BIRMINGHAM CITY COUNCIL

MEETING OF THE CITY COUNCIL

TUESDAY, 15 SEPTEMBER 2020 AT 14:00 HOURS IN ON-LINE MEETING, MICROSOFT TEAMS

A G E N D A

1 **NOTICE OF RECORDING**

Lord Mayor to advise that this meeting will be webcast for live or subsequent broadcast via the Council's Internet site (www.civico.net/birmingham) and that members of the press/public may record and take photographs except where there are confidential or exempt items.

2 **DECLARATIONS OF INTERESTS**

Members are reminded that they must declare all relevant pecuniary and non pecuniary interests arising from any business to be discussed at this meeting. If a disclosable pecuniary interest is declared a Member must not speak or take part in that agenda item. Any declarations will be recorded in the minutes of the meeting.

3 **MINUTES**

5 - 80

To confirm and authorise the signing of the Minutes of the meeting of the Council held on 14 July 2020.

4 **LORD MAYOR'S ANNOUNCEMENTS**

(1400-1410)

To receive the Lord Mayor's announcements and such communications as the Lord Mayor may wish to place before the Council.

5 **PETITIONS**

(10 minutes allocated) (1410-1420)

To receive and deal with petitions in accordance with Council Rules of Procedure (B4.4 E of the Constitution)

As agreed by Council Business Management Committee a schedule of outstanding petitions is available electronically with the published papers for the meeting and can be viewed or downloaded.

6 **EXEMPTION FROM STANDING ORDERS**

Councillor Martin Straker Welds to move an exemption from Standing Orders.

7 **QUESTION TIME**

(80 minutes allocated) (1420-1540)

To deal with oral questions in accordance with Council Rules of Procedure (B4.4 F of the Constitution).

A. Questions from Members of the Public to any Cabinet Member or Ward Forum Chair (10 minutes)

B. Questions from any Councillor to a Committee Chair, Lead Member of a Joint Board or Ward Forum Chair (Up to 10 minutes)

C. Questions from Councillors other than Cabinet Members to a Cabinet Member (Up to 30 minutes)

D. Questions from Councillors other than Cabinet Member to the Leader or Deputy Leader (Up to 30 minutes)

8 **UPDATE ON BIRMINGHAM CITY COUNCIL'S RESPONSE TO COVID-19**

81 - 138

(**30 minutes allocated) (1540-1610)**

To consider a report of the Cabinet.

The Leader, Councillor Ian Ward to move the following Recommendation:-

"That the report be noted."

A 5 minute break will be taken.

9 **ROUTE TO ZERO INTERIM REPORT**

139 - 404

(**40 minutes allocated) (1615-1655)**

To consider a report of Acting Director Inclusive Growth.

Councillor Waseem Zaffar to move the following Motion:-

"1. Approves the target date to achieve net zero carbon is set as 2030 for the City Council's own operations excluding its existing housing stock and procurement;

2. Notes the challenge of achieving the 2030 net zero carbon date for the City as a whole but commits the Council to working with partners and neighbouring local authorities to become the first City Region to become Carbon neutral. The Council's ambition remains to achieve a net zero carbon outcome as soon as possible and a revised date will not be set until these discussions have taken place.

3. Approves that an advisory group to Cabinet is established to oversee the City Council's own progress on achieving net zero carbon.

4. Approves that the City Council endorse the Recommendations for reducing the City Council's own emissions as set out in Table 2 of this report.

5. Notes the content of the Anthesis report and commits the City Council to work with partners to pursue the recommendations where practical and feasible, developing appropriate Action Plans for future Cabinet approval.

6. Notes that an annual report will be taken to Full Council to update on progress on reducing carbon emissions."

405 - 424

10 **HOME TO SCHOOL TRANSPORT INQUIRY**

(**40 minutes allocated) (1655-1735)**

To consider a report of the Education and Children's Social Care O&S Committee together with an Executive Commentary.

Councillor Kath Scott to Move the following Motion:

"That the Executive provide an assessment of progress against the outcomes set out above, and the key areas listed in Section 7 in this report, to the Education & Children's Social Care Overview & Scrutiny Committee in March 2021."

425 - 438

11 **ANNUAL REPORT OF THE INDEPENDENT REMUNERATION PANEL 201920**

(10 minutes allocated) (1735-1745)

To consider a report of the Council Business Management Committee.

The Leader, Councillor Ian Ward, to move the following Motion:-

"The Recommendations made by the Independent Remuneration Panel on page 4 of its Annual Report be accepted and implemented with effect from 19 May 2020."

12 **PROVISIONAL DATE OF THE NEXT MEETING**

To note that the provisional date of the next meeting of City Council is 3 November 2020.

MEETING OF BIRMINGHAM CITY COUNCIL 14 JULY 2020

MINUTES OF THE MEETING OF BIRMINGHAM CITY COUNCIL HELD ON TUESDAY, 14 JULY 2020 AT 1400 HOURS AS AN ON-LINE MEETING

PRESENT:- Deputy Lord Mayor (Councillor Yvonne Mosquito) in the Chair.

Councillors

Muhammad Afzal
Akhlaq Ahmed
Mohammed Aikhlaq
Alex Aitken
Safia Akhtar
Deirdre Alden
Robert Alden
Tahir Ali
Gurdial Singh Atwal
David Barrie
Baber Baz
Bob Beauchamp
Matt Bennett
Kate Booth
Sir Albert Bore
Nicky Brennan
Marje Bridle
Mick Brown
Tristan Chatfield
Zaker Choudhry
Debbie Clancy
Liz Clements
Maureen Cornish
John Cotton
Phil Davis
Adrian Delaney
Diane Donaldson
Barbara Dring
Neil Eustace
Mohammed Fazal
Peter Fowler
Jayne Francis
Eddie Freeman
Peter Griffiths
Fred Grindrod
Paulette Hamilton
Roger Harmer
Kath Hartley
Adam Higgs
Charlotte Hodivala
Penny Holbrook
Jon Hunt
Mahmood Hussain
Shabrana Hussain
Timothy Huxtable
Mohammed Idrees
Zafar Iqbal
Ziaul Islam
Morriam Jan
Kerry Jenkins
Meirion Jenkins
Julie Johnson
Brigid Jones
Nagina Kauser
Mariam Khan
Zaheer Khan
Narinder Kaur Kooner
Chaman Lal
Mike Leddy
Bruce Lines
Mary Locke
Ewan Mackey
Majid Mahmood
Zhor Malik
Karen McCarthy
Saddak Miah
Gareth Moore
Simon Morrall
Brett O'Reilly
John O'Shea
David Pears
Robert Pocock
Julien Pritchard
Hendrina Quinnen
Chauhdry Rashid
Carl Rice
Lou Robson
Gary Sambrook
Lucy Seymour-Smith
Shafique Shah
Mike Sharpe
Sybil Spence
Martin Straker Welds
Sharon Thompson
Paul Tilsley
Lisa Trickett
Ian Ward
Mike Ward
Suzanne Webb
Ken Wood
Alex Yip
Waseem Zaffar

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NOTICE OF RECORDING

19356 The Deputy Lord Mayor advised that the meeting would be webcast for live and subsequent broadcasting via the Council's internet site and that members of the Press/Public may record and take photographs except where there are confidential or exempt items.

The Deputy Lord Mayor reminded Members that they did not enjoy Parliamentary Privilege in relation to debates in the Chamber and Members should be careful in what they say during all debates that afternoon

The Deputy Lord Mayor requested that Members ensure that their video cameras are switched off unless called to speak and that their microphone is switched off when they are not speaking.

The Deputy Lord Mayor advised Members that If they wished to speak, to indicate in the chat function and wait to be invited to speak and to state their name at the start of every contribution.

DECLARATIONS OF INTEREST

19357 The Deputy Lord Mayor reminded Members that they must declare all relevant pecuniary and non-pecuniary interests relating to any items of business to be discussed at this meeting

Any declarations would be recorded in the minutes of the meeting.

At this point in the meeting the Deputy Lord Mayor sought any expressions of interest and non were made.

MINUTES

It was moved by the Deputy Lord Mayor, seconded and –

19358 **RESOLVED:-**

That the Minutes of the meeting held on 9 June 2020 having been circulated to each Member of the Council, be taken as read and confirmed and signed.

LORD MAYOR'S ANNOUNCEMENTS

A. Death of Honorary Alderman Freda Mary Longden-Parker

The Deputy Lord Mayor indicated that her announcement was a sad one in that she had to inform the Chamber of the death of former Councillor and Honorary Alderman, Freda Mary Longden-Parker. The Deputy Lord Mayor indicated that the Council had recently been advised that Freda died on 16th January 2020, at 99 years of age. She leaves behind her daughter Elizabeth, two Granddaughters, Jessica and Charlotte, and her Great Grandson, Rudy.

The Deputy Lord Mayor indicated that tributes to Freda would be reserved until such time as meetings were able to be held in the Council Chamber and in the meantime she invited all to join her in extending sincere condolences to Freda's family and friends.

It was moved by the Deputy Lord Mayor, seconded and:-

19359 **RESOLVED**:-

That this Council places on record its sorrow at the death of former Councillor and Honorary Alderman Freda Mary Longden-Parker and its appreciation of her devoted service to the residents of Birmingham. The Council extends its deepest sympathy to members of Freda's family in their sad bereavement.

PETITIONS

Petition Relating to City Council Functions Presented prior to the Meeting

The following petition was presented:-

(See document No. 1)

In accordance with the proposals by the persons presenting the petition, it was moved by the Deputy Lord Mayor, seconded and -

19360 **RESOLVED**:-

That the petition be received and referred to the relevant Chief Officer to examine and report as appropriate.

Petitions Relating to City Council Functions Presented at the Meeting

The following petitions were presented:-

(See document No. 2)

In accordance with the proposals by the Members presenting the petitions, it was moved by the Deputy Lord Mayor, seconded and -

19361 **RESOLVED**:-

That the petitions be received and referred to the relevant Chief Officer(s) to examine and report as appropriate.

Petitions Update

The following Petitions Update had been made available electronically:-

(See document No. 3)

It was moved by the Deputy Lord Mayor, seconded and -

19362 **RESOLVED**:-

That the Petitions Update be noted and those petitions for which a satisfactory response has been received, be discharged.

EXEMPTION FROM STANDING ORDERS

19363 **RESOLVED:-**

That, pursuant to discussions by Council Business Management Committee, Standing Orders be waived as follows:

- Reduce the time for item No. 7 (Question Time) to 50 minutes and not have questions from members of the public.

- No Motions be submitted by individual Councillors at the meeting

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QUESTION TIME

19364 The Council proceeded to consider Oral Questions in accordance with Council Rules of Procedure (B4.4 F of the Constitution).

EXTENSION OF TIME

It was proposed by Councillor Gareth Moore and seconded by Councillor Ian Ward that the time for consideration of agenda item 7 (Question Time) be extended by 15 minutes.

The Deputy Lord Mayor put the proposal to the vote and by a show of hands was declared to be carried.

It was therefore-

19365 **RESOLVED**:-

That the time for consideration of agenda item 7 (Question Time) be extended by 15 minutes.

Details of the questions asked are available for public inspection via the Webcast.

SCRUTINY BUSINESS REPORT

The following report of the Scrutiny Chairs was submitted:-

(See document No 4)

Councillor Carl Rice presented the report and the recommendation was seconded.

A debate ensued.

Councillor Carl Rice replied to the debate.

The recommendation having been moved and seconded was agreed.

It was therefore-

19366 **RESOLVED**:-

That the report be noted.

LEAD MEMBER REPORT - WEST MIDLANDS COMBINED AUTHORITY TRANSPORT DELIVERY COMMITTEE

The following report of Councillor Kath Hartley, Lead Member, Transport Delivery Committee was submitted:-

(See document No 5)

Councillor Kath Hartley presented the report and the recommendation was seconded.

A debate ensued.

Councillor Kath Hartley replied to the debate.

The recommendation having been moved and seconded was agreed.

It was therefore-

19367 **RESOLVED**:-

That the report be noted.

SUBMISSION OF THE 'DEVELOPMENT MANAGEMENT IN BIRMINGHAM' DEVELOPMENT PLAN DOCUMENT

The following report of the Leader, Councillor Ian Ward was submitted:-

(See document No 5)

The Leader Councillor Ian Ward presented the report and the recommendation was seconded.

A debate ensued.

The Leader, Councillor Ian Ward replied to the debate.

On a point of clarification, Councillor Robert Alden, referring to the Leader's comments about the Conservative Group contacting Central Government in regard to the proposed changes to Permitted Development rights, explained that he had emailed the Leader that morning indicating that he had written to Government ministers highlighting a number of concerns that the issue would cause in Birmingham if retail was allowed to be converted to residential without consultation .

The recommendation having been moved and seconded was put to the vote and, by the recorded vote set out below, was declared to be carried.

For the Recommendation (59)

Akhlaq Ahmed	Kath Hartley	Karen McCarthy
Mohammed Aikhlaq	Penny Holbrook	Saddak Miah
Alex Aitken	Jon Hunt	Brett O'Reilly
Gurdial Singh Atwal	Shabrana Hussain	John O'Shea
Baber Baz	Mohammed Idrees	Robert Pocock
Kate Booth	Zafar Iqbal	Hendrina Quinnen
Sir Albert Bore	Ziaul Islam	Chauhdry Rashid
Marje Bridle	Morriam Jan	Carl Rice
Mick Brown	Kerry Jenkins	Lou Robson
Tristan Chatfield	Julie Johnson	Lucy Seymour-Smith
Liz Clements	Brigid Jones	Shafique Shah
John Cotton	Nagina Kauser	Mike Sharpe
Diane Donaldson	Mariam Khan	Sybil Spence
Barbara Dring	Zaheer Khan	Martin Straker Welds
Mohammed Fazal	Narinder Kaur Kooner	Sharon Thompson
Jayne Francis	Chaman Lal	Paul Tilsley
Eddie Freeman	Mike Leddy	Lisa Trickett
Fred Grindrod	Mary Locke	Ian Ward
Paulette Hamilton	Majid Mahmood	Waseem Zaffar
Roger Harmer	Zhor Malik	

Against the recommendation (0)

Abstentions (13)

Robert Alden	Charlotte Hodivala	Simon Morrall
Debbie Clancy	Bruce Lines	David Pears
Maureen Cornish	Ewan Mackey	Julien Pritchard
Peter Fowler	Gareth Moore	Suzanne Webb
Adam Higgs		

It was therefore-

19368 **RESOLVED**:-

That Council:

i) Notes the summary of representations received on the Publication DMB document and approves the 'Council responses' to the representations (Appendix 3) and the Schedule of Proposed Minor Changes to the Publication DMB document (Appendix 4).

ii) Approves the submission of the Publication DMB document (Appendix 1), Sustainability Appraisal (Appendix 2), representations and Council response (Appendix 3), Schedule of Proposed Minor Changes (Appendix 4) and other supporting documents to the MHCLG under the provisions of Regulation 22 of The Town and Country Planning (Local Planning) (England) Regulations 2012 as soon as practicable, following recent approval by Cabinet at its meeting on 23rd June 2020.

MEMBERSHIP OF THE CO-OPERATIVE COUNCIL'S INNOVATION NETWORK

The following report of Council Business Management Committee was submitted:-

(See document No 5)

The Leader Councillor Ian Ward presented the report and the recommendation was seconded.

A debate ensued.

The Leader, Councillor Ian Ward replied to the debate.

The recommendation having been moved and seconded was put to the vote and, by the recorded vote set out below, was declared to be carried.

For the Recommendation (59)

Akhlaq Ahmed	Paulette Hamilton	Majid Mahmood
Mohammed Aikhlaq	Roger Harmer	Zhor Malik
Alex Aitken	Kath Hartley	Karen McCarthy
Safia Akhtar	Penny Holbrook	Saddak Miah
Robert Alden	Jon Hunt	Brett O'Reilly
Gurdial Singh Atwal	Mahmood Hussain	John O'Shea
Kate Booth	Shabrana Hussain	Hendrina Quinnen
Sir Albert Bore	Mohammed Idrees	Chauhdry Rashid
Marje Bridle	Zafar Iqbal	Carl Rice
Mick Brown	Ziaul Islam	Lou Robson
Tristan Chatfield	Kerry Jenkins	Lucy Seymour-Smith
Liz Clements	Julie Johnson	Shafique Shah
Maureen Cornish	Brigid Jones	Mike Sharpe
John Cotton	Nagina Kauser	Sybil Spence
Phil Davis	Mariam Khan	Martin Straker Welds
Diane Donaldson	Zaheer Khan	Sharon Thompson
Mohammed Fazal	Narinder Kaur Kooner	Lisa Trickett
Jayne Francis	Chaman Lal	Ian Ward
Peter Griffiths	Mike Leddy	Mike Ward

Fred Grindrod	Mary Locke	Waseem Zaffar

Against the recommendation (0)

Abstentions (13)

Deirdre Alden	Eddie Freeman	David Pears
David Barrie	Adam Higgs	Julien Pritchard
Baber Baz	Charlotte Hodivala	Gary Sambrook
Zaker Choudhry	Timothy Huxtable	Paul Tilsley
Debbie Clancy	Meirion Jenkins	Suzanne Webb
Adrian Delaney	Ewan Mackey	Ken Wood
Neil Eustace	Gareth Moore	Alex Yip
Peter Fowler	Simon Morrall	

It was therefore-

19369 **RESOLVED**:-

That Council agrees to make an application to join the CCIN in July 2020; and, if the application is successful, to review the outcomes after 12 months to inform any decision as to the renewal of membership for future years.

PROVISIONAL DATE OF THE NEXT MEETING

19354 The Deputy Lord Mayor asked Members to note that the provisional date of the next meeting of City Council is 15 September 2020.

In concluding the meeting, the Deputy Lord Mayor noted that several Councillors had been out in their Wards helping with food banks and helping those shielding and the vulnerable and she thanked them for her efforts. The Deputy Lord Mayor made reference to the Lord Mayor who was also shielding but had been making video messages.

The meeting ended at 1655 hours.

APPENDIX

Questions and replies in accordance with Council Rules of Procedure B4.4 F of the Constitution:-

WRITTEN QUESTION TO THE LEADER OF THE COUNCIL FROM COUNCILLOR ZAKER CHOUDHRY

A1 COUNCIL BACKED PROJECTS AND RATES OF ILLNESS AND LOSSES'

Question:

Given the high fatality rate among construction workers from Covid-19 (see Office for National Statistics analysis) could the leader report on the safety of workers involved in Council-backed projects, setting out rates of illness and any losses of life?

Answer:

Birmingham City Council appoints principal designers and principal contractors to undertake construction projects and complies with the associated legislation (primarily the Construction (Design and Management) Regulations. Sickness Absence records cover all BCC staff but would not include those of 3rd parties contracted to undertake construction work for BCC. Any losses of life are reportable to the HSE under the Reporting of Inquires, Diseases and Dangerous Occurrences Regulations (RIDDOR). We have not been made aware of any fatalities related to construction projects undertaken for Birmingham City Council.

WRITTEN QUESTION TO THE LEADER OF THE COUNCIL FROM COUNCILLOR JON HUNT

A2 CWG - LACK OF BAME REPRESENTATION AT BOARD ROOM LEVEL

Question:

It has been reported in the media that the board of the 2022 Commonwealth Games significantly fails to reflect the ethnic diversity of the region - and indeed lacks any Asian members. Could the leader state what is being done to put this right, explaining how it happened?

Answer:

The Birmingham 2022 Commonwealth Games Organising Committee (OC) is a Public Limited Company (limited by guarantee) and a Non-Departmental Public Body (NDPB) with the Department of Digital Culture Media and Sport as its department sponsor. As an NDPB, the OC has the operational independence required to allow it to run the Games effectively, whilst maintaining the right balance of accountability required for a body mainly funded by government.

The Birmingham 2022 board currently consists of 13 non-executive members, eight of which were nominated by the different Games partners and five of which are independent non-executive directors. Four independent directors were appointed by the Secretary of State for Digital, Culture, Media and Sport as part of a public appointments process. The Chair of the Board was appointed via the same public appointments process but he was appointed by the then Prime Minister. These appointments have been made in accordance with the Cabinet Office's Governance Code on Public Appointments. The process is regulated by the Commissioner for Public Appointments.

The Council had the right to make one appointment within the eight Games Partner nominees and it was decided this would be whoever was the Leader of the Council, as the most senior publicly accountable representative of the Council.

There is currently a vacancy on the board, to be appointed by the Secretary of State, and the recruitment process to fill that vacancy will begin soon. You can see all of the board members here: https://www.birmingham2022.com/corporate/who-we-are/board-of-directors/ Each has the Games partner that nominated them under their name or 'independent' for the independent NEDs.

Any further questions about efforts by the organising committee to ensure diversity in its appointments should be directed to the committee directly.

WRITTEN QUESTION TO THE LEADER OF THE COUNCIL FROM COUNCILLOR GARETH MOORE

A3 Council Assets

Question:

What is the total value of Council assets held outside the city boundary?

Answer:

£92.4m.

WRITTEN QUESTION TO THE LEADER OF THE COUNCIL FROM COUNCILLOR CHARLOTTE HODIVALA

A4 Supplies of PPE

Question:

What is the Council doing to build up supplies of PPE and other essentials in the event there is a second wave in the Covid-19 pandemic this autumn\winter?

Answer:

The council has worked hard to ensure we have an adequate supply of PPE and the Procurement Team have secured further supplies based on future stock projections. The Local Resilience Forum (LRF) are also monitoring stock levels across the region and will top-up BCC where required.

However, as the LGA made clear in its response to the Public Accounts Committee report on future PPE supply, Councils and social care providers need concrete assurances about ongoing supplies of quality PPE should we see a second wave of COVID-19.

Cllr Ian Hudspeth, the Conservative Chairman of the Local Government Association's Community Wellbeing Board, said: "We have been calling for a clear long-term strategy for the sustainable supply of PPE to be published. Councils and social care providers need concrete assurances about ongoing supplies of quality PPE should the country experience a second wave of coronavirus.

Staff working in care homes and working in people's homes have been doing an incredible job in extremely challenging circumstances. They deserve to know that they will have the equipment, resources and support they need to continue doing so to ensure their safety and those they are caring for, at all times.

Social care services are still operating under the guidance for sustained transmission of COVID-19 in the community, with staff continuing to use PPE at the same level and rate as early on in the pandemic.

As the report states, we need urgent clarity over the governance and distribution of PPE, so that this vital protective equipment reaches where it is needed as soon as possible."

"We must be as prepared as possible if we are to continue supporting those who use and work in social care, while reducing the impact of this devastating disease."

WRITTEN QUESTION TO THE LEADER OF THE COUNCIL FROM COUNCILLOR JOHN LINES

A5 A34 Highway Scheme

Question:

What is the current estimated delivery date for final completion of the A34 Highway Scheme for the Commonwealth Games?

Answer:

The A34 Perry Barr Highway Scheme is planned to be complete by end of December 2021.

WRITTEN QUESTION TO THE LEADER OF THE COUNCIL FROM COUNCILLOR TIMOTHY HUXTABLE

A6 Training

Question:

Does the Council provide Environmental and Planning Enforcement Officers expert witness training to help them when taking cases to court?

Answer:

The majority of Regulation and Enforcement officers are either trained via their formal professional qualification e.g. Environmental Health or Trading Standards degree, or have undertaken an NVQ level 3 in Investigative Practice. This course includes court practice and giving evidence. Others have previous experience in law enforcement e.g. ex-Police Officers.

Officers in Planning Enforcement have regular training with regard to formal interviewing and preparation for Court. The most recent training scheduled for 20 and 21 May 2020 has been postponed due to the Coronavirus pandemic.

WRITTEN QUESTION TO THE LEADER OF THE COUNCIL FROM COUNCILLOR DEIRDRE ALDEN

A7 Interim Chief Executive

Question:

When the Interim Chief Executive is in Birmingham, which office space is made available to him to work from?

Answer:

The Interim Chief Executive has had office space made available to him at Woodcock Street to work from.

WRITTEN QUESTION TO THE LEADER OF THE COUNCIL FROM COUNCILLOR MORRIAM JAN

A8 Appropriate Public Memorials and Statues

Question:

Could the leader state what is being done to address concerns about public memorials and statues associated with beneficiaries of slavery and proponents of colonialism?

Answer:

We will review the appropriateness of local monuments and statues on public land and council property. We will also ensure that the plaques accompanying our monuments properly and fully explain their historical context, where appropriate.

CITY COUNCIL – 14 JULY 2020

WRITTEN QUESTION TO THE DEPUTY LEADER OF THE COUNCIL FROM COUNCILLOR MIKE WARD

B1 Resident Satisfaction 2019/2020

Question:

How does the Deputy Leader explain the steep decline in resident satisfaction in the past year?

Answer:

The Council values the views of our citizens and communities in shaping our priorities and investment areas. We welcome feedback from citizens on how they think our services are performing, and the annual Residents' Survey is only one of the ways in which we constantly seek the feedback that we need to continue on our improvement journey.

Our annual Residents Survey contains a number of questions and enables us to monitor satisfaction with the Council alongside service priorities, local cohesion and levels of volunteering. Unfortunately, national comparators are no longer available for us to compare our satisfaction levels against other local authorities, however we are committed to improving our performance in this area.

We are proud of the progress that we have made as a Council in many key areas of service delivery over the past few years, although we acknowledge that there is still some way to go. The introduction of a four year Council Plan and Budget has enabled us to successfully deliver within our approved budget over the past two financial years, with no unplanned use of reserves. These improvements has been made despite a decade of austerity cuts imposed by national government, forcing us to make cuts of £730m since 2010 – nearly a third of our budget. The departure of the Birmingham Independent Improvement Panel (BIIP) in 2019 is a testament to our success. Nationally, case-studies on improvement indicate that there is often a 'lag-effect' in turning around public perceptions after improvements have begun to take effect, and we may be observing this effect here in Birmingham.

We are constantly seeking feedback from citizens on their priorities and where they think that services need to improve, using this to inform our own strategic planning and where we choose to invest resources. We do this both through the Residents Survey and the annual Budget Consultation, inviting communities to have their say on what matters the most to them. For example, we are investing to modernise our waste collection and recycling services, refurbishing the Perry Barr waste depot and procuring a new fleet of refuse collection vehicles, after residents told us that one of their key concerns was the importance of clean streets and refuse collection. We also know that residents are concerned about the impact of austerity on vulnerable people, including children and older people, which is why we are working closely with the Birmingham City Board and our key partners to address these concerns as a system, while also shifting the emphasis of our social care services from crisis to prevention.

We believe that one of the key factors in citizen satisfaction is the extent to which people believe that they have a say in local services and the decisions that affect them. It is notable

that the dip in resident satisfaction coincides with the move to a four-year election cycle which, while providing additional stability for the Council, may have led to citizens believing that they have less influence over local decision-making. We are determined to address this perception and develop innovative ways to involve people and communities in decision-making and the design of services, including those whose voices are 'less heard'. That is why last year we published 'Working Together in Birmingham's Neighbourhoods', signifying our commitment to helping local neighbourhoods and communities to have more influence over local services and decisions, and setting out a framework for a truly bottom-up approach to localism.

WRITTEN QUESTION TO THE DEPUTY LEADER OF THE COUNCIL FROM COUNCILLOR KEN WOOD

B2 Council Tax Reduction

Question:

Broken down by constituency\district, how many Birmingham residents benefited from the council tax reduction funded by the government's Covid hardship fund?

Answer:

Total £7,172,514.79 paid in hardship relief.

Numbers of Claimants in each area:

Acocks Green	1426
Aston	2468
Bartley Green	1413
Billesley	1174
Birchfield	419
Bordesley Green	2047
Bournville & Selly Park	541
Bourneville & Cotteridge	322
Brandwood & Kings Heath	1147
Bromford and Hodge Hill	17
Castle Vale	55
Druids Heath and Monyhull	401
Edgbaston	856
Erdington	1150
Erdington	39
Frankley Great Park	90
Garretts Green	71
Glebe Farm & Tile Cross	138
Gravelly Hill	101
Hall Green North	585
Hall Green - South	122
Handsworth	738
Handsworth Wood	387
Harborne	618
Heartlands	155
Highters Heath	789
Holyhead	691
Kings Norton North	659
Kings Norton South	480
Kingstanding	1522
Ladywood	2301
Longbridge & West Heath	808
Lozells	2228
Moseley	939

Nechells	2844
Newtown	479
North Edgbaston	25
Northfield	1169
Oscott	792
Perry Barr	1016
Quinton	1150
Shard End	1738
Sheldon	926
Small Heath	156
Soho & Jewellery Quarter	1902
South Yardley	1649
Sparkbrook & Balsall Heath East	2055
Sparkhill	1588
Stirchley	470
Stockland Green	1181
Sutton Four Oaks	89
Sutton Mere Green	221
Sutton Reddicap	475
Sutton Roughley	111
Sutton Trinity	258
Sutton Vesey	387
Sutton Walmley & Minworth	159
Sutton Wylde Green	169
Tyseley & Hay Mills	1239
Ward End	1379
Weoley & Selly Oak	19
Yardley East	104
Yardley West & Stechford	1297

WRITTEN QUESTION TO THE CABINET MEMBER FOR CHILDREN'S WELLBEING FROM COUNCILLOR SIMON MORRALL

C1 Referrals

Question:

Since 2012 how many referrals were made to the Safer Recruitment Panel by Travel Assist Service providers and what proportion of these resulted in a job offer being rejected/withdrawn?

Answer:

We do not hold this information as whilst the safer recruitment panel could take a decision not to recommend the third party contractor employee for work on a BCC route, as we are not the employer we are unable to comment on whether the individual was employed for other duties.

Due to Data Protection legislation BCC does not hold any employment history for contractors as this is held with each 3rd party provider as the employer.

The Safer Recruitment Panel was strengthened earlier this year and since that time 28 referrals have been made by Travel Assist third party contractors. Of these 10 have been concluded of which none have resulted in the panel forming a view that they are not recommended to work on one of our routes. The remaining 18 are still pending a decision as further information or expert advice is being sought.

WRITTEN QUESTION TO THE CABINET MEMBER FOR CHILDREN'S WELLBEING FROM COUNCILLOR DAVID PEARS

C2 National Express Contract

Question:

According to the decision report, the new National Express Contract included the provision of a new route management system. I understand this may no longer be the case and that another new system is being procured. If this is the case, what is the additional cost of this compared to the original contract?

Answer:

It is correct that National Express will no longer directly provide the route management system. It is now seen as more advantageous for BCC to own and operate its own Transport Management system to retain overall visibility over all suppliers, schools and related data. BCC is being refunded for this contractual element now.

It is also correct that a new transport system is being procured currently. At this stage, the difference between the original contract and the new procured system will depend on the chosen supplier, although the additional cost is likely to be in the region of £70k per annum (at worst case). We are planning to mitigate this additional cost by charging a small levy to our service providers to allow them full access to the portal and enhance the service. Going forward, the cost of the system will become cost-neutral to BCC and provide many additional benefits that address many of the issues raised in the audit report from October 2019.

WRITTEN QUESTION TO THE CABINET MEMBER FOR CHILDREN'S WELLBEING FROM COUNCILLOR DEBBIE CLANCY

C3 Lockdown

Question:

During lockdown, on how many occasions have you used the Council House to work out from?

Answer:

None

WRITTEN QUESTION TO THE CABINET MEMBER FOR CHILDREN'S WELLBEING FROM COUNCILLOR MAUREEN CORNISH

C4 Non-Disclosure Agreement – Tyseley Incinerator

Question:

Were you asked to sign – and did you sign – a non-disclosure agreement in relation to information about the Tyseley incinerator?

Answer:

No

WRITTEN QUESTION TO THE CABINET MEMBER FOR CHILDREN'S WELLBEING FROM COUNCILLOR BOB BEAUCHAMP

C5 Non-Disclosure Agreement

Question:

On how many occasions have you signed a non-disclosure agreement for information shared with you by Council officers since joining Cabinet?

Answer:

Once

WRITTEN QUESTION TO THE CABINET MEMBER FOR EDUCATION, SKILLS AND CULTURE FROM COUNCILLOR PETER FOWLER

D1 Laptop Scheme

Question:

How many laptops have been provided by government for Birmingham schools for applicable year groups and children in care under the Covid laptop scheme?

Answer:

The government provided 703 laptops for disadvantaged Year 10 pupils and 3,770 laptops for children with a social worker/care leavers.

WRITTEN QUESTION TO THE CABINET MEMBER FOR EDUCATION, SKILLS AND CULTURE FROM COUNCILLOR DEBBIE CLANCY

D2 Lockdown

Question:

During lockdown, on how many occasions have you used the Council House to work out from?

Answer:

None

WRITTEN QUESTION TO THE CABINET MEMBER FOR EDUCATION, SKILLS AND CULTURE FROM COUNCILLOR MAUREEN CORNISH

D3 Non-Disclosure Agreement – Tyseley Incinerator

Question:

Were you asked to sign – and did you sign – a non-disclosure agreement in relation to information about the Tyseley incinerator?

Answer:

No

WRITTEN QUESTION TO THE CABINET MEMBER FOR EDUCATION, SKILLS AND CULTURE FROM COUNCILLOR BOB BEAUCHAMP

D4 Non-Disclosure Agreement

Question:

On how many occasions have you signed a non-disclosure agreement for information shared with you by Council officers since joining Cabinet?

Answer:

Once

WRITTEN QUESTION TO THE CABINET MEMBER FOR EDUCATION, SKILLS & CULTURE BY COUNCILLOR PAUL TILSLEY.

D5 Laptops for Children with Limited Access to it

Question:

It has been reported that Councils are getting laptops to ensure digital inclusion for children with limited access to IT. Could the Cabinet Member set out how these laptops are being distributed in Birmingham, stating how many have been received and how they are being distributed and how need is assessed?

Answer:

703 laptops were provided to Birmingham by the government for disadvantaged year 10 pupils. These were allocated to Birmingham schools on a pro-rata basis based on the number of pupils marked as disadvantaged in the spring term census 2020. These have been delivered to schools for them to distribute to the pupils.

3,770 laptops were provided to Birmingham by the government for children with a social worker and care leavers. These were allocated to pupils with social workers and care leavers by Birmingham Children's Trust and are being distributed through the pupils' schools.

WRITTEN QUESTION TO THE CABINET MEMBER FOR FINANCE & RESOURCES FROM COUNCILLOR NEIL EUSTACE

E1 Lockdown Deficit

Question:

What is going to be the process for dealing with the deficit incurred as a result of lockdown?

Answer:

Further discussions are taking place with government with regard to the further funding announced by the Secretary of State at the LGA conference on 2 July 2020. The further funding allocation for the council is expected imminently. Once we have established the level of funding, we will then commence discussions with government on the “freedoms and flexibilities” available to the council to further address any residual budget gap, in accordance with suggested route by government.

Should a budget gap still remain the council will then address this through the usual mechanisms for balancing an in year deficit including fasttracking delivery of savings, minimising non-essential spend use of any unallocated contingencies. This will be done in accordance with the constitution.

WRITTEN QUESTION TO THE CABINET MEMBER FOR FINANCE & RESOURCES FROM COUNCILLOR MORRIAM JAN

E2 Losses Review for Expenditure, Revenue and Capital

Question:

The Cabinet Member is clearly hoping for the Government to provide more support for Councils for the losses incurred during lockdown. As part of making the case for this support, has the Cabinet Member reviewed all current expenditure, revenue and capital, to ensure no unnecessary activity is taking place?

Answer:

Council Officers are monitoring weekly the financial costs, income losses and risks associated with the Covid-19 pandemic and are in regular discussion with me, providing full briefings on the financial position of the Council and the steps being taken to control expenditure. Weekly reports are also submitted to the Strategic Cell, Corporate Leadership Team and EMT and my finance star chamber provides an additional mechanism to discuss and resolve specific Directorate challenges. This is on top of normal business of managing service budgets.

In addition, on a monthly basis we provide a financial return to MHCLG stating our forecast level of spend and income losses.

We continue to have ongoing discussions with MHCLG to fund these income losses and spend and to provide a range of freedoms and flexibilities to enable us to manage the situation. We are awaiting further funding, which is imminent. The Council will consider its position once conversations have been exhausted with MHCLG.

A full review of the Council's finances is taking place for Quarter 1 and the updated financial position for the Council, including the Covid position, will be reported to Cabinet on 21st July.

Within the constitution we declared Covid-19 as an emergency and we are legally required to spend. When the emergency commenced councils were told by government to spend what was needed and they would be reimbursed by the government. Under the emergency powers in the constitution the council got on with providing the emergency measures needed. Those emergency decisions taken were published on 30 June.

WRITTEN QUESTION TO THE CABINET MEMBER FOR FINANCE & RESOURCES FROM COUNCILLOR JON HUNT

E3 Capitalisation of Losses Verses High Borrowing Rate

Question:

There is discussion of using capitalisation to cover the losses incurred by Councils' during lockdown. Is this a feasible proposal for Birmingham, given the City's high borrowing rate?

Answer:

Any capitalisation would need government approval.

Discussions are ongoing with MHCLG around additional funding for spending and loss of income and new freedoms and flexibilities. An announcement is expected imminently.

We are well within prudential borrowing limits and should capitalisation be an option for us this may well be a feasible option for the Council to adopt.

WRITTEN QUESTION TO THE CABINET MEMBER FOR FINANCE AND RESOURCES FROM COUNCILLOR EDDIE FREEMAN

E4 Advertising

Question:

How much has the Council spent on advertising in the Guardian Newspapers in each of the last 4 years?

Answer:

We have run an analysis of payments to vendors in our system and identified three relevant names.

Guardian Media Group PLC
Guardian Newspapers, and
Guardian News & Media Ltd.

There are only two payments that have been made to the above organisations in the last 4 years totalling £1,320.

If you are aware of any other potential names we can analyse activity on those.

WRITTEN QUESTION TO THE CABINET MEMBER FOR FINANCE AND RESOURCES FROM COUNCILLOR DAVID BARRIE

E5 Purchasing

Question:

How much has the Council spent on purchasing copies of the Guardian Newspaper in each of the last 4 years?

Answer:

The Council communications team only buys local Birmingham newspapers for scanning of local coverage. It is not possible to discern whether individual newspapers are coded to cost centres in the wider Council as costs are only attributed to a general 'newspapers/publications' code rather than individual titles.

WRITTEN QUESTION TO THE CABINET MEMBER FOR FINANCE AND RESOURCES FROM COUNCILLOR ADRIAN DELANEY

E6 Claims

Question:

In the Covid returns to MHCLG, how much did the Council claim against loss of income from the Museum's Trust in the first 3 months of lockdown and how much has been passed onto them by the Council?

Answer:

The Museum has only recently claimed for supplier relief to meet the first 3 months (April to June) loss of income. The value of the claim is £405,000. The Council is yet to assess that claim.

MHCLG request Councils to complete financial position statements on a monthly basis for spend and loss of income. They are funding Councils via additional grant not on a claim basis.

£405,000 for the Museum claim will be reflected in the MHCLG COVID return for July.

WRITTEN QUESTION TO THE CABINET MEMBER FOR FINANCE AND RESOURCES FROM COUNCILLOR DEBBIE CLANCY

E7 Lockdown

Question:

During lockdown, on how many occasions have you used the Council House to work out from?

Answer:

Zero

WRITTEN QUESTION TO THE CABINET MEMBER FOR FINANCE AND RESOURCES FROM COUNCILLOR MAUREEN CORNISH

E8 Non-Disclosure Agreement – Tyseley Incinerator

Question:

Were you asked to sign – and did you sign – a non-disclosure agreement in relation to information about the Tyseley incinerator?

Answer:

No

WRITTEN QUESTION TO THE CABINET MEMBER FOR FINANCE AND RESOURCES FROM COUNCILLOR BOB BEAUCHAMP

E9 Non-Disclosure Agreement

Question:

On how many occasions have you signed a non-disclosure agreement for information shared with you by Council officers since joining Cabinet?

Answer:

Once

WRITTEN QUESTION TO THE CABINET MEMBER FOR HEALTH AND SOCIAL CARE FROM COUNCILLOR DEBBIE CLANCY

F1 Lockdown

Question:

During lockdown, on how many occasions have you used the Council House to work out from?

Answer:

None

WRITTEN QUESTION TO THE CABINET MEMBER FOR HEALTH AND SOCIAL CARE FROM COUNCILLOR MAUREEN CORNISH

F2 Non-Disclosure Agreement – Tyseley Incinerator

Question:

Were you asked to sign – and did you sign – a non-disclosure agreement in relation to information about the Tyseley incinerator?

Answer:

No

WRITTEN QUESTION TO THE CABINET MEMBER FOR HEALTH AND SOCIAL CARE FROM COUNCILLOR BOB BEAUCHAMP

F3 Non-Disclosure Agreement

Question:

On how many occasions have you signed a non-disclosure agreement for information shared with you by Council officers since joining Cabinet?

Answer:

Once

WRITTEN QUESTION TO THE CABINET MEMBER FOR HOMES AND NEIGHBOURHOODS FROM COUNCILLOR DEBBIE CLANCY

G1 Lockdown

Question:

During lockdown, on how many occasions have you used the Council House to work out from?

Answer:

None

WRITTEN QUESTION TO THE CABINET MEMBER FOR HOMES AND NEIGHBOURHOODS FROM COUNCILLOR MAUREEN CORNISH

G2 Non-Disclosure Agreement – Tyseley Incinerator

Question:

Were you asked to sign – and did you sign – a non-disclosure agreement in relation to information about the Tyseley incinerator?

Answer:

No

WRITTEN QUESTION TO THE CABINET MEMBER FOR HOMES AND NEIGHBOURHOODS FROM COUNCILLOR BOB BEAUCHAMP

G3 Non-Disclosure Agreement

Question:

On how many occasions have you signed a non-disclosure agreement for information shared with you by Council officers since joining Cabinet?

Answer:

Once

WRITTEN QUESTION TO THE CABINET MEMBER FOR SOCIAL INCLUSION, COMMUNITY AND EQUALITIES FROM COUNCILLOR DEBBIE CLANCY

H1 Lockdown

Question:

During lockdown, on how many occasions have you used the Council House to work out from?

Answer:

None

WRITTEN QUESTION TO THE CABINET MEMBER FOR SOCIAL INCLUSION, COMMUNITY AND EQUALITIES FROM COUNCILLOR MAUREEN CORNISH

H2 Non-Disclosure Agreement – Tyseley Incinerator

Question:

Were you asked to sign – and did you sign – a non-disclosure agreement in relation to information about the Tyseley incinerator?

Answer:

No

WRITTEN QUESTION TO THE CABINET MEMBER FOR SOCIAL INCLUSION, COMMUNITY AND EQUALITIES FROM COUNCILLOR BOB BEAUCHAMP

H3 Non-Disclosure Agreement

Question:

On how many occasions have you signed a non-disclosure agreement for information shared with you by Council officers since joining Cabinet?

Answer:

None

WRITTEN QUESTION TO THE CABINET MEMBER FOR STREET SCENE AND PARKS FROM COUNCILLOR ROBERT ALDEN

I1 Fly-tipped Rubbish

Question:

Since May 2018, how many piles of fly-tipped rubbish have been cordoned off with barriers rather than being cleared straight away?

Answer:

Since May 2018 the Highway Maintenance Service (Amey/Kier) has attended 1,008 received reports of 'large items' causing an obstruction to highway, where BCC Waste Management subsequently attended to remove the items.

It is not recorded whether these are 'fly tipped rubbish' or other types of obstruction such as building materials. In all instances Amey/Kier would remove obstructions where they can be safely lifted by the response crew. Where the items could not be removed immediately, a risk assessment would have been undertaken and where there was deemed to be a danger to the public, barriers would have been placed, pending removal of the obstruction by BCC Waste Management Services.

Without undertaking individual analysis of each reported case it cannot be determined as to the number of occasions where barriers were put in place. But it is considered from anecdotal feedback that in the majority of the received reports referred to above that the action taken would have been the placing barriers.

WRITTEN QUESTION TO THE CABINET MEMBER FOR STREET SCENE AND PARKS FROM COUNCILLOR RON STORER

I2 Recycling Bin Paper Pods

Question:

How many recycling bin papers pods have the Council purchased that were the wrong size, and at what cost?

Answer:

The manufacturer ceased producing the caddies to the original 55 litre design.

The company sent in a new 55ltr design for trial. 150 of the new design caddies were bought on trial at the cost of £750. However, as the design and safety aspects were not agreed, these were returned to the manufacturer and the cost reimbursed so there was no cost to the Council.

In order to supply pods to residents, 40 litre caddies of a compatible design were ordered and are now in use by residents: 4960 of these pods have consequently been purchased at a cost of £24,552.

WRITTEN QUESTION TO THE CABINET MEMBER FOR STREET SCENE AND PARKS FROM COUNCILLOR EDDIE FREEMAN

I3 Street Cleanliness

Question:

Please provide the ward by ward breakdown for each month since April 2019 showing the results of the 13 street cleanliness assessments carried out in each ward each month for the Land Audit Management System.

Answer:

The LAMS (Land Audit Management System) is a quality inspection system to monitor grounds maintenance and street cleansing for a total street scene overview. The survey is undertaken by trained officers. LAMS is a quality inspection scheme used by many local authorities

The data is reviewed by Service Managers to see if maintenance schedules need to be changed.

Locations are randomly chosen by the surveying officers

Grading & Scoring Mechanism details:-

Grade	Description	Score
A	Excellent Standard	3 points
B	Acceptable Standard	2 points
C	Unacceptable Standard	1 point
D	Poor Standard	0 points
Desired minimum grade of B and above (minimum baseline of 66.60%)		

Appendix showing data attached.

I3 Cllr Freeman Copy of LAMS data April 20

WRITTEN QUESTION TO THE CABINET MEMBER FOR STREET SCENE AND PARKS FROM COUNCILLOR DEBBIE CLANCY

I4 Lockdown

Question:

During lockdown, on how many occasions have you used the Council House to work out from?

Answer:

During lockdown I have not been into the Council House for any reason at all.

WRITTEN QUESTION TO THE CABINET MEMBER FOR STREET SCENE AND PARKS FROM COUNCILLOR MAUREEN CORNISH

I5 Non-Disclosure Agreement – Tyseley Incinerator

Question:

Were you asked to sign – and did you sign – a non-disclosure agreement in relation to information about the Tyseley incinerator?

Answer:

No

WRITTEN QUESTION TO THE CABINET MEMBER FOR STREET SCENE AND PARKS FROM COUNCILLOR BOB BEAUCHAMP

I6 Non-Disclosure Agreement

Question:

On how many occasions have you signed a non-disclosure agreement for information shared with you by Council officers since joining Cabinet?

Answer:

None.

WRITTEN QUESTION TO THE CABINET MEMBER FOR STREET SCENE AND PARKS FROM COUNCILLOR BRUCE LINES

I7 Emissions

Question:

What are the current average daily emissions from the Tyseley incinerator, in mg/Nm3 for each of the following?

-Total dust
-TOC
-CO
-HF
-SO2 and SO3
-NOx
- Sb + As + Pb + Cr + Co + Cu + Mn + Ni + V
- Hg
-Cd and Tl
- Dioxins and furans

Answer:

The information provided is a yearly average. This information is also provided on the Veolia website

www.veolia.co.uk/birmingham/facilities/our-sites/energy-recovery/emissions-air-data-0

	Dust (mg/Nm3)	*TOC* (mg/Nm3)	CO (mg/Nm3	HF (mg/Nm3)	SO2 (mg/Nm3)	NOx (mg/Nm3)	Sb + As + Pb + Cr + Co + Cu + Mn + Ni + V (mg/Nm3)	Hg (mg/Nm3)	Cd & Tl (mg/Nm3)	Dioxins & Furans (ng/Nm3)
2019	2.3	*1.4*	9.7	0.038	12.7	145.8	0.029	0.00088	0.00163	0.0154

WRITTEN QUESTION TO THE CABINET MEMBER FOR STREET SCENE AND PARKS FROM COUNCILLOR ADAM HIGGS

I8 CO2 Tonnage

Question:

For each of the last 4 years what was the total tonnage of CO2 emitted by the Tyseley Waste incinerator?

Answer:

Using waste as a fuel is recognised as a net saver of carbon.

When considering the full life cycle compared to other fuels, **waste provides a net saving of carbon emissions.** We consider the mining, transport, use of alternatives and the comparative of landfilling the waste, as well as the renewable biomass content of the fuel. The calculation methods have been rigorously tested and proven valid in many planning enquiries.

CO2e emissions reported to the Environment Agency include both the fossil and biogenic CO2e emissions released, and it is important to differentiate between them since biogenic emissions are considered to be carbon neutral.

The ERF technology generates partly renewable electricity which is exported to the National Grid to power homes, and ferrous and non ferrous metals as well as aggregates (glass, stones, ashes) which are recovered for recycling replacing virgin aggregate. **All of these reduce carbon emissions to the atmosphere.**

The alternative to this is not recycling as the infrastructure to deliver that is not in place, and would not be for a considerable time, **it is landfilling** which produces methane, 25 times more powerful a greenhouse gas than carbon dioxide.

A summary of the carbon emissions for a Modern ERF using 2019 operational data and comparison against landfill is below:

CO2e emissions - 2019	Tonnes CO2e
Direct & Indirect CO2e emissions of Modern ERF	48,387
Avoided CO2e emissions of Modern ERF	33,702
Net CO2e emissions of Modern ERF	14,685
Net CO2e emissions of Landfill	34,125
Saving against landfill	**19,440**

A further summary of the CO2e emissions in grams CO2e per kWh of electricity exported is shown below for a Modern ERF compared with landfill and providing the electricity generation instead from alternative fossil fuel sources:

Comparison of CO2e emissions	**Emissions (gCO2e/kWh)**
Modern ERF generation	486
Landfill* + coal fired power generation to produce equivalent energy	705
Landfill* + CCGT generation to produce equivalent energy	539
Landfill* + 50% coal & 50% CCGT generation to produce equivalent energy	523

**Landfill gas recovery efficiency is based on 75%*

To be clear the benefits of energy recovery are two fold in carbon terms, firstly landfill diversion, and secondly the use of a partly renewable fuel to generate energy.

Tyseley ERF Yearly Total	C02 (tonnes)
2016	316,087
2017	310,366
2018	312,115
2019	308,485

WRITTEN QUESTION TO THE CABINET MEMBER FOR STREET SCENE AND PARKS FROM COUNCILLOR MEIRION JENKINS

I9 Percentage of Waste

Question:

What percentage of waste collected at HWRCs has been recycled in each year for the last 5 years?

Answer:

HWRC WASTE (TONNES)

	2015/16	2016/17	2017/18	2018/19	2019/20
PERCENTAGE REUSE, COMPOSED & RECYCLED	45.01%	41.78%	38.00%	38.95%	47.11%
PERCENTAGE REUSE, COMPOSED, RECYCLED & SEGREGATED WOOD FOR BIO-FUEL	58.80%	55.96%	51.08%	53.89%	58.63%

Please note, the dip in the recycling percentage in 2017/18 and 2018/19 was mainly due to increases in residual waste, possibly due to the disruption to collection services at that time.

WRITTEN QUESTION TO THE CABINET MEMBER FOR STREET SCENE & PARKS FROM COUNCILLOR JON HUNT

I10 Resuming of Garden Waste Subscriptions

Question:

Given that Paid Bulk Waste Collections have resumed, why have Garden Waste Collection Subscriptions not been resumed?

Answer:

During the pandemic, our focus has been to maintain the weekly collection of residual waste.

Bulky waste collections recommenced with a booking system and we have ensured that the weekly household and recycling collection service has been maintained in addition to bringing back the bulky waste service.

The garden waste collection service has 58,000 garden bins in operation with the majority of previous customers already renewing before the decision was made to suspend new customers. We are currently reviewing the provision of this service and any changes will be widely publicised.

WRITTEN QUESTION TO THE CABINET MEMBER FOR STREET SCENE & PARKS FROM COUNCILLOR BABER BAZ

I11 Paid Bulky Waste Collections

Question:

Could the Cabinet Member report on the number of requests for Paid Bulky Collections since the service was resumed, giving the age breakdown if possible?

Answer:

Paid bulky collections were resumed on Wednesday 6th May. The online bulky booking form has been accessed 11598 times (until 11:00 hours on 8 July), however many of these did not result in a collection being booked – examples for such include:

- there were no collection slots available
- their card didn't work
- they changed their mind about paying the fee.

Since the service resumed we have completed 80 collections per working day – a total number of 3540 collections (until 8 July).

Collection slots are currently being released on a weekly basis (usually a Friday morning) for the whole week following the week after next. For example, on Friday 10th July, collection slots will be released for the week beginning Monday 20th July. Therefore the maximum current waiting period between making a booking and the collection taking place is two weeks (e.g. booking successfully made on Friday 10th and the collection taking place on Friday 24th).

WRITTEN QUESTION TO THE CABINET MEMBER FOR STREET SCENE & PARKS FROM COUNCILLOR NEIL EUSTACE

I12 Booking Slots for Household Recycling Centres

Question:

Following the introduction of the much-needed booking system for Household Recycling Centres, could the Cabinet Member report on the uptake of booking slots?

Answer:

The booking system at the Household Recycling Centres has been well received by residents with a 100% of all slots being booked 6 days in advance. It has been identified that a number of booking slots reserved have not been used by residents, as part of our effort to continue to improve the offer to our residents we have taken into account and added additional slots as a counter measure. We will continue to review on a regular basis moving forward.

- We continue to prioritise and ensure the safety of all users and employees of the sites by maintaining social distancing on all HWRCs across the city and continue to monitor government guidelines and advice on CoViD-19
- The implementation of the booking system has removed the queuing issues seen prior to implementation, which has resolved issues locally removing the negative impact felt by businesses and homeowners in the surrounding area
- We have received positive feedback relating to all aspects of the booking system and the management of the HWRCs

WRITTEN QUESTION TO THE CABINET MEMBER FOR TRANSPORT AND ENVIRONMENT FROM COUNCILLOR ADAM HIGGS

J1 Car Free School Streets Scheme

Question:

Can you provide a full list of schools who applied to take part in either tranche of the car free school streets scheme?

Answer:

2019 applications:
St Edward's Catholic Primary School
St Dunstan's Catholic Primary School
Twickenham Primary School
Featherstone Primary School
Gunter Primary School
Hollywood Primary School
Little Sutton Primary School
Our Lady's Catholic Primary School
Alston Primary School
Leigh Primary School
St Francis CofE Primary School
Lyndon Green Junior School
The Orchards Primary Academy
Lea Forest Primary Academy
Court Farm Primary School
Hillstone Primary School
The Oaklands Primary School
Bournville School & 6th Form Centre
Penns Primary School
Nelson Mandela School
Moor Hall Primary School
St Peter's CE Primary School
St Francis Catholic Primary School
Water Mill Primary School
St Laurence Church Junior School
St Francis CofE Primary School
Cofton Primary School
The Oval Primary School
Sladefield Infant School
Chilcote Primary School
Nelson Junior & Infant School
Somerville Primary School
Heathlands Primary Academy

2020 applications:
Anderton Park Primary School
Ark Tindal Primary
Birches Green Infant and Junior Schools

Chad Vale Primary School
Holy Cross Catholic Primary School
Hillstone primary school
Moor Green Primary Academy
Osborne Primary School
Somerville Primary School
The Oval
Wyndcliffe Primary School
St Albans Catholic primary
Woodthorpe JI School
Saint John Wall Catholic School

WRITTEN QUESTION TO THE CABINET MEMBER FOR TRANSPORT AND ENVIRONMENT FROM COUNCILLOR DEBBIE CLANCY

J2 Lockdown

Question:

During lockdown, on how many occasions have you used the Council House to work out from?

Answer:

None.

WRITTEN QUESTION TO THE CABINET MEMBER FOR TRANSPORT AND ENVIRONMENT FROM COUNCILLOR MAUREEN CORNISH

J3 Non-Disclosure Agreement – Tyseley Incinerator

Question:

Were you asked to sign – and did you sign – a non-disclosure agreement in relation to information about the Tyseley incinerator?

Answer:

No

WRITTEN QUESTION TO THE CABINET MEMBER FOR TRANSPORT AND ENVIRONMENT FROM COUNCILLOR BOB BEAUCHAMP

J4 Non-Disclosure Agreement

Question:

On how many occasions have you signed a non-disclosure agreement for information shared with you by Council officers since joining Cabinet?

Answer:

Once

WRITTEN QUESTION TO THE CABINET MEMBER FOR TRANSPORT & ENVIRONMENT FROM COUNCILLOR JON HUNT.

J5 Whose Emergency Transport Plan

Question:

The log of emergency decision making during the pandemic states that a number of decisions were taken to develop the Emergency Transport Plan between 7 May and 11 June? The log also states that the cabinet member was not briefed or consulted about these decisions. Can the cabinet member explain why?

Answer:

The information contained in the log is incorrect and I have asked for it to be amended accordingly. I was engaged extensively on both the Emergency Transport Plan and the subsequent Emergency Active Travel Fund bid – as set out in the related Executive reports dated 9 June and 23 June respectively.

Matters relating to the awarding of contracts to take such work forward are delegated to officers and I would not expect to be consulted on these.

WRITTEN QUESTION TO THE CHAIRMAN OF CO-ORDINATING OVERVIEW AND SCRUTINY COMMITTEE FROM COUNCILLOR ALEX YIP

K Lockdown

Question:

During lockdown on how many occasions have you used the Council House to work out from?

Answer:

Once on Friday, 29th May 2020 when the first live streamed Co-ordinating Overview & Scrutiny Committee took place.

WRITTEN QUESTION TO THE CHAIRMAN OF COMMONWEALTH GAMES CULTURE AND PHYSICAL ACTIVITY OVERVIEW AND SCRUTINY COMMITTEE FROM COUNCILLOR ALEX YIP

L Lockdown

Question:

During lockdown on how many occasions have you used the Council House to work out from?

Answer:

None

WRITTEN QUESTION TO THE CHAIRMAN OF ECONOMY AND SKILLS OVERVIEW AND SCRUTINY COMMITTEE FROM COUNCILLOR ALEX YIP

M Lockdown

Question:

During lockdown on how many occasions have you used the Council House to work out from?

Answer:

I have not visited the Council House since the start of lockdown in March. All committee meetings have been by video conference.

WRITTEN QUESTION TO THE CHAIRMAN OF EDUCATION CHILDREN'S SOCIAL CARE OVERVIEW AND SCRUTINY COMMITTEE FROM COUNCILLOR ALEX YIP

N Lockdown

Question:

During lockdown on how many occasions have you used the Council House to work out from?

Answer:

Zero

WRITTEN QUESTION TO THE CHAIRMAN OF HEALTH AND SOCIAL CARE OVERVIEW AND SCRUTINY COMMITTEE FROM COUNCILLOR ALEX YIP

O Lockdown

Question:

During lockdown on how many occasions have you used the Council House to work out from?

Answer:

Zero

WRITTEN QUESTION TO THE CHAIRMAN OF HOUSING AND NEIGHBOURHOODS OVERVIEW AND SCRUTINY COMMITTEE FROM COUNCILLOR ALEX YIP

P Lockdown

Question:

During lockdown on how many occasions have you used the Council House to work out from?

Answer:

None

WRITTEN QUESTION TO THE CHAIRMAN OF RESOURCES OVERVIEW AND SCRUTINY COMMITTEE FROM COUNCILLOR ALEX YIP

Q Lockdown

Question:

During lockdown on how many occasions have you used the Council House to work out from?

Answer:

None

WRITTEN QUESTION TO THE CHAIRMAN OF SUSTAINABILITY AND TRANSPORT OVERVIEW AND SCRUTINY COMMITTEE FROM COUNCILLOR ALEX YIP

R Lockdown

Question:

During lockdown on how many occasions have you used the Council House to work out from?

Answer:

I have not been into the council house since lockdown. I'd like to place on record my sincere thanks to the council's IT service for acting so fast and effectively to enable remote working.

Executive Business Report
Birmingham City Council
City Council

15 September 2020

Subject:	Update on Birmingham City Council's response to COVID-19
Report of:	Cabinet
Report authors:	Chris Naylor (Gold Commander & Interim Chief Executive)

Does the report contain confidential or exempt information? ☐ Yes ☒ No

If relevant, state which appendix is exempt, and provide exempt information paragraph number or reason if confidential:

1. Executive Summary

1.1. The purpose of this report is to provide an update on the Council's response to the COVID-19 pandemic, following the previous report that was brought to City Council in June 2020.

1.2. In addition, this report provides an update on work that the Council is doing to understand the differential impact of the pandemic on different communities in Birmingham, and how this information is helping to shape our strategy for recovery.

2. Recommendations

2.1. That the report be noted.

3. Introduction

3.1. As we head into the autumn, we are seeing a gradual return to a semblance of normality across Birmingham; schools are welcoming back children for the new term, shops and small businesses are re-opening their doors for customers, and we are finally able to socialise with the friends and family that we missed during lockdown. As the worst of the pandemic passes, Birmingham can begin to look towards a brighter, and more hopeful, future.

3.2. In doing so we will not forget the immense toll that Covid-19 has had on our city, and for those families and communities who have lost loved ones, life will never return to ‘normal’. We share their pain and sadness, and extend our greatest sympathies to all those who have experienced loss as a result of the pandemic.

3.3. Despite the easing of lockdown, we cannot be complacent. Covid-19 still presents a significant risk to both public health and the economy. Around the country we have seen other cities and regions go back into lockdown as infection rates rise, and so we ask everyone to stay vigilant and abide by social distancing guidelines to ensure that this does not happen in Birmingham. Within the Council, planning for recovery is taking place alongside planning for a ‘second wave’, understanding that the pathway to recovery is unlikely to be linear and that we may see some parts of our economy start to recover before others. As always, we are working closely with both local and national partners to monitor case rates, share information and best practice, and plan for any future outbreaks should they occur.

3.4. The impact of Covid-19 will continue to reverberate across our city, and across the rest of the world, for the foreseeable future. We are only at the very beginning of our recovery journey, and it is likely that our lives will look very different for a very long time. As a Council, it is important that we commit to learning the hard lessons of Covid-19 and recommit to building a fairer, more sustainable city where every person can live up to their full potential.

3.5. Details in relation to specific areas of response can be found as follows:

- Decision making; pages 2 to 4
- Health & Wellbeing; pages 4 to 12
- Education, Skills and Children’s Wellbeing; pages 12 to 23
- Communities (including Housing, Bereavement Services); pages 24 to 35
- Street Scene & Parks (including Waste Management); pages 35 to 37
- Transport; pages 37 to 43
- Business Support; pages 44 to 47
- Council Finances (including Corporate Procurement); pages 47 to 52
- Recovery Planning; pages 53 to 57

4. Council decision making during Covid-19

4.1.1. The City Council is a statutory responder, in the same context as the police and fire service with legal duties to act in an emergency. It is therefore required to respond effectively with a recognised command structure that is empowered to

make the rapid decisions that are necessary in an emergency. This has been facilitated through the Council's Emergency and Business Continuity Plans, after a Major Incident was declared in March 2020, in accordance with the provisions of the Council's constitution (Part E3 Section 3.3). The Council's approach has changed to deliver an accountable command and control system to ensure that the needs of residents are met. This has meant that the normal rules around council decision-making have changed to reflect the different state the Council and the city are in as the global pandemic continues.

4.1.2. Whilst the change in governance arrangements has meant that many Covid-19 related decisions were made via the command structure, Cabinet members have played an active part in decision making and have been regularly briefed on key issues by Council Officers. Cabinet took a leading role in shaping the council's response to several areas including economic recovery, the approach to bereavement, support to rough sleepers, access to recreational space and the phased reopening of schools. Although the command structure remains in place, as the pandemic continues, we are now working to a system where the vast majority of Covid-19 decisions are taken with Cabinet or Cabinet Member oversight, where required.

4.1.3. Cabinet also led work in highlighting weaknesses in the national response to the pandemic particularly around the lack of available PPE.

Local Covid-19 Outbreak Engagement Board

4.1.4. The Local Covid-19 Outbreak Engagement Board was established in June 2020, as a sub-committee of the Birmingham Health and Wellbeing Board. The purpose of the Board is to provide political ownership and public-facing engagement and communication for outbreak response in Birmingham. The Board's role is also to ensure that the Test and Trace response in Birmingham is delivering the right interventions to protect the health and wellbeing of citizens.

4.1.5. Its membership includes representation from across the political spectrum and partners in health, police and the community and voluntary sector. The Board is chaired by the Leader of the Council.

Covid-19 Decision Log

4.1.6. To ensure maximum transparency, decisions made by the Council relating to Covid-19 are published in a Decision Log.

4.1.7. This document sets out key decisions undertaken as part of the Council's response to the pandemic and actions taken after a Major Incident was declared, showing dates of decisions and the reasons for them, who took responsibility, what cost was involved and member consultation. These range from setting up a food distribution hub while the national scheme was being set up and discussions around a regional mortuary, to closing city centre markets, sourcing personal protective equipment (PPE) and buying free school meal vouchers to ensure our most vulnerable youngsters did not go hungry.

4.1.8. The Decision Log shows the tremendous amount of hard work that continues across the council, mostly behind the scenes and we acknowledge the continued efforts of staff and partners. The decision log can be found here.

5. Health & Wellbeing

5.1. Adult Social Care

Supporting and protecting our shielded and vulnerable

5.1.1. Adult Social Care has continued to work with colleagues from across the council to co-ordinate efforts to support and protect our shielded and vulnerable cohort, whilst ensuring efforts are not duplicated.

5.1.2. It has provided additional support and advised officers who have worked closely with regional partners through West Midlands Association of Directors Adult Social Service (WMADASS) to support sharing of good practice, regional mapping and escalation of issues including shielding and food distribution across the West Midlands.

5.1.3. During the initial response to the emergency situation, the directorate refocused its Neighbourhood Network Schemes programme to support the COVID-19 response and commissioned Birmingham Voluntary Services Council (BVSC) to lead on capturing, coordinating, and sharing community activities responding to COVID-19 under their #Covid19SupportBrum partnership. Sector leads were identified across a number of vulnerable groups including care homes, learning disabilities, mental health and carers. This was to ensure a timely exchange of intelligence with Adult Social Care and the command structures of the council. This enabled a partnership approach to situations between Adult Social Care, the provider sector and sector leads.

5.1.4. National Shielding was officially paused at the end of July 2020. Any reintroduction of shielding would be a ministerial decision, as opposed to a decision within the gift of the Council. There are 31,000 people in Birmingham on the shielded list and updated data continues to arrive on a daily basis.

Community response

5.1.5. The core structures that supported the city-wide response to the Covid-19 crisis remain largely in place. These include:

- The network of thematic organisations
- The locality leads as part of the early help offer (Children's Partnership)
- The NNS network.

- The maintenance of the database of services offered by R2W (Routes to Wellbeing).

5.1.6. These networks are still meeting and the funded capacity that came online during the crisis currently remains in place, but is proposed to be strengthened to support a locality based response through use of the Emergency Assistance Grant.

5.1.7. The council has seen changes to some of the support networks that were available during the peak of the pandemic; for example:

- The mutual aid network – parts of this is still in place, but many of the participants have had to return to work reducing the availability of support;
- During the pandemic 'Safe and Well' checks were planned for individuals who were shielded and had not responded to any attempts to contact them via letter, phone or email. The Council called on the West Midlands Fire Service (WMFS) for mutual aid to undertake visits to over 1,000 'uncontactable' shielded individuals, to support the visits being undertaken by Council staff. The WMFS visits are ongoing, but they have indicated that they are unlikely to be able to continue beyond September 2020. If there is a requirement to undertake Safe and Well checks in future, then Council staff may need to be deployed to undertake this activity.

5.1.8. The directorate have continued to work with the Council's Insight Programme to look at vulnerability across the city to understand and develop policies and strategies to support vulnerable citizens.

Prevention and Communities Grant

5.1.9. Alongside this, organisations funded through Prevention and Communities Grants have also refocused their activities. This has allowed a range of actions to be taken to support the shielded and vulnerable cohort, including: safe and well checks; wellbeing calls to vulnerable adults in the community; food delivery and during the winter period there will also be a focus on encouraging flu jabs for eligible vulnerable adults.

5.1.10. The infrastructure of the Adult Social Care Prevention and Communities Grants was also mirrored by the Birmingham Children's Partnership to provide urgent resources to the front line for children and families.

5.1.11. As part of the city's recovery journey, this has opened a longer term dialogue with regards to an all age grant prospectus, in order to ensure a whole life course approach to investment within the community and voluntary sector. It also helps to ensure that the services available to vulnerable citizens are not unnecessarily fragmented by age segmentation of funding streams.

5.1.12. The sector leads are now also working with BVSC in their coordinating role to establish infrastructures which will form part of the recovery journey whilst also recognising that support to localised lockdowns will continue to be required.

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Personal Protective Equipment (PPE)

5.1.14. The PPE group continues to support teams across the council, independent care homes and home care providers, personal assistants, informal carers and others who need PPE to continue to deliver critical services.

5.1.15. Demand for PPE remains high. The PPE group has worked with colleagues in the Facilities Cell to address deficiencies in supply through obtaining PPE from alternative sources including generous donations from Birmingham businesses and the public. Due diligence is carried out on all offers of PPE received.

5.1.16. Procurement of further PPE is being undertaken in partnership with regional local authorities to increase our purchasing power.

5.1.17. With demand for PPE high and the subsequent pressure on supply chains, prioritisation of how the stock is used is required. Robust processes have been put in place for the allocation and distribution of PPE. This has enabled services that most need PPE to protect citizens and staff to remain equipped throughout the pandemic. The top priority is given to those who are working directly to provide care and support to vulnerable citizens, including our staff working in care centres and those providing domiciliary care.

5.1.18. As well as supplying PPE to our staff, there is also a need to support other independent providers who provide critical services to citizens. Systems and arrangements to monitor the PPE stock situation in the independent sector were established, so we are better able to quickly respond when a provider is in difficulty. An on-line portal has been developed for PPE requests and we have developed very effective working arrangements with Birmingham Community Healthcare Trust so that there is a single route for care homes who require support with PPE and other aspects of infection control and safe working practices.

5.1.19. PPE stock usage is being reported back to Local Resilience Forums on a weekly basis, in line with their requirements.

5.1.20. As the pandemic response evolves, the arrangements for PPE supply and distribution continue to change. The Government has now launched a PPE portal to act as the primary source of emergency supply for the independent care sector. This should reduce demand on the Council's stock although other pressures may emerge as guidance on the use of PPE further develops.

5.1.21. As at 17th August 2020, the PPE team has distributed 2,414,672 items of PPE including over 500k face-masks, 640k aprons and over 1m gloves.

5.1.22. In terms of PPE distributed to City Council services – 54% of the total has been supplied to Adult Social Care, 19% to Education and Skills and 6% to Neighbourhoods. 15% of the "internal" distribution has been supplied to the Children's Trust.

Support to care homes

5.1.23. Throughout the past six months we have proactively worked with our Health colleagues to provide a strong level of practical and financial support for care homes.

5.1.24. Regular contact has been maintained to ensure providers can raise concerns promptly and regular information, advice and guidance is being published on the Council's website via the 'Care Service Provider' page, including FAQs. Where providers are facing staff shortages, support is being provided on a mutual aid basis. Elsewhere, the directorate is coordinating clinical support for care homes, including enhanced GP cover and has expanded the Trusted Assessor model for hospital discharge to reduce the need for providers to conduct their own assessments.

5.1.25. The directorate have developed a care home tracker, bringing together several sources of data on care homes. This is being used to identify those homes we believe will benefit from enhanced testing and also to ensure that support is available to care homes once test results are known. Alongside this the CCG have led on developing a highly effective Pillar 1 swabbing process for use in the city.

5.1.26. Local enhanced testing arrangements has been used to coordinate whole home testing for all care homes during May and June 2020. We have been providing tests and getting results within 48 hours, and if there is a Covid-19 positive result we have provided swift wrap-around support through providing advice on self-isolation, assistance with staffing and enhanced GP and nursing care.

5.1.27. We have been working hard with our local system partners to coordinate a local enhanced testing programme and to ensure that once results are known, we provide advice and support to care providers to help manage outbreaks effectively.

5.1.28. Whilst we do have a large number of care providers (291 homes) and residents (7,200), we are confident we can provide a holistic testing and support offer based on local intelligence from across our health and social care system.

5.1.29. We have provided a strong level of financial support for care homes, implementing a previously agreed fee increase that reflects inflation and

National Living Wage, as well as reimbursement of additional costs e.g. staffing and PPE, on an open book basis for any additional costs since 16 March 2020.

5.1.30. Beyond this we have implemented the ability for up to 25% variance to costs for home support/supported living without recourse to social work review where the change is temporary and as a result of Covid-19 e.g. day service, lunch club closure or simply an increase or decrease of care required. We also released payment of over £1m relating to disputed invoices where risk of potential overpayment was low, to assist with cashflow.

Patient/Staff Testing

5.1.31. Testing numbers have continued to increase and a series of new pathways for testing have been activated over the last month nationally, including the launch of weekly staff and monthly resident care home testing.

5.1.32. Laboratory capacity across the West Midlands has steadily increased both for patient and staff testing (including postal testing for staff who are unable to drive). There are between 1-2,000 tests a day being carried out in the West Midlands.

5.1.33. Testing for Adult Social Care staff has been available via two routes, the government self-referral website for essential workers or via BCC Occupational Health. Both routes have enabled staff and members of their household who are showing symptoms of the virus to request a test. These routes have been embedded within directorate processes to ensure that staffing levels are known, and services can continue, as well as appropriate health and wellbeing support offered to staff.

5.1.34. Following the government announcement of antibody tests for social workers on Thursday 21st May, and the subsequent extension of this offer to the entire health and social care workforce, antibody tests are now being conducted with workers and are due to conclude by the end of August.

Supporting our carers

5.1.35. Adult Social Care have continued to work with and support our carers since the start of the emergency response to the pandemic. The Carers Strategy Group, which consists of providers and commissioners, has been temporarily reconfigured to meet on a weekly basis to ensure that there is a consistent response across the city for all carers. The Carers Support Service has also been temporarily reconfigured to optimise the support to carers through these challenging times.

5.1.36. We continue to provide focused outreach/safe and well checks via telephone targeting the most vulnerable registered carers first. Our webpages are

continually updated to provide the latest Covid-19 advice, guidance and links to government guidance.

5.1.37. Work is currently under way to identify the longer-term negative impacts of Covid-19 for carers and how this should be addressed as part of the city's recovery journey. Potential themes identified so far include: the financial impact of the pandemic and lockdown restrictions, isolation, loss of independence, and the risk of deterioration in health for both carers and the people they care for.

Finance

5.1.38. As at period 4 (end of July 2020), the overall forecast outturn for the Adults Social Care Directorate is an overspend of £30.000m against the current budget of £328.361m, which is a combination of a Covid-19 related overspend of £31.777m offset by a base budget underspend of £1.777m.

5.2. Public Health

5.2.1. Our Public Health Director Dr Justin Varney continues to lead on supporting our response to the Covid-19 challenges.

5.2.2. The Cabinet Member for Health and Wellbeing continues to send weekly Public Health briefings to elected members providing a short summary of the current data on Covid-19 in Birmingham. This section of the report provides the latest data as of **31 August 2020**.

- The 7-day case rate up to **31 August 2020** in Birmingham was 26.2 per 100,000.
- Spread appears to be primarily occurring through social interactions within family networks and workplaces where social distancing is not being observed.
- Hospital admissions remain very low and the international evidence suggests that where there are increases, in primarily younger working age adults, there is usually a 4-week time lag before this is reflected in hospitalisations;
- Situations / outbreaks reported to Public Health England have fallen to 25 from 31 in the 7 days leading up to the 23rd August and the majority are linked to workplaces, or to residential care homes.
- There has been consistent increase in the number of people testing positive in the 20-40yr age group and a small increase in both 40-59yrs and 0-19yrs age groups. Further analysis of the 0-19yrs shows this is primarily in the 16-21yrs age group, most visibly in the week ending the 16th August.

- In terms of ethnicity there has been a rise in all ethnic groups testing positive, although the largest ethnic group remains the Asian community.

Awareness Raising

5.2.3 The current testing regime is based on testing individuals admitted to hospital and NHS staff (pillar 1) and testing in the community (pillar 2). Community testing includes repeat testing of residents and staff in older adult residential care homes.

5.2.4 Currently, the reporting of pillar 2 tests and cases lags behind pillar 1 and there is a 3 day lag in complete data. The Council is receiving daily data on new cases but there is not yet demographic data on testing uptake other than post-code level data.

5.2.5 Partnerships have been formed with a series of local community radio stations to actively promote awareness and Covid-19 information, including: Ambur Radio, Switch Radio, Raaj FM, New Style Radio, Big City Radio, and Unity FM.

5.2.6 Various other measures are being taken to raise awareness as follows:

- Targeted social media focused to post-code areas with consistent series of household cases is being circulated to community partners and members to help increase awareness.
- Translated versions of national test and trace posters are being circulated through social media and community partners. This is supported by proactive community engagement.
- Supporting awareness of Asian Chamber of Commerce multi-lingual helpline to support businesses become Covid-19 safe.
- Weekly meetings with faith leaders and different community organisations to support messaging and communication cascades.
- The Bhealthy campaign has launched with translated materials, including testing and Covid-19 safety advice and is being supported by a series of community webinars.
- Environmental Health capacity has been increased to support education and awareness engagement with businesses and Inclusive Growth has been working with the BIDs in a similar way.

Testing

5.2.7 The Council has worked with DHSC/NHSE to agree additional drive through and walk-through testing sites. These have been chosen based on the physical space requirements but focused on areas where there is lower car ownership for the walk-through sites or lower testing uptake.

5.2.8 The national regional and local testing service led by NHS England are working with the Council to scope further temporary and rotational pop-up testing sites.

5.2.9 The Council is working with the NHS Test and Trace and Regional DHSC team to develop 'drop and collect', a pilot approach to taking testing kits to the doorstep in areas where there is increased concern or low testing uptake. The drop and collect teams will provide kits to households with information, (translations will be available) and then collect the kits within an agreed time frame, these will then go through the logistics of local testing sites and it is hoped that this will increase participation in testing and also provide citizens with faster access to results.

Contact tracing

5.2.10 The Council is already working with West Midlands PHE to provide additional support to contact tracing where individuals have not responded or not engaged fully with CTAS.

5.2.11 There are two approaches being developed to support contact tracing processes in Birmingham as part of the national enhanced support approach:

- Increased situation awareness for national contact tracers so that positive cases can be asked specific questions about attendance at events that we know have happened in their potential exposure period such as street parties.
- Local Authority support for enhanced contact tracing, this is the national model where there is an accelerated approach to contact tracing where those who do not response within 2-3 days are then moved to Local Authority follow up by trained staff. We are working for this to go live in mid-September.

Covid-19 and ethnicity

5.2.12 There are multiple pieces of research that highlight a statistically significant difference in death rates in different ethnic groups. Although the variance between different ethnic groups is reduced when variables such as age, gender and deprivation are considered this does not fully explain the disparity and further research is needed to explore the reasons for this.

5.2.13 This pandemic has exposed the links between inequality experienced across race, class, gender, disability and age. Highlighting existing inequalities in terms of low income work, education, health, housing, but has also revealed new divides in terms of the ability to work and learn from home, to access green spaces, the extent of digital and financial exclusion.

5.2.14 The impact of this virus will affect many families and individuals but it will have a profound effect upon those who were already experiencing inequalities before the pandemic.

5.2.15 The council is already looking at these impacts by collecting and analysing qualitative and quantitative data and engaging with voluntary and community organisations and partners to help us better understand and support communities. Birmingham has been leading the way on raising these issues and will be participating in a number of national and regional reviews to explore the impact of Covid-19 on our BAME communities.

6 Education, Skills and Children's Wellbeing

6.1 Schools

6.1.1 We were pleased to be supported by an experienced inspector from Ofsted who was seconded to Birmingham during the summer term and was a key part of a successful partnership initiative between the City Council and the School of Education at the University of Birmingham. This partnership undertook research which helped to develop our understanding of the short-and medium-term effects of school closures on the learning and wellbeing of pupils, and to support schools identify strategies to support pupils and promote equity.

6.1.2 In May, Government set out plans for schools in England to start reopening to more pupils from the start of June. The Council produced a comprehensive risk assessment document to support schools with planning for reopening and committed to working with schools, parents and unions to ensure that any such move was done in a safe way that gave confidence and reassurance. The risk assessment took account of all aspects of government and Public Health guidance and has been regularly updated as the guidance has changed.

6.1.3 Birmingham schools began to reopen to more pupils in eligible year groups (nursery, reception, Y1 and Y6) from the start of June and attendance steadily increased. By 22nd June, 26,000 children were attending. On Tuesday 23rd June, 100% of Birmingham primary schools were open, 96% of nursery schools, 94% of secondaries and 89% of special schools.

6.1.4 During the summer term, the Council arranged for the delivery of 703 laptops provided by the DfE to maintained schools. These laptops are for the use of disadvantaged pupils in Year 10. A further 3,770 laptops were provided by the DfE for children with a social worker identified by Birmingham Children's Trust.

6.1.5 To support families over the summer period, the council developed a menu of potential holiday activities, both online and onsite, with external providers for schools to take up. Schools experiencing high parental demand for extended childcare were supported to access provision with local childcare providers. The

council published details of holiday childcare through playschemes and other activities on its website.

6.1.6 All schools in Birmingham have been re-opening to all pupils from the start of September. In advance of the re-opening we supported this by ensuring that strong messages went out across the education sector that stressed the importance of full re-opening. Schools have been offered support with logistics planning and risk assessments.

6.1.7 Initial attendance data from the DfE for the very start of term has shown Birmingham compares favourably to other core cities and primary attendance is in line with national average. We will of course be monitoring this closely in the days and weeks to come. Officers from Education and Skills will be continuing their work with schools to support families over the coming weeks and we remain confident that the vast majority of concerns families may have can be resolved when they speak to their children's schools for reassurance.

6.1.8 Working with school leaders, trade union colleagues, Public Health and other stakeholders we will be sharing messages with families and the wider community from September onwards. These will emphasise the benefits of returning to school for pupils' wellbeing as well as their outcomes and will reassure families of the comprehensive risk assessments that have been done by schools to ensure children can be welcomed back safely. A variety of channels will be used, including social media.

6.1.9 Officers from Education and Skills have continued to work closely with Public Health on Test and Trace. A comprehensive flowchart has been produced to support schools and education settings deal with suspected cases and positive feedback has been received about schools' engagement with the process and their understanding of the reporting protocols. Where suspected cases have arisen in school settings, these have been dealt with appropriately and in full compliance with all Public Health guidance.

6.1.10 Comprehensive support has been provided to Birmingham schools to help them plan for the full reopening to all pupils from September 2020. In conjunction with the Council's safety services team, the risk assessment document has been fully updated to include all changes to guidance and preparation for possible future local lockdowns. The Council is receiving completed risk assessments for all schools for which it is the employer of staff (community and voluntary controlled) and providing feedback where appropriate. All schools and academies are required to provide the council with a declaration of conformity that confirms a full risk assessment has been undertaken.

6.1.11 As part of the preparation for a full return of pupils in September, the Council has worked up plans to potentially commission the use of public buildings and spaces beyond the school estate for educational purposes if pupils could not all return to the same school building/site. Education officers worked closely with

HR and partners to explore innovative solutions to any potential workforce deficit.

6.1.12 Education and Skills and Transportation colleagues are working closely both locally and regionally on ensuring that public transport can safely support a full return of pupils in September.

6.1.13 The council will continue to support schools and settings by providing regular updates to school leaders, sharing national messages, providing local Public Health information and updating the risk assessment when any new guidance is issued.

6.2 Special Educational Needs and Disabilities (SEND)

SEND Improvement and Transformation Journey

6.2.1 Despite the considerable disruption caused by Covid-19, work has continued at pace on the SEND service improvement and transformation journey. In some areas, progress has actually accelerated as teams have been forced to innovate and develop new solutions to problems posed by the pandemic. Since the last update report in June 2020, key improvement activities have included:

- Establishing weekly meetings with all schools to discuss children with Education, Health and Care Plans (EHCPs) and their return to on-site learning;
- Continuing weekly monitoring of EHCPs for pupils returning in September, across all schools and settings;
- Development of a new School Bridging Service to support and monitor children with anxieties about returning to school;
- Surveying individual pupil wellbeing across schools and the impact of COVID-19 on families (with a final report due in October 2020);
- Supporting our children and young people to present their views on the impact of COVID-19, with a view to feeding this into service development;
- Working alongside Cambridge University on a report looking at SEND provision across six schools in Birmingham.

6.2.2 Further details on some of these activities are provided below.

Supporting our SEND families

6.2.3 The Assistant Director for SEND and the Cabinet Member for Children's Wellbeing continue to have regular teams meeting with our Parent Carer Forum and this has been very useful in ensuring that the information and advice on our

local offer website and locality working has been relevant to our families with children with SEND.

6.2.4 The local offer website continues to be updated to ensure our children and young people with SEND and their families have up to date information and advice on frequently asked questions, tips and links to useful websites and resources.

6.2.5 Our specialist advisory teacher services team have been providing a range of advice and ideas to support children and families at home during the past 6 months.

Special Schools

6.2.6 Throughout the pandemic, the service has worked with our 27 Special Schools to ensure that students, parents and carers remain supported. For those schools that stayed open, this included weekly meetings with the Assistant Director for SEND and the Cabinet Member for Education, Skills and Culture.

6.2.7 We have worked closely with head teachers over the last two academic terms to provide guidance and advice, as well as ensure the supply of the necessary equipment to keep children and staff safe in Special Schools.

6.2.8 Prior to the summer break, the Council directly supplied PPE to Special Schools through our corporate procurement function. This direct distribution of equipment was in contrast to other local authorities, who did not supply PPE to schools beyond initial emergency supplies when schools reopened towards the end of term.

6.2.9 Due to the significant costs of directly supplying PPE to Special Schools, institutions were asked to make individual arrangements for the procurement of PPE supplies in the new academic year. However, following discussions with Special Schools and concerns about the financial burden this would place on schools, the Council has now agreed to continue directly distributing PPE to schools until at least the Autumn half-term.

Transition back to school

6.2.10 Since the last report to City Council in June 2020, the service has been busy planning for the new academic year and how we might best support children's transition back into school and on-site learning. Whether pupils are returning to familiar settings or starting at a new school, we recognise that the beginning of this academic year will look very different to what children and their families might normally expect.

6.2.11 We understand that many parents and carers are anxious about their children returning to school, especially if their child has complex care needs. Where there is a concern, schools have proactively worked with families to carry out

individual pupil risk assessments focusing on reducing risk and enabling a return to on-site learning.

6.2.12 The Educational Psychology Service has produced several resources to assist with the transition back into school, including both guidance for parents and easy-to-understand stories for children. This includes:

- 'Parent Guide: Practical tools, tips and resources for returning to school'
- 'I'm Going Back To School' story
- 'Supporting the return to school: Encouraging flexible thinking for children with Autism Spectrum Condition'

6.2.13 More broadly, the SEND service is in the process of developing a city-wide graduated approach to addressing pupil wellbeing, based on a four stage 'assess, plan, do, review' cycle. To facilitate this, we are looking to appoint wellbeing leads from across school leadership teams as well as a dedicated practitioner in each school. Over the coming months, we will be working within locality school teams to assist with capacity building and enable them to be more effective in their roles.

6.2.14 The Council has created a new Home Bridging Team to support children and young people who are anxious about returning to school. This term, out of 83 children who were previously home tutored, the team have successfully supported 64 children in gaining a place back in school. Moving forward into the Autumn Term, the team will be working within localities to establish local support offers for all key stages.

Education Health and Care Plans

6.2.15 Over this period, we are working hard to keep the Education, Health and Care Plans (EHCP) process moving. The service continues to operate via telephone calls and video conferencing where possible, and decision-making panels have successfully moved online. Previous improvement work on structured pathways has resulted in significant efficiencies within the system, with the average wait for plans reducing to its lowest for some years.

6.2.16 Parent Link Officers continue to work alongside all agencies across the SEND landscape to seek resolutions to issues and improve outcomes for children and young people. The majority of referrals received are related to requests for assessment, school placements, communication breakdowns, and general requests for advice and guidance.

Temporary Legislative Changes

6.2.17 On 1st May 2020, as part of the legislative response to Covid-19, national government announced changes to the legislation around Education, Health and

Care Plans (EHCPs). These temporary changes last until 25th September, and give local authorities, health commissioning bodies, education providers and other agencies more flexibility around statutory timelines for EHC assessments and plans to allow for the disruption caused by the pandemic.

6.2.18 No changes have been made to Annual Reviews, appeals processes or the admission of children to schools.

Home to School Transport

6.2.19 Birmingham City Council currently conveys over 4200 children to SEND schools and resource centres, which presents a major challenge in the context of Covid-19 social distancing guidance and risk assessments.

6.2.20 Despite the difficulties posed by the pandemic, we are planning for a full return of all pupils to schools in accordance with DfE guidance. Schools are planning a phased approach to pupil return in the first three weeks of September, with 98% of schools working to a full return of all students by the end of September. Plans are in place for class, Key Stage and corridor 'bubbles', with staggered lunch and break times. A small number of schools plan to work as one bubble. In relation to bubbles the following work has been undertaken:-

- Over the summer break, we have undertaken a comprehensive programme of planning and risk assessments for the new academic year. Key activities include:
- Consultation with all schools concerning new admissions and how bubbles will operate;
- Working with travel operators to plan new routes that meet bubble requirements while minimising change for each young person;
- Issuing of guidance to travel operators, parents and schools on new routes and timetables;
- Weekly meetings with representatives from Travel Assist to discuss individual school requirements in detail;
- Follow-up meetings with SEND Parent Link Officers and Travel Assist representatives offered to all schools in the last week of the summer break, to ensure that plans were up-to-date and sufficiently robust;
- Issuing of all necessary PPE to Travel Assist guides.

6.2.21 These changes to the Home to School Transport service, including the operation of new routes and services, have necessitated the procurement of additional vehicles and the recruitment of additional Travel Assist guides. The financial impact of these changes is currently being calculated.

6.3 Birmingham Children's Trust

Contact

6.3.1 Despite the limitations placed on services by the pandemic and social distancing guidance, Birmingham Children's Trust (BCT) remains in regular contact with all children and young people open to them. The number of face-to-face visits and meetings continues to increase, with comprehensive risk assessment processes in place. All front-line staff are provided with PPE, and individual staff assessments have been introduced to ensure that the workforce feels safe and protected.

6.3.2 BCT continues to offer extra support to children, families and young people where there are additional risk factors. They continue to collect and report live data on the frequency and methodology of visits, with this information made available to all members of the BCT leadership team.

6.3.3 The Council meets weekly with BCT and other partners, including police and health, to discuss children whom BCT believes should be attending educational settings. Partner agencies are making direct contact with families to ensure the safe return to school for children where possible.

6.3.4 We continue to emphasis the importance of case progression and oversight as opposed to 'contact' with children, young people and their families. Webinars have been held on the importance of safety planning during Covid-19, case progression and maintaining contact with children. We are encouraged that BCT is getting closer to resuming 'business as usual'.

Practice

6.3.5 From 30th June, BCT has reintroduced family time (contact) for children in care. Updated guidance, practice standards, and risk assessments have been published, and all stakeholders consulted. There are plans to open a second contact centre.

6.3.6 The Local Family Justice Board has introduced a hybrid approach to care hearings in line with recent guidance, and this process is now well established.

6.3.7 From 1st July 2020, practice evaluations have been reintroduced for BCT staff.

6.3.8 BCT continues to support staff to work remotely, with a range of different measures in place to ensure team cohesion and staff wellbeing. A daily communications update is sent to all BCT staff so that everyone is kept up-to-date with recent news and developments, and regular staff forums are held to so that the needs and concerns of staff can be understood and responded to appropriately. A new suite of e-learning training has been developed to support staff to work from home and maintain wellbeing. A staff survey has been

undertaken and early findings suggest high levels of satisfaction with current arrangements.

6.3.9 Despite the success of these staff support measures, BCT is negotiating the use of some buildings to enable staff to continue to work effectively in the longer-term.

6.3.10 Throughout the crisis, BCT has maintained high levels of performance and 100% of performance indicators have remained within tolerance. They continue to hold virtual meetings, reviews, conferences and visits and have ensured that families have access to ICT equipment so that close contact can be maintained.

6.3.11 As part of the recovery, BCT is now working with the wider partnership to consider the learning from Covid-19 and ask how they can maintain the pace of change that has been seen in strategic and operational partnership working during the crisis.

Finance

6.3.12 BCT has responded well to Covid-19 challenges within the overall context of a difficult financial situation for public sector finances. The Trust has acted to reduce and suppress Covid-19 spending where it can, leading to the reduction of the initial estimate of financial impact by half.

6.3.13 The costs relating to Covid-19 committed by the Trust amount to approximately £1.9m to date. The estimate of costs up to the end of September is in the range of £3-3.5m and relates primarily to contingent accommodation. This is being reviewed as the period of restrictions continues to ensure both short term sufficiency and that costs are reasonable.

6.3.14 The Trust has not incurred significant additional staffing costs as the workforce has been resilient in terms of sickness levels and staff redeployment.

Challenges

6.3.15 Throughout the crisis Birmingham Children's Trust has faced significant challenges in continuing to ensure the safety and wellbeing of children, young people and families across the city. As we head into autumn, BCT continues to face difficulties caused by social distancing guidance as well as new issues posed by the lifting of lockdown restrictions and the reopening of educational settings.

6.3.16 Following the lifting of lockdown restrictions, there has been a steady increase in contacts and referrals to the Trust, with referral numbers almost back to the usual expected rate. While this is good news, with the reopening of schools there is a risk of a higher than normal 'spike' in referrals and contacts which could place considerable strain on services.

6.3.17 BCT is working hard with colleagues from the Council, partners and families to support all vulnerable children back into school in the autumn term. However, the Trust has a limited influence on the individual decisions that families make for their children, and the final numbers of children returning to school will not be known until some way into the term.

6.3.18 The suspension of court hearings during lockdown, and the move to online proceedings, has caused significant delays to court work and the progression of some cases. BCT is in talks with the judiciary about how best to handle delays and the impact on children's wellbeing, and detailed plans are now in place to prioritise both outstanding and new court work.

6.3.19 BCT is aware of the need to support staff to sustain new ways of working, both to ensure the stability of the workforce and to secure the safety and wellbeing of children and families known to the Trust. In addition to the mental health impacts of lockdown and long-term working from home, 60% of the workforce are from BAME communities and may require additional support to feel safe and protected while delivering services. To help tackle some of these issues, the Director of Public Health has facilitated sessions on Covid-19 with the BCT workforce, answering questions and offering advice and guidance. A secondment opportunity has been offered out to staff, to create a new role with a dedicated focus on BAME issues and improvement within BCT.

6.3.20 Continuing high levels of uncertainty, and the risk of a 'second wave' of Covid-19 infections, pose additional risks to service delivery and sustainability. BCT continues to review the service response, including lessons learned from the lockdown period, to ensure that the Trust is ready for any future waves of infection or local lockdowns.

6.4 Youth Service

6.4.1 In line with government guidance, all Birmingham City Council youth centres closed at the beginning of the lockdown period, with no youth services physically operating from buildings. Instead, we have adapted our service model to offer support to young people online and over the telephone, with youth workers providing advice, guidance and emotional support around issues of social isolation, anxiety and stress. All our youth centres have maintained an active online presence to deliver youth work virtually – keeping young people updated and sharing information, setting regular health and wellbeing challenges, and delivering virtual youth work sessions.

6.4.2 Support to young people around their future pathways and reassurance regarding returning to school has also been an important part of the support offered. Workers have delivered care packages, activity packs and food parcels to vulnerable young people and families. Regular doorstep checks with young people have also taken place.

6.4.3 The Youth service are currently delivering 33 detached youth work sessions a week across the City in the local communities and parks. The main messages to young people have been around keeping safe and options for their future. Detached work has also responded to West Midlands Police request regarding ASB and youth violence.

6.4.4 The Youth Service has been following the National Youth Agencies Readiness guidelines regarding delivery and are currently preparing centres for re-opening. Work with individuals and small groups will commence shortly from our centres.

6.5 Birmingham Adult Education Service (BAES)

6.5.1 Following Government advice, all Adult Education centres were closed to the public on Friday 20th March 2020, shifting to the online provision of courses and learner support services.

6.5.2 Throughout the lockdown we have continued to monitor the impact on learner recruitment and attendance and are pleased to report that we achieved the highest number of online courses/enrolments in England in the adult skills sector. Since April 2020, we had 5574 learners enrolling on courses, of whom 1169 are ESOL learners and 1943 are learners enrolled in English, Maths or IT.

6.5.3 Between April and July 2020, we offered 714 new online courses in response to COVID-19. We offered courses in Health and Social Care, English, Maths, ICT, and Business, Family Learning and Languages. In April 2020 we launched our digital Community Hub in our website with more than 1300 visits. We continued to offer support and guidance to learners online, through the BAES website, social media and videoconferencing/video-calling software. During this period our Progress Coaches had 2055 interactions with learners to support them with their learning online.

6.5.4 BAES has redeveloped the 2020/21 offer to produce a ‘recovery curriculum’ in response to the economic recession and increasing rates of unemployment, with further focus on skills and employability programmes, including introduction of the ‘route to work’ plan and progression pathways into further skills training and jobs. A significantly increased proportion of the offer is also available for online learning to increase flexibility in accessing training for learners and employers. BAES is also providing workforce development for those in entry level jobs for SMEs as part of strategy to maximising job retention and career development for those most at risk.

6.5.5 BTIS has been quick to adapt face to face interpreting provision since the introduction of social distancing measures. Audio conferencing interpreting via Microsoft teams has been put into practice ensuring continuity of service delivery and clients being able to work with their usual interpreters. BSL interpreting is being provided by video via Teams and WhatsApp.

6.5.6 Translation provision also continues. Since April we have completed the translation of COVID-19 key messages for BCC and neighbouring local authorities. We have also translated information posters, provided audio recordings of Test and Trace scripts and translated and recorded a radio message. Languages have included Arabic, Bengali, Chinese, Czech, French, Gujarati, Hindi, Italian, Kurdish, Mirpuri, Polish, Portuguese, Punjabi, Pushto, Romanian, Russian, Somali, Tigrinya and Urdu.

6.6 Birmingham Careers Service

6.6.1 Careers Service staff have continued to deliver services on a virtual and agile basis throughout the duration of the lockdown, offering careers information advice and guidance services to NEET (aged 16-19), young people at risk of becoming NEET, and some young people who attend schools for the service trades. We have also offered a generic exam results service to advise young people on their options following GCSEs and A-Levels.

6.6.2 Our work has focused on developing and consolidating existing provision to ensure that young people continue to be supported throughout the crisis. Where possible, support services have been moved to virtual/online delivery, with careers advice and guidance provided to NEET young people and students via phone, email, WhatsApp, text, and social media.

6.6.3 Young people have been kept informed about local provision over the summer months, including college and training provider recruitment and enrolment, apprenticeships, volunteering opportunities and study programmes. This has taken place via the above-mentioned methods plus the introduction of webinars, webchat, and the increased use of twitter, Instagram and Facebook posts.

6.6.4 The service has maintained contact with all schools, encouraging the referral of all Year 11, 12 and 13 pupils who are at risk of becoming NEET. This has led to over 500 referrals within a month with potentially more to follow as results become known. The service is aware that the availability of some offers of employment, education, training or learning that were promised to young people may no longer be available due to the current situation, so we are prepared to support those young people to identify alternative options and routes towards education and employment.

6.6.5 A range of new online resources have also been produced including:

- exam results newsletters;
- Enrolment 2020 information;
- a directory of support services for young people;
- and, virtual tours from a range of training providers.

6.6.6 Further information on the above and details on how to access services are now available on the website at https://www.birminghamcareersservice.co.uk

6.7 Libraries

6.7.1 All Birmingham library buildings were closed to the public from Monday 23rd March following Government advice. However, this does not mean that the library service itself was closed – instead, we saw a 111% rise in online demand for library membership over the lockdown period, and library staff have been busy over the summer creating new online services and innovations designed to increase access to services.

6.7.2 New services provided by the library service include the following:

- 'Virtual library' website
- Children's "Story Time" twice weekly (via YouTube)
- "Rhyme Time" twice weekly (via YouTube)
- Poetry sessions
- Book review sessions
- Book collections provided to homeless in hostels and hotels
- Access to newspapers from across the world covering 100 countries in 60 languages
- Addition of 1500 comics and graphic novels to website

6.7.3 Since lockdown, over 6,266 eBooks and 2,569 e-audio books have been loaned out to citizens.

6.7.4 The archive and collections team continue to explore options to ensure that people's experiences of the pandemic in Birmingham are documented, recorded and added to the city's collective memory in the Library of Birmingham's archives. A blog went live on 11th May asking citizens to record their experiences and collect material for addition to the city's archive.

6.7.5 Since 5th August, the library service has begun to implement its re-opening strategy with an Order and Collect Service for books at locations across the city where it has been deemed safe to open. 23 community libraries across the city and Library of Birmingham are currently offering an Order and Collect Service and this will increase over the coming weeks.

7 Communities (including Housing and Bereavement Services)

7.1 Housing

Homelessness and rough sleeping

7.1.1 The City Council and its partners continue to provide support to rough sleepers and homeless families following the easing of lockdown restrictions.

7.1.2 Rough sleeping numbers remain steady in the range 20-30, all of whom have been offered accommodation. There has been a geographical shift of rough sleeps out of the city centre, though this has seen some reversal as the city centre becomes a little busier. Operational plans are in place should there be a 'second wave' or a local lockdown.

7.1.3 The official rough sleeper count night for 2020 will take place in November.

7.1.4 We have bid for funding for the Next Steps Accommodation Programme (NSAP). The programme and fund have been created to ensure that as few individuals as possible return to rough sleeping following the Covid-19 lockdown which saw nearly 15,000 people brought into temporary accommodation across the country. If our bid is successful, the programme will provide short-term accommodation and immediate support for former rough sleepers, alongside longer-term move-on accommodation and funding for drug and alcohol treatment.

7.1.5 We are currently providing accommodation and subsistence to approximately 80 individuals deemed 'No Recourse to Public Funds' (NPRF) in hotels, temporary accommodation, and supported housing. Recent discussions have confirmed the desire to continue to protect and support these individuals on a three-month rolling basis, subject to individual review and monthly public health review. Additional legal advice is now being sought on the impact of 'suspension of derogation of duties' regarding EEA nationals.

7.1.6 Since lockdown over 800 individuals have been seen by the housing advice service, provided by the Housing Options Centre at Washington Court and Sifa Fireside.

7.1.7 The number of referrals coming through the Housing Options Centre via phone remains steady at around 220 -240 per week, which is around the same as before lockdown. The majority of cases tend to be due to relationship breakdowns. We may see an increase in referrals to the service as the evictions ban for those in Private Rented Sector (PRS) accommodation comes to an end on 20th September. More on this is provided below.

7.1.8 We have seen an increase in demand for temporary accommodation from mid-June onwards, with numbers in Bed & Breakfast accommodation (B&Bs) rising to around 500.

7.1.9 There is still a shortage of self-contained and longer term accommodation due to the effects of COVID-19 on our contractors, who have taken longer than expected to resume business as usual. This is being closely monitored.

7.1.10 For the safety of customers and staff, we have reviewed and adapted our processes for allocating properties to ensure that the risk of spread of coronavirus is reduced as far as possible. For example, whenever possible, viewings are being completed virtually. We have also asked registered providers to do the same.

7.1.11 Domestic Abuse and Youth Hubs are open and carrying out interviews; however the majority are completed, where possible, by telephone.

7.1.12 Homeless prevention visits have recommenced whilst observing the social distancing guidelines. A sufficient supply of PPE equipment has been sourced.

National ban on evictions

7.1.13 On 21st August, national government announced that it would be extending the national ban on evictions for renters to 20th September. Prior to this announcement there was widespread concern that the lifting of the ban would lead to a surge in homelessness, prompting Birmingham City Council to write to national government urging them to take action and provide financial assistance to support renters and landlords.

7.1.14 While we welcome the extension of the national ban on evictions for renters, there is concern that additional support is needed for both renters and landlords. The Council is lobbying national government to develop and fund a temporary Rent Support Scheme for those who have accrued rent arrears during the Covid-19 lockdown, aimed at households who have either lost jobs or have been furloughed on low incomes.

7.1.15 The Council continues to strongly urge all its own tenants who have financial concerns or are struggling to pay their bills to contact the Council directly. As a landlord to over 60,000 households, we have seen rent arrears increase by almost £4.5m since lockdown first began. In response, the Council has proactively contacted more than 18,000 tenants to try and understand what further support is needed to prevent them from falling any further into debt.

7.1.16 Help and support is available to all residents in Birmingham. If tenants can afford to pay their rent, we strongly encourage them to make this a priority so that, when the ban is lifted on 20th September, they don't find themselves in a situation which might have been avoidable.

7.1.17 The Council is also asking private landlords to act sympathetically and sensitively and support their tenants who are struggling at this difficult time, to prevent evictions in the future.

7.1.18 We will continue to work with national organisations and other local authorities across the UK to ensure a consistent and reliable approach once the ban is lifted.

Housing repairs and maintenance

7.1.19 Since Government lifted Covid-19 restrictions on 15th June 2020, we have started to release and complete routine repairs in customers' homes, while maintaining social distancing and safe working practices. Due to the continuing disruption caused by the pandemic, we have made some small changes to the process and are allowing contractors 40 days to carry out these non-urgent repairs. Some supply issues are being experienced but contractors are making efforts to deal with this challenge. Contractors are working hard to complete the jobs that have been raised over the last four months, and it is anticipated the full service will return to business as usual in September.

7.1.20 We are pleased to update that the backlog in gas servicing is reducing as officers work hard to contact customers to book appointments and carry out works.

Housing management

7.1.21 As lockdown measures are relaxed, we are working to return our housing management services to normal functioning. Following the sign-off of risk assessments, we pleased to provide the following updates:

- Visiting services have recommenced, currently focusing on cases relating to gardens/issues external to the dwelling and potential abandonments.
- Night-time security patrols, which continued throughout the pandemic, will now return to a more proactive approach when visiting designated blocks and areas.
- Estates-based staff are preparing to recommence normal duties after focusing on only business critical tasks during lockdown. Provision is still in place for staff to start and finish earlier in the day, both to assist with social distancing and reduce contact with residents.
- Subject to agreed risk assessments, we are increasing officer presence at sheltered schemes utilising the offices at these sites.

7.1.22 Following the successful roll-out of virtual viewings during lockdown, this service will continue alongside the reopening of both of our Lettings Suites (subject to agreed risk assessments).

7.1.23 We have also recommenced undertaking mutual exchanges.

7.1.24 We are continuing to see an increase in complaints and issues relating to exempt accommodation. Local virtual meetings have been arranged in a number of wards to deal with these issues, and additional officer resource is being redeployed to focus on this sector, looking to work with providers to raise standards and deal with problems as they arise.

Housing Development/Birmingham Municipal Housing Trust (BMHT)

7.1.25 Following the lifting of lockdown restrictions, contractors resumed activity on all Birmingham Municipal Housing Trust (BMHT) in June 2020, with Covid-19 safe working protocols in place. Contractors are currently operating at 70-80% efficiency against pre-pandemic activity, resulting in some forecast slippage against the BMHT 2020/21 budget.

7.1.26 As the country slowly returns to 'business as usual', we anticipate further programme delays arising from disruption to the industry, supply chains and international borders. This is likely to lead to significant delays in the delivery of new homes, both for BHMT and sector-wide, regionally and nationally. Programme forecasts have been updated in light of this disruption, and a reduction in delivery for this financial year is inevitable.

7.1.27 Developers have started to raise some concerns around the availability and supply of some materials, and we continue to work closely with partners to monitor and assess the potential risk to the programme in terms of delays and cost increases.

7.1.28 It is important for the city's economic recovery and the financial health of the construction industry in Birmingham that we support contractors through this period of Covid-19 disruption and allow for some degree of flexibility in programme and contract management.

7.1.29 Activity to identify and investigate potential sites for development is continuing, so that the programme can continue at pace once the crisis has passed. We have pushed forward with tender evaluations and acceptance reports to ensure that we can 'hit the ground running' on the other side of the crisis. At the July 2020 Cabinet, development plans for the construction of 234 homes on the Bromford estate gained approval.

7.1.30 We have a number of new developments due to start on site in the autumn, notably the Farnbrough Road site in Castle Vale which will commence in October 2020. This is a joint scheme with Pioneer to deliver 124 new homes for the area.

7.2 Registry Office and Bereavement Services

7.2.1 Following new legislation and social distancing requirements, new arrangements have been made to allow face-to-face registrations to recommence. From 8th

August onwards, all citizens accessing the Registry Office must wear a face covering unless they have a valid exemption under the legislation.

Birth registrations

7.2.2 Following the reinstatement of birth registrations with effect from 1st June 2020, a fully operational service is now up and running.

7.2.3 When the service reopened, there was a backlog of approximately 6,000 births waiting to be registered. As of 14th August, there are just under 4,500 applications in the system. Recovery arrangements are in place to both reduce the backlog and register new births, but prioritisation of registrations is generally in chronological order with some urgent circumstances taken into consideration e.g. need for passport registration.

Citizenship ceremonies

7.2.4 Between March and July 2020, all citizenship ceremonies were cancelled in line with national guidance. The Birmingham Registration Service is now approaching all applicants who were registered for a citizenship ceremony during this period and rearranging bookings.

7.2.5 As soon as this backlog is cleared, arrangements for new applicants will be clarified.

Marriage/Civil Partnerships

7.2.6 In line with national guidance, marriage and civil partnership ceremonies recommenced from 4th July 2020. Notices of Marriage and Civil Partnership can now be arranged through the Registry Office, with the service operating by appointment.

7.2.7 Risk assessments are in place to allow for ceremonies to be held at the Registry Office. The maximum number of participants in weddings is currently 30, including photographers, ministers, and registrars.

7.2.8 Registrar General Licence requests for marriage and civil partnerships are being risk assessed and considered on a case-by-case basis in accordance with PHE guidance. At all times staff safety is paramount.

7.2.9 Applications to reduce the waiting period for marriages or civil partnerships are not being processed. Any applications received or in progress at lockdown have been refunded.

7.2.10 Approved premise licences cannot be issued during this period. However, Birmingham City Council's Registrar Service is considering extensions to existing licences where appropriate.

Deaths/Still-Births

7.2.11 The Coronavirus Act 2020 made significant changes to the death registration process, with electronic and telephone registration permissible for the first time.

7.2.12 Despite increase demand for registrations, legislative and operational changes increased service efficiency overall. These improvements, alongside the allocation of additional staff resources, has reduced the average waiting time for registrations and this is now down to less than 12 hours for completed applications.

Bereavement Services (Burials and Cremations)

7.2.13 Despite the lifting of some lockdown restrictions, the Council continues to operate on an emergency footing. This, alongside national restrictions on funeral attendance, has meant some changes to the way that funeral services are conducted.

7.2.14 From 1st June onwards, attendance at funerals has been limited to 30 people. This is currently being reviewed following the guidance received concerned re-opening places of worship. Funeral directors have been asked to assist with enforcing rules about attendance and social distancing.

7.2.15 Services generally last a maximum of 30 minutes. There is now a requirement for persons attending funerals inside crematoria chapels to wear face coverings, unless an exemption is in place. Ministers must wear face coverings going into and leaving the building, while funeral director staff are also encouraged to wear face coverings.

7.2.16 All attendees at burials are also encouraged to wear face coverings.

7.2.17 At the height of the pandemic, the number of slots for funerals was increased to cope with an anticipated high level of demand. From August onwards, we have started to review and reduce the number of slots available on a weekly basis, as only 35-40% of slots were being used. In the case of a rise in deaths, the number of slots will again be increased.

7.3 Community Centres

7.3.1 Following a Government announcement on 20th March 2020, all Council-managed community centres were closed to the public. A few remained open on a restricted basis during lockdown to accommodate essential community services such as food banks, including the Council-funded TAWS/FareShare operation at Ladywood Health & Community Centre.

7.3.2 From 4th July onwards, restrictions were lifted and community centres allowed to reopen. To facilitate the reopening of centres to the public, the Council reviewed operating procedures and carried out new Covid-19 risk assessments to ensure the safety of both citizens and staff.

7.3.3 Council-run community centres started welcoming groups back from 17th August, with a restricted offer initially due to:

- Social distancing requirements which have significantly reduced the capacity of rooms and halls
- Restrictions on some high-risk activities e.g. group singing
- Ventilation requirements which mean we cannot use many of our spaces at present - only those with natural ventilation i.e. opening doors and windows

7.3.4 The return of groups on site will also be phased with tenants, key holders and more regular user groups returning first and it is not anticipated that centres will be operating at pre Covid-19 capacity for some time to come.

7.4 Voluntary Sector Recovery

7.4.1 In June 2020, Birmingham City Council commissioned a report to understand how community organisations mobilised during the COVID-19 crisis. Research was undertaken with a number of small and medium-sized community organisations and key stakeholders across Birmingham.

7.4.2 The report will help us to:

- understand relationship changes between community organisations and BCC brought about by the crisis
- explore how lessons from this crisis can support greater impact of the Working Together in Birmingham's Neighbourhoods White Paper across BCC's working practices
- and, identify the role community organisations can play in city-wide recovery, in tandem with relevant agendas such as inclusive growth.

7.4.3 Many of these organisations worked with and coordinated mutual aid efforts across the city during the pandemic, often operating at a street level, to support their immediate neighbours, especially those 'shielding' from Covid-19. Community organisations played a role in coordinating this support at a larger, cross-city scale.

7.4.4 One of the key drivers of the community response to the Covid-19 crisis has been the deep local intelligence and relationships that community organisations have built up with their communities over time. This knowledge is both unique and irreplaceable, becoming vitally important in times of crisis.

7.4.5 We will use this learning to shape the new future of our relationship with communities going forward.

7.5 Community Safety/Inclusion

7.5.1 Since the last report to City Council in June 2020, the Birmingham City Council Community Safety (BCC CSP) and Prevent Team have continued to work in full business continuity mode, working remotely and ensuring as much business as usual activity is continued whilst supporting BCC's organisational response to Covid-19.

7.5.2 A transition plan is now in place, enabling the team to draw upon the learning from working practices under lock down and take these lessons into the "new normal".

7.5.3 Officers have continued to engage and work collaboratively with all partners to ensure safety in our communities. This ranges from pre-planning and monitoring arrangements in response to the recent protests in the city, to supporting West Midlands Police and other enforcement partners to manage more complex incidents of anti-social behaviour.

7.5.4 The Community Safety Partnership Board continues to work collaboratively with other statutory partnerships across the city - including the Health and Wellbeing Board, the Children Safeguarding Partnership, and the Adult Safeguarding Board - to reduce duplication and identify any gaps in service provision.

7.5.5 Since April 2020, the CSP team have seen a 30% increase in the number of enquiries received, compared to the same time last year.

7.5.6 The Birmingham Community Safety Partnership (BCSP) adopted a Gold/Silver/Bronze operating model during the pandemic. This arrangement is now being reviewed as part of the transition plan.

Gold – Executive Board

7.5.7 The Executive Board acts as the Gold strategic lead and continues to meet fortnightly. A delivery and communication plan is in place and the Board is working with the West Midlands Police and Crime Commissioner and West Midlands Police to support activities around organised crime groups and respond to any increase in tensions as communities transition back into a more normal life. This includes the opening of retail businesses, larger groups of people gathering in parks and more people making use of public transport. A daily partnership tension monitoring process is in place to facilitate this work.

Silver - Operations Group (now Community Safety Operational Group)

7.5.8 The Silver Operations Group, has now transitioned into the CSP Operations Group and is working to a new Terms of Reference. The group continues to meet twice a week and will continue to meet virtually with a view to meeting weekly in the longer term.

7.5.9 The CSP Operations Group identifies and manages anti-social behaviour, crime and community tension issues. This includes partnership working to address the following issues:

- Enforcement in relation to Covid-19 related and general incidents of anti-social behaviour. This includes working with partners outside BCSP structures to enable the early identification and rapid resolution of problems.
- Developing stronger links with Safer Travel and British Transport Police to monitor safety issues on public transport
- Providing support in response to increased incidents and tension around parks, including working with the Youth Service to support the increase of youth provision.
- Addressing the increase in unlicensed/pop up parties and raves within streets, homes and parks, by developing a clear process for engagement and enforcement that utilises all the powers available to the Council, West Midlands Police and other partners.
- In addition, the Community Safety Youth Focus Group continues to meet weekly with partners, sharing information with regards to supporting young people and working in partnership to reduce youth crime.

Bronze – Local Partnership Delivery Groups (LPDG)

7.5.10 Under the transition plan the LPDGs are undergoing a review. Five of the six LPDGs have moved to meeting monthly, whilst the City Centre LPDG continues to meet on a fortnightly basis. All six LPDGs continue to have a Place and People based focus.

7.5.11 A number of new relationships with community groups and individuals have developed in lockdown and the BCC CSP team want to ensure these continue moving forward. A community reference group is therefore being developed to:

- increase awareness, trust and confidence in Birmingham's Community Safety delivery.
- support and identify issues and concerns;
- provide opportunity for community members to engage and advise on delivery;
- and, help shape delivery.

7.5.12 Work is also underway on the refreshing and renewal of the city's Hate Crime Strategy, in close collaboration with partners and stakeholders from across the city.

7.6 Prevent

7.6.1 The Birmingham City Council's Channel Panel has continued to work closely with the WM CTU to ensure that multi-agency arrangements are maintained for vulnerable individuals throughout the COVID-19 crisis. Channel Panel meetings have been held virtually on a monthly basis with minimal impact to processes although referrals are down due to lockdown.

7.6.2 The Prevent team have continued to work closely with the Home Office and civil society organisations, ensuring any disruption to project delivery has been minimised. Civil society organisations have now moved activities onto online platforms where face to face delivery has not been possible.

7.7 Domestic Abuse

7.7.1 Birmingham City Council has worked closely with Birmingham and Solihull Women's Aid (BSWAID) to widen available support for those at risk of domestic abuse.

7.7.2 The importance of staying home to help stop the spread of Covid-19 also meant those suffering domestic abuse were, as a result of the lockdown, spending more time with their perpetrators – with fewer opportunities to seek help.

7.7.3 No additional calls were received during early lockdown. However, there has been a significant increase in calls to WM Police between May – August 2020:

Month	2019	2020
May	2411	2738
June	2432	2586
July	2590	2528
August	1420	1506/08/20)

7.7.4 To deal with this rise in demand, BSWAID extended its helpline's opening hours, covering weekends and bank holidays, to ensure that those seeking help had maximum opportunities to do so. For those unable to speak safely to operators, the charity also piloted a local webchat service through www.bswaid.org, where victims were able to use a confidential web chat between 10am and 2pm initially on weekdays. This service has now been extended to 4pm.

7.7.5 Furthermore, the Domestic Abuse Hub – which the City Council opened in partnership with BSWAID in March 2019 – remains open to those who are at risk of being made homeless as a result of domestic abuse.

7.7.6 The Shadow Domestic Abuse Local Strategic Partnership Board is chaired by Cllr Nicky Brennan in her role as Cabinet Advisor on Domestic Abuse and

Councillor John Cotton, the Cabinet Member for Social Inclusion, Community Safety & Equalities, is also a member of the Board.

7.7.7 The Board has been set up in preparation of the strategic oversight requirements of local authorities as per the planned implementation of the Domestic Abuse Act. It has been meeting on a fortnightly basis since March. As well as overseeing the delivery of the Domestic Abuse Prevention Strategy, the Board is currently focused upon preparing and communicating the City's response to the anticipated increase in reports of domestic abuse as lockdown measures begin to ease. It is also coordinating support efforts from partners should a further local lockdown prove to be required. This includes a parallel media campaign with the hashtag #NoExcuseforabuse.

7.7.8 Work has commenced internally to ensure that the Council has robust arrangements in place to support our own staff who may be experiencing domestic abuse and provide a strong message that domestic abuse will not be tolerated in the Council. Council Wide Teams Live events are planned for the autumn which will be led by the Chief Executive and Assistant Director for Human Resources.

7.8 Migration

7.8.1 The asylum accommodation system nationally continues to be under huge pressure, initially from the number of in-country applications made by previously failed asylum seekers, and more recently by the high volume of asylum claims made at port following Channel crossings. At the same time, through-put has been paused as those whose claims have been concluded have not been moving out of Home Office accommodation. The lead-in period to resuming move-on from asylum accommodation for those with a positive decision began on 11th August and is being managed by Adult Social Care Commissioning in close partnership with colleagues from Housing, commissioned provider Refugee & Migrant Centre, the Home Office and Serco.

7.8.2 A further contingency hotel was opened in the city by Home Office provider Serco in late May, at over 200 bed spaces without initial consultation with the Council. Sandwell & West Birmingham CCG, West Midlands Police, Community Safety, Public Health, ASC Safeguarding and ASC Commissioning are working in concert to ensure that vulnerable people accommodated in this and other sites around the city receive the help and support they need and that robust safeguarding measures are put in place. This rightly reflects the commitments the Council has given as a signatory to the City of Sanctuary declaration.

7.8.3 In May 2020, a group of 15 Health Champions from migrant communities in Birmingham were trained as part of Adult Social Care's Migration Friendly Cities initiative to deliver public health messages including Covid-19 information, awareness-raising and signposting in migrant communities and across a range

of languages. The migrant Health Champions will be participating in BCC Public Health's BHealthy campaign, including attending the webinar series in September.

8 Street Scene & Parks

8.1 Waste Collections

Household waste and recycling collections

8.1.1 Household waste and recycling collections are being carried out as scheduled. All crews are out collecting as normal and only combining garden waste with residual waste as a last resort, to limit the number of dropped collections. As at 14th August the total number of roads that remain 'dropped' across the whole city is 25 out of a total of 12,250 collected in any given week.

8.1.2 Birmingham Refuse Collection workers are still bucking the national trend, and garden waste is still being collected.

8.1.3 Following the reopening of renewals for the Garden Subscription Service, a further 3861 sales were made. The Garden Waste Subscription Service has however now closed.

8.1.4 Anyone who has had Covid-19 or has displayed symptoms is reminded to follow government guidance to tie and double-bag their waste, and wait 72 hours before disposing of it in their household bin.

Bulky Waste Collections

8.1.5 Bookings for bulky waste collections are now being accepted and these will serve as an alternative to going to Household Recycling Centres (HRCs). The same number of collections are being offered as before their suspension, so normal business has been resumed.

Household Recycling Centres (HRCs)

8.1.6 BCC has now re-opened all 5 Household Recycling Centres (HRCs). At the beginning of reopening, we saw long queues of up to 3-4 hours at some HRCs, which led to the launch of a booking system on 8 June. This booking system will enable citizens to access HRCs while ensuring that COVID-19 social distancing measures are enforced.

8.1.7 From 11th June, only those with a booking, linked to the registration plate of their vehicle, have been permitted access to the HRCs, with no exceptions. Each vehicle is limited to one booking per week.

8.1.8 As this booking system has been introduced as an emergency queue mitigation measure, it is only available online. Citizens without access to the internet are advised to ask friends or family to make bookings for them.

8.1.9 To date 100% of all slots are being booked 6 days in advance and therefore given the success and popularity of the booking system we have introduced a number of additional slots at each of the HRC sites. We will continue to review these arrangements on a regular basis. We are continuing to experience a number of no shows at all HRC and this is about 13% of the daily allocation

8.1.10 Vans are now been permitted at all sites. Charges will apply to businesses, as per before the lockdown.

8.1.11 From Thursday 2nd July, Birmingham residents will be able to access the HRCs with trailers and vans. Social distancing measures and a booking system remain in place. Those wishing to visit the HRCs with a trailer 6x4ft or smaller must be a Birmingham resident disposing of household waste and recycling and will need to book their visit via the online booking system. Residents who wish to bring a large trailer (larger than 6x4ft) or a van will need to book a slot by calling the Van Booking Centre on 0203 567 3915 Monday - Friday from 8am-4pm.

Street Cleansing

8.1.12 No reduction in service has been reported, any spare capacity in refuse collection is being diverted to Street Cleansing. Street cleansing in the city centre will return to the two-shift system to take account of increased footfall when shops and offices reopen.

8.1.13 Extra street cleansing crews have been directed to the more problematic areas of the city including: Lozells, Washwood Heath and Alum Rock.

8.2 Parks and Grounds Maintenance

8.2.1 Parks and green spaces across Birmingham remain extremely busy, attracting more visitors than in previous years. Litter continues to be a problem across the majority of sites, with additional staff resource deployed to address the issue.

8.2.2 Reports of anti-social behaviour (ASB) have reduced, but we have seen some large-scale gatherings in the north of the city (Sutton and Erdington), with at least two Dispersal Orders being used by West Midlands Police in Sutton Park. Dispersal Orders have also been used following social media advertisements of gatherings and raves.

8.2.3 The hot weather at the start of August led to a worrying increase in youths and families choosing to swim in park lakes and pools. Sutton Powell's pool was a particular hotspot. Parks worked with the Council and West Midlands Police to ensure foot patrols at the lake, and pushed messaging out through social media teams to dissuade this type of dangerous activity.

8.2.4 The city's 232 play areas and outdoor gyms reopened on 4th July, with signage displaying instructions for safe use and the maximum number of people allowed at one time. So far, their use has been without incident.

8.2.5 Team sports are now starting to recommence, including cricket (from 24th July), football and rugby (from 5th September). All teams must demonstrate that they are abiding by guidance from their sport's governance body.

8.2.6 Tennis courts and ball courts reopened on 2nd June, but players are advised to only use their own equipment.

8.2.7 Applications to use the parks for events are now being considered, mainly from community groups and for small training activities. All event applications must demonstrate that they can operate in a COVID-19 safe manner, with enhanced hygiene, social distancing, and contact details being collected to enable Track and Trace measures.

8.2.8 Volunteering has recommenced in some areas led by Friends of Parks Groups whilst maintaining social distancing in line with Government guidance. We welcome all the participants back and are working closely with Birmingham Open spaces Forum to ensure COVID-19 Secure Operating Procedures are in place and being followed.

8.2.9 Grass cutting is back to the normal programme across the city. Daily checks, safety inspections and essential works are being carried out.

9 Transport

9.1.1 COVID-19 and the ensuing lockdown restrictions have had a huge impact on transport and travel patterns worldwide. In Birmingham traffic levels initially dropped to around a third of normal levels but have since increased to around 90% of normal levels on main roads as at mid-August 2020.

9.2 Public transport

9.2.1 By the start of July, National Express West Midlands had increased the frequency of bus services to normal service levels.

9.2.2 The emergency response on public transport continues to be co-ordinated by TfWM, and has included:

- 'Queue buster' trams introduced to help provide additional support in peak time on metro services, and the launch of 'travel heat map' for passengers showing the trend in travel times
- Creation/production of exemption cards and badges for passengers exempt from wearing face coverings to raise awareness amongst other passengers and reduced potential for antisocial behaviour

- Free face masks distributed across bus stations, metro services, rail services and Travel & Information Services. Face coverings became mandatory on public transport on 15th June 2020.
- Targeted deployment of the Safer Travel Team issuing 'directions to leave' where customers are non-compliant with wearing a mask covering. This is following an initial two-week period of educating passengers. After an initial spike in 'directions to leave' this soon plateaud, seeing compliance levels approximately at 90% across all modes.
- West Midlands Trains introduced the RAG rating social distance information onto their website, this informs passengers of the current social distancing status for each service e.g. no issues to serious issues and the service will not stop.

9.3 Parking

9.3.1 We resumed parking charges from Monday 15th June 2020 at all pay and display location, however, the Government's concession scheme has remained in place meaning that for the time being some groups have been able to continue to park without charge.

9.3.2 We have reopened the Town Hall, Markets and Jewellery Quarter multi-storey car parks.

9.3.3 Millennium Point multi-storey will reopen on 1st September 2020 to accommodate the return of students and staff to Birmingham City University and Aston Universities.

9.3.4 We have facilitated the Military/NHS who continue to use our Brewery Street Coach and Lorry Park for a Covid-19 Mobile Testing Centre.

9.4 Road safety

9.4.1 We are continuing to promote national campaigns such as Road Safety GB's **Take Extra Care campaign** which urges all road users to continue to protect the emergency services by staying alert and traveling safely during the Covid-19 pandemic.

9.4.2 All school staff in Birmingham were invited to attend a road safety webinar. This gave information on existing support and resources available, plus further guidance on the Take Extra Care Campaign and social distancing advice.

9.4.3 Above all, in order to reduce the number of vehicles on the roads in Birmingham, citizens are encouraged to walk or cycle where possible, particularly for shorter journeys.

9.5 Return to school travel advice

9.5.1 With greater numbers of pupils returning to schools, available space needs to be used effectively to ensure everyone can get around safely. Walking and cycling will play a vital role in ensuring that pupils are able to attend classes safely, helping to make space for those who have no alternative but to use public transport.

9.5.2 To support schools to plan for increased attendance and create extra space where needed outside schools, we can consider the introduction of emergency school streets measures such as temporary Car Free School Streets, and parking restrictions.

9.5.3 A risk assessment around the journey to and from school has been provided. In addition to this, further guidance has been produced related to social distancing at the school gate.

9.5.4 We have been encouraging all schools to:

- Take part in Modeshift STARS, which inspires the whole school community to travel sustainably, actively, responsibly and safely by championing walking, scooting and cycling.
- Carry out school travel surveys with parents on their typical routes to school and potential alternatives.
- School crossing patrol sites: stand further away from the patrol and wait for instruction to cross. Be aware that the warden may be operating from the other side of the crossing, which children and parents are not normally used to. Remind children not to make any physical contact with their lollipop person e.g. handshake/high five.
- Reduce the frequency of, or retime, deliveries and servicing trips of suppliers.
- Public transport: if there is no other option but to use public transport, plan journeys to avoid using busy interchanges where possible and checking https://journeyplanner.networkwestmidlands.com/ which has up to date advice and information.
- Working with Transport for West Midlands to develop a Back to School Travel Toolkit and support schools in delivering this.

9.5.5 A series of specific travel advice webinars and newsletters have been offered to schools.

9.6 Emergency Active Travel Fund – Delivering the Emergency Birmingham Transport Plan

9.6.1 On 27th May 2020 the Department for Transport (DfT) announced that the Emergency Active Travel Fund (EATF) of £225 million, allocated to combined and local authorities, would be released in two tranches. The first tranche of £45 million was released on the 26th June 2020. This initial tranche of funding was to be used to promote cycling and walking as a replacement for journeys previously made by public transport. This included measures such as closing roads to through traffic and installing segregated cycle lanes. The City Council received £1.131 million of this allocation.

9.6.2 It is anticipated that the second EATF tranche of £180 million will be released mid-September 2020. A West Midlands wide bid was submitted to the DfT on 7th August, which included an ask of £4.477 million to be allocated to Birmingham. Schemes to be funded under tranche 2 of EATF must be delivered by 31st March 2021.

9.6.3 Schemes to be delivered using the EATF grant will implement measures to create an environment that is safer for both walking and cycling. This will allow cycling in particular to replace some journeys previously made by public transport and will have an essential role to play in the short term in helping avoid overcrowding on public transport systems.

9.6.4 Schemes to be funded under the first tranche of EATF must commence delivery within four weeks of receipt of the funding by WMCA, and complete delivery within eight weeks of receipt of the funding. These schemes have been taken from the EBTP and their prioritisation for inclusion follows stakeholder and public engagement, alongside officer assessment of the practicalities and benefits of their delivery.

9.6.5 Delivery of tranche 1 schemes has already commenced and a summary of the packages of schemes are as follows:

- Transport space reallocation in Moseley and Stirchley local centres,
- Low traffic neighbourhoods including Lozells and Kings Heath,
- Pop-up cycle lanes along six routes across the city (consistent with routes identified in the Walking and Cycling Strategy and Infrastructure Improvement Plan).
- Park & Pedal city-wide programme.

9.6.6 Tranche 2 schemes comprise of a combination of tranche 1 schemes to be made more permanent as well as delivering further schemes outlined in the EBTP. Schemes will include;

- Package 1: Tranche 1 Project enhancements; including transport space reallocations in Moseley and Stirchley local centre and cycle lanes along six corridors (consistent with routes identified in the Walking and Cycling Strategy and Infrastructure Improvement Plan).
- Package 2: Places for People – Low Traffic Neighbourhoods and School Streets; including 6 low traffic neighbourhood locations.
- Package 3: City Centre Traffic Cells.
- Package 4: Additional Cycling and Walking Interventions; including further pop-up cycle lanes across the city.

9.7 Reopening High Streets Safely Fund (RHSF)

9.7.1 The following schemes were funded via a combination of RHSF funding, BCC emergency Covid-19 funding and reallocating existing resources from the Transportation and Highways Capital Programme:

- Delivering public realm changes in the city centre and local centres across the city to facilitate retail reopening safely with social distancing e.g. footway widening and markings, suspension of parking bays etc.
- Measures to support the reopening of the hospitality sector linked to changes to pavement license legislation and BID recovery plans including road closures.

9.8 Clean Air Zone

9.8.1 To try to forecast the possible impact of ‘lockdown’ on air quality for 2020 the CAZ team worked with the Council’s environment team, the University of Birmingham (UoB) and the external consultants. While this modelling provides some guidance for what the results of the annual air quality survey might be there remains a high degree of uncertainty in the results due to the limited data available and the degree to which the scenarios used in the modelling hold true. The modelling indicates that air quality is predicted to still be in exceedance of the legal limits at a number of locations for 2020 (as measured as an annual mean). On this basis there remains the need to introduce a CAZ in order to reduce the levels of NO2 to within legal limits.

9.8.2 Following agreement from Government the launch of the CAZ is postponed from summer 2020 to 2021. Feedback was sought from various stakeholders around the city, including the business community which has highlighted a number of concerns with the launch of the CAZ in early 2021. These concerns include the economic impact of COVID-19 on businesses and individuals and their ability to prepare for the introduction of the CAZ including the upgrading of vehicles and the perceived safety of public transport as an alternative to motor vehicle use. A

new launch date is yet to be announced. Additional factors influencing the launch date include an expectation from the business community and residents that the launch date for the CAZ will be confirmed no later than six months ahead of the actual launch and adherence to the ministerial direction which requires the Council to implement its plans for achieving compliance in the shortest possible time; as such, the current launch 'window' is from February 2021 to the end of June 2021.

9.9 Data for forward planning

9.9.1 Transport for West Midlands (TfWM) conducted a public survey on attitudes to travel and COVID-19. Circa 6,200 responses were received, of which around 40% of respondents were from Birmingham residents.

9.9.2 A further survey was carried out in June 2020 and circa 3400 responses were received, with 55% of responses from Birmingham residents.

9.10 Future public transport

9.10.1 On 8th August the DfT announced further financial support for bus and tram services in England to support people getting back to work and education spaces safety. The total value of support to operators will reach at least £700million, including £5.7m allocated to the West Midlands Metro.

9.10.2 The West Midland region's transport plan is to also be updated with a greater focus on meeting the West Midlands 2041 climate change challenge. The revised plan will also look to build on changes seen during the coronavirus pandemic, by further encouraging more cycling and walking, and cutting car use. Recent surveys carried out in the region show that three-quarters of people enjoyed seeing less traffic on the streets during lockdown, while levels of cycling and walking have hugely increased.

9.10.3 As the region prepares for schools to reopen the following interventions will be undertaken, as led by TfWM:

- National Express West Midlands introduced a function onto their website where passengers can check how busy buses are to help plan their journey
- Metro launches 'Intent to travel app' where registered users can log intended future travel plans to help Metro to respond to service demand
- Department for Education awarded £2.5m to WMCA to assist with the provision of school travel, cross party working commenced to identify where extra provision is required across the region.
- Return to school's toolkit launched across all social media and schools' comms channels

- National Express will be making multiple service changes at the end of August. This will include strengthened services for school travel on their commercial network and see amended timetables to support the schools return.
- Uplift in Metro services in September returning to its pre-Covid 6-minute headway timetable for the peak times of service which is a return to 100% service.
- Further rail timetable uplift which will see provision for 100% capacity (but not 100% service yet).

10 Business Support

10.1.1 Since the last report to Full Council in June 2020, Birmingham City Council has continued to work with the local business community, regional partners and national government to support Birmingham's businesses.

10.2 Coronavirus Small Business Support Grants

10.2.1 Birmingham City Council has received an allocation of £231,576,000 to be paid out directly to 19,146 small businesses across Birmingham through the Small Business Grant Fund and the Retail, Hospitality and Leisure Business Grant Fund.

10.2.2 As of 21st August 2020, we have paid out a total of £211,555,000 to 17,608 small businesses. This equates to 92.67% of the total allocation. The administration of these grant schemes has posed significant challenges for the team, requiring the investment of significant resources into the development of automated checking and payment processes; however, overall it has been a success, with more grants paid out to more businesses than any other local authority in the United Kingdom.

10.2.3 There has been an additional incentive to maximise payments through these schemes, as the funds available for the Discretionary Business Grant Scheme is capped at 5% of monies paid out through the Small Business Grant Fund and the Retail, Hospitality and Leisure Business Grant Fund. More detail on this is provided below.

10.2.4 Where we already hold the bank details of eligible businesses, we have been able to pay out grants automatically. However, this only accounts for a very small minority of businesses in Birmingham. Payment of grants has therefore largely been reliant on businesses getting in touch through the BCC website to submit details for payment through an online form. The team has carried an extensive programme of business engagement and communications campaigns to encourage all eligible businesses to apply for grants. In addition to sending

out bulk emails, letters and text messages, our call centre has carried out over 5,800 telephone calls to potentially eligible businesses.

10.2.5 There are a number of reasons why a potentially eligible business may choose not to submit an application. Some businesses have not historically registered for business rates and are wary of receiving a backdated business rates bill. Other businesses have previously ceased trading and vacated the property, with neither the outgoing business nor the landlord updating the business rates record. We are now proactively reviewing the status of businesses that have not claimed for a grant, with inspectors carrying out site visits to determine if premises are empty/void and whether landlords should be rebilled for empty business rates.

10.2.6 The Coronavirus Small Business Support Grants schemes closed on 28th August 2020. Any unspent funds will need to be returned to national government; however, we will be able to move 5% of any unspent funding to 'top up' our Discretionary Business Grant Scheme.

10.3 Discretionary Business Grant Scheme

10.3.1 On 2nd May 2020, national government announced a further Discretionary Business Grant Scheme, aimed at small businesses outside the scope of the Small Business Grant Fund and the Retail, Leisure and Hospitality Grant Fund. This scheme is markedly different from the previous two schemes because, while there were some national criteria set for the fund, local authorities have been asked to design their own schemes and application processes. Local authorities are also able to determine which cases to support using additional locally set criteria.

10.3.2 Under the Discretionary Business Grant Scheme, local authorities are able to disperse grants to the value of £25,000, £10,000, or any amount under £10,000. The funding allocation to each local authority was set at 5% of projected spend for the Small Business Grant Fund and the Retail, Leisure and Hospitality Grant Fund. Birmingham City Council's allocation is therefore just over £10m.

10.3.3 These grants are primarily and predominantly aimed at:

- Small and micro businesses
- Businesses with relatively high ongoing fixed property-related costs
- Businesses which can demonstrate that they have suffered a significant fall in income due to the COVID-19 crisis
- Businesses which occupy property, or part of a property, with a rateable value or annual rent or annual mortgage payments below £51,000

10.3.4 Due to the relatively small amount of funding available through this scheme, Birmingham City Council decided to structure the applications process into

'rounds', with funding allocated on a 'first come, first served' basis to eligible businesses within each round. We have worked closely with the business community, including the Greater Birmingham Chamber of Commerce and the Greater Birmingham and Solihull Local Enterprise Partnership (GBSLEP), and regional partners to design a scheme that both avoids a 'postcode lottery' and ensure that the money helps the maximum of businesses possible.

10.3.5 Round One of the Discretionary Business Grant Scheme ran for two weeks from 1st June – 15th June 2020. For this round, we were asked by national government to prioritise the following types of businesses:

- Small businesses in shared offices or other flexible workspaces. Examples could include units in industrial parks, science parks and incubators which do not have their own business rates assessment;
- Regular market traders with fixed building costs, such as rent, who do not have their own business rates assessment;
- Bed & Breakfasts which pay Council Tax instead of business rates; and
- Charity properties in receipt of charitable business rates relief which would otherwise have been eligible for Small Business Rates Relief or Rural Rate Relief.

10.3.6 In addition to these nationally set criteria, we also applied the following local requirements:

- Small businesses employing less than 50 staff
- Businesses which can demonstrate at least a 30% drop in income due to the COVID-19 crisis
- Businesses with ongoing fixed commercial property-related costs (rent, service charge, lease, license, mortgage payments)
- Businesses mainly trading/based within the Birmingham City Council area

10.3.7 A total of 1,898 applications were received in Round One, with just under £4.5million of grants distributed to businesses. A more detailed breakdown of applications is provided in the table below.

Round 1 **As of 24/08/2020**	**No. of businesses**	**No. of grants awarded**			**Total awarded**
		<£10k	**£10k**	**£25k**	
Awaiting review	0				
In review (appeal)	1				

Audit investigation	1				
Rejected	800				
Closed as duplicate	67				
Appeal upheld but not yet paid	2				
TOTAL PAID	**1027**	**956**	**66**	**5**	**£4,452,459.00**
TOTAL APPLICATIONS	**1898**				

10.3.8 Round Two of the Discretionary Business Grant Scheme ran from 3rd August 2020 to 17th August 2020. For this round, we were able to drop the national eligibility criteria and open up the scheme to more businesses, inviting applications from small businesses across all business sectors.

10.3.9 A total of 1317 applications were received in Round Two. As of 24th August 2020, the majority of these applications were still being processed, however a detailed breakdown of applications is provided in the table below.

Round 2 **As of 24/08/2020**	**No. of businesses**	**No. of grants awarded**			**Total awarded**
		<£10k	**£10k**	**£25k**	
Going through initial checks	144				
Awaiting review	753				
In review	43				
Further evidence required	39				
Audit investigation	0				
Rejected	147				
Closed as duplicate	6				
Approved but not yet paid	1				
TOTAL PAID	**184**	**117**	**26**	**41**	**£1,727,492**
TOTAL APPLICATIONS	**1317**				

10.3.10 The below table shows the status of all applications received in both rounds of Discretionary Business Grant Scheme applications, as at 24th August 2020. So far, a total of £6,179,951 has been paid out to businesses across Birmingham.

Total DBG As of 24/08/2020	**No. of businesses**	**No. of grants awarded**			**Total awarded**
		<£10k	**£10k**	**£25k**	
Going through initial checks	144				
Awaiting review	753				
In review	44				
Further evidence required	39				
Audit investigation	1				
Rejected	947				
Closed as duplicate	73				
Approved but not yet paid	3				
TOTAL PAID	**1211**	**1073**	**92**	**46**	**£6,179,951**
TOTAL APPLICATIONS	**3215**				**£6,179,951**

11 Council Finances

11.1.1 The financial position provided below is correct as of 14th August 2020.

11.1.2 To date, national government has announced that the Council will receive £84.3m of unringfenced COVID-19 related funding, alongside a number of ringfenced funding grants as shown in the table below.

Table 1: Grant Funding Announced			
Grant	**National Amount £m**	**BCC Amount £m**	**BCC %**
Tranche 1	1,600	38.744	2.4%
Tranche 2	1,594	31.566	2.0%

Tranche 3	500	13.968	2.7%
Non-tax income funding	TBA	TBA	TBA
Total Unringfenced	**3,694**	**84.278**	**2.2%**
Infection Control	600	9.761	1.5%
Reopening High Streets Safely Fund	50	1.017	2.1%
Test and Trace Service	300	8.439	2.9%
Emergency Assistance Grant for Food & essential Supplies	63	1.923	3.1%
Emergency Accommodation Interventions	105	TBA	TBA
Total	**4,812**	**105.418**	**2.2%**

11.1.3 The Government did not announce the basis of allocation of the first tranche of funding, but it appears to be based on need assessment formulae. The second tranche of funding has been allocated on a per capita basis. It is disappointing that the Council has received a lower level of funding in the second tranche given the forecast costs it has raised with the Government.

11.1.4 The Government announced a further tranche of unringfenced funding on 2 July 2020, specifically to fund expenditure pressures, of which Birmingham has been allocated a further £14m. The Government has held back £6m of the national allocation to provide additional support to councils dealing with pressures due to high numbers of unaccompanied asylum-seeking children. As Birmingham only has a small unaccompanied asylum seekers population, it is unlikely that there will be any material allocation for the city. Government, further announced a new co-payment scheme to fund the majority of irrecoverable income losses from sales, fees and charges. Where losses are more than 5% of that planned, then 75% of losses will be met by Government. Initial estimates are that Birmingham may receive a further £22.1m of funding from this scheme when based on reported losses for the 6 month period.

11.1.5 The total forecast additional spend/loss of income to the Council on COVID-19 related general fund activities for **2020/21 and 2021/22 is £236.719m**. This is inclusive of additional expenditure, loss of income and likely risk materialising. The 2021/22 position will be better understood as we start to plan recovery and the “new norm”. The table below provides an overview of pressures the Council is facing between years.

Table 2: Forecast Pressures on Expenditure and Income			
Financial Year	**Expenditure £m**	**Income £m**	**Total £m**
2020/21	90.334	68.700	159.034
2021/22	7.472	70.213	77.685
Gross GF Pressures	**97.806**	**138.913**	**236.719**
Grant Received	N/A	N/A	(84.278)
Net GF Pressures	**97.806**	**138.913**	**152.441**

11.1.6 The two-year costs identified to date have exceeded the allocation of £84.278m granted to Birmingham by £152.441m (including identified risks) for General Fund.

11.1.7 The current assumption for the financial position for 2020/21 is based on a 6 month premise for the duration of the Covid-19 along with some residual costs.

11.1.8 It should be noted that additional costs are beginning to be identified for 2022/23 and beyond due to slippage on planned savings proposals, including lower assumptions around ability to grow income.

11.1.9 Basis and assumptions:

- Forecasts are based on decisions and emerging actions
- Where estimated figures have been used these will continue to be reviewed and updated.
- Where costs were given as a range, the higher value has been used.
- We have assumed a duration of April through September where services have been closed as a result of social isolating policy from national government, such as leisure centres.

11.1.10 A return on the latest estimates of costs and losses of income due to COVID-19 was submitted to MHCLG on 31 July 2020. Previously MHCLG asked for all authorities to submit a return that assumed the duration of the crisis was 4 months. This MHCLG return asks for full year costs. The Council estimated total costs in 2020/21 of £257.872m general fund and £6.276m HRA. This includes expenditure in relation to the Test and Trace, Infection Control, Reopening High Streets Safely, Emergency Welfare Assistance and Hardship grants. This is summarised in Table 4.

Table 4: MHCLG July Return Summary	
2020/21 Impact	**£m**
Additional Costs	104.439
Income Losses (after Business Rates Relief)	128.295
Ringfenced Grant Expenditure (e.g. Test and Trace Funding)	25.138
Total General Fund Impact	**257.872**
HRA Impact	6.276
Total Impact Submitted to MHCLG	**264.148**

Infection Control Grant

11.1.11 The Council has received an allocation of £9.8m as part of the £600m Infection Control funding. Seventy five percent of this allocation (£7.3m) will be allocated directly to care homes in 2 tranches – one in June and the other in August 2020 based on the current number of Care Quality Commission beds registered within each home and in accordance with the grant determination requirements. To date, payments have been made to 296 homes. Payments for the first tranche have totalled £3.6m to date. Payments for the second tranche are due to commence next week. The balance of the funding (£2.5m) will be used to support extra care, supported living and home support providers with infection control.

Test and Trace Service Support Grant

11.1.12 The Council has received £8.4m to develop and action its plans to reduce the spread of the virus in the local area. Spending plans are in the process of being developed, but as at 7 August 2020, commitments totalled just over £8.2m (£5.5m in 2020/21 and £2.7m in 2021/22) covering salary costs, software and system costs, communications, equipment, enforcement and welfare support and community swabbing.

Welfare Assistance Fund

11.1.13 An additional £63m has been confirmed by Government on 11 June 2020 to assist those who are struggling to afford food and other essentials due to COVID. Birmingham has been allocated £1.9m. Spending plans are in the process of being developed.

Reopening the High Streets Safely

11.1.14 The Council was allocated £1.017m and expects to spend this fully in 2020/21.

Cashflow and borrowing issues

11.1.15 The Government has responded to potential cashflow pressures by providing major COVID funding in advance, including the general support grant to local authorities and the funding for business support.

11.1.16 If we do have short term cashflow deficits, the main source of short-term borrowing for local authorities is other local authorities. Although initially the local authority cash market tightened it is now back to normal, however there remains a risk of it tightening again.

11.1.17 It is still too early to be clear about the additional cost of borrowing to meet COVID-19 related cashflows for the period before they are permanently funded. Using currently known costs and funding, an interest cost of £1.7m over the next two years has been calculated at PWLB interest rates.

11.2 Corporate Procurement Services

11.2.1 Corporate Procurement has played a lead role both within the Council and regionally in sourcing essential PPE during the pandemic to ensure delivery of sustainable sources of supply that match the demand profile in accordance with required standards and at the best possible prices for the duration of the pandemic.

11.2.2 Processes, supplier due diligence and governance was established quickly to ensure that only the right quality of PPE was ordered as quality and cost varied considerably. During the crisis Corporate Procurement identified and validated offers from over 1300 organisations capable of supplying PPE. The success of the approach to date has resulted in the Council procuring over 11.2 million items of PPE of which 6.5 million items are for other LAs.

11.2.3 Key enabling activities carried out in the “React” phase to establish our approach include:

- Emergency Procurement Governance established under regulation 32(2)(c) and regulation 72 (1) under the Public Contract Regulations 2015 including a new award report template for PPE.
- Vetting processes developed for supplier, product and test certificates to be verified, involving colleagues in Finance, Legal Services, Trading Standards, Health and Safety, Public Health and Audit.
- Established and promoted an e-mailbox for suppliers to register their PPE offers with BCC.
- Recorded suppliers’ offers to prioritise those companies that we should negotiate with.

- Created a Microsoft ‘Team’ enabling collaboration with West Mids Heads of Procurement to aggregate demand to reduce prices.
- Supported the WMCA to launch its supplier registration form.
- Attendance at Facilities cell and circulating weekly progress reports on procurement activities.
- Developing a procurement model to enable adjustments in our purchasing based on weekly demand profiles (BCC and 3rd party support e.g. care providers, schools etc.); LRF volumes; PPE minimum stock levels and PPE on order to maintain resilience up to at least December 2020.
- Attendance at LGA National Advisory sub-group for PPE that includes regional Heads of Procurement reps from across England to share experiences; discuss proposed approaches and feedback to MHCLG, Cabinet Office, DHSC on issues being experienced in order to effect national improvements.
- Two separate meetings with MHCLG to provide further details on our experience of LRF, budget issues and the approach adopted in the West Midlands.
- Representing BCC at the Midlands Engine meeting and a Warwickshire Manufacturing Alliance meeting.
- Hosting meetings of the West Midlands Heads of Procurement to discuss position/issues and tactical/strategic options as well as updating on feedback from LGA meetings.
- To improve our resilience up to at least December 2020, we are having all of the stock delivered that is currently on order.

11.2.4 In addition to PPE, the Procurement team has now sourced equipment to support the re-opening of buildings such as screens, signs, tape, sanitiser stands/gel etc.

11.2.5 The Council is now moving into the recovery phase as the increased amount of supply means that we can no longer rely on the above PCR15 provisions and should now look to either establish a regional contracting arrangement or use national supply arrangements e.g. from Crown Commercial Services.

11.2.6 DHSC has indicated that reimbursements for clinical PPE purchased to date are likely to be offered (approximately. £1.5M for BCC subject to the exact terms which have yet to be published) as well as proposing an arrangement for PPE to be supplied FOC until March 2021. Neither of these have yet been confirmed in writing, but it seems that they are likely to be contingent on us not establishing our own contracting arrangements for clinical PPE prior to March 2021.

12 Recovery Planning

12.1 Understanding the impact of COVID-19 on our communities

12.1.1 It is widely recognised that the COVID-19 pandemic has exposed and exacerbated longstanding structural inequalities across Birmingham and the United Kingdom. This not only includes inequalities related to 'protected characteristics' such as ethnicity, gender, and age, but a much broader set of inequalities and wider determinants of health such as deprivation, education, work security, and access to healthcare services.

12.1.2 As well as bringing existing inequalities to the fore, the pandemic and subsequent lockdown restrictions created new social divides that drastically affected quality of life during lockdown and the ability of some households to 'bounce back' once restrictions were lifted. Things that might once have been viewed as luxuries, such as the ability to work from home, access to green space and gardens, and internet connectivity are now seen as essential protective factors for households, enabling some families to pass lockdown in relative ease while others saw a massive detrimental impact on mental health and income.

12.1.3 Understanding how the crisis has affected, and will continue to affect, different communities and households across the city is vital to shaping the recovery strategy for Birmingham. As a Council, we are committed to understanding the reasons why the pandemic hit some groups harder than others and taking action to directly address the structural inequalities that persist in our city.

12.1.4 In July 2020, an initial report was taken to Cabinet bringing together all the (then) available evidence on the differential impact of COVID-19 on Birmingham's communities, across a range of different vulnerabilities including ethnicity, disability, sexual orientation, religion and socioeconomic status. This report also outlined the ways in which some groups might continue to be disadvantaged through recovery unless targeted policy actions were incorporated into recovery programmes. The report is available here.

12.1.5 Across the Council, an extensive programme of work is taking place to understand the impact of COVID-19 on communities and people's experiences of the pandemic. This local insight and intelligence will be used as part of an evidence-led approach to recovery, building a rich, localised and meaningful picture of the impact of COVID-19 across the city. This will include targeted engagement with groups who have been the most adversely affected by the pandemic and/or are likely to be hardest hit in the longer term.

12.1.6 Some of the work to date includes:

- The establishment of a regional Taskforce, co-chaired by Councillor Hamilton, to gather evidence on the impact of COVID-19 on BAME

communities, including conducting a series of public hearings to listen to first-hand accounts of people's experiences. These findings contributed to a review into the coronavirus impact on BAME communities.

- Through Public Health, the commissioning of ethnographic studies of Birmingham residents to explore the prolonged impacts of COVID-19, their experiences of the system and specific services, and what support is needed for them as individuals as well as for communities and the city overall. This work is due to be completed in November 2020, with the findings included in the Director of Public Health Annual Report (published in 2021).
- Partnering with Lewisham Council to explore health inequalities affecting African and Caribbean communities and a range of broader issues (for example, access to treatment and management support, specific health conditions, and wider determinants of health).
- Through Education and Skills, working with the University of Birmingham to better understand the implications for education of COVID-19, including gathering insight through a parent/carer survey. This partnership is looking to take lessons learnt during COVID-19 to improve education in the longer-term.
- Through the Neighbourhood Development and Support Unit (NDSU), the commissioning of Locality to undertake research and analysis on the response to COVID-19 by Birmingham's community sector, including understanding what learning can be aligned with the Working Together in Birmingham's Neighbourhoods White Paper going forward.

12.1.7 The findings from this programme of work will help to shape and refine recovery planning, including how we will work with communities and partners to drive structural change, reduce inequalities and build a more inclusive economy. Reports will be brought to Cabinet and the City Council for decisions and updates where appropriate and as different pieces of work progress.

12.2 Economic Recovery Strategy

12.2.1 As part of a wider recovery programme, a draft 'COVID-19 Economic Recovery Plan' has been developed which sets out how the Council intends to support Birmingham's economy to recover from the COVID-19 crisis and adapt to new challenges such as Brexit. This is a working document, which will continue to evolve over the coming months as we engage with local stakeholders and partners.

12.2.2 The COVID-19 pandemic and the closure of businesses it required is having a seriously damaging impact on the Birmingham economy, setting back the impressive economic growth we have seen in recent years. The UK has seen a

20% fall in GDP in a single month and Birmingham has already seen an increase of over 30,000 (62%) in claimant count unemployment since the beginning of lockdown. Some of this impact will be short-lived (GDP is predicted to bounce back in the third quarter), but some will be longer term and there is a severe risk of longer term "scarring" from the loss of jobs.

12.2.3 As we move from the initial emergency into the recovery phase, the City Council, alongside government, the West Midlands Combined Authority and other public agencies will need to do all it can to mitigate the impact on our economy. Recovery will be a lengthy process in many sectors, and each sector will need to respond differently and in different timescales, partly according to the lifting of "lockdown" regulations.

12.2.4 We are fortunate to already have a range of ambitious growth plans in place that will play a key role in driving the economic recovery, including the Birmingham Development Plan, the Big City Plan, the East Birmingham Inclusive Growth Strategy, and the Midlands HS2 Growth Strategy. We also have a commitment to a low carbon future through the Route to Zero programme, the implementation of the Clean Air Zone in the city centre, and the Birmingham Transport Plan. While all these plans are still valid, the profound impact of COVID-19 has called for a shift in our approach, and redoubled efforts to promote inclusive growth and challenge the 'old normal' in economic development.

12.2.5 The crisis has revealed the scale of the things we need to put right, but it has also highlighted our capacity to adapt and take radical action when this is called for. Our recovery plans will therefore focus on identifying opportunities to progress four main priorities:

- Creating a more inclusive economy and tackling the inequalities and injustices highlighted by the crisis
- Taking more radical action to achieve zero carbon and a green and sustainable city
- Strengthening our public services and creating new services to address needs
- Building the strength and resilience of our communities, based on the positive response to the crisis.

12.2.6 Action will be taken under four key headings, reflecting the distinct role of the City Council:

- **Place development and management**

  Once the public health crisis has ended it is vital that we as a city develop a long-term response which recognises that the economic damage inflicted by COVID19 will be felt differently across our city.

Without a place-based economic response, the inequalities that we saw before the Coronavirus will become even more entrenched and our objectives to deliver inclusive growth will be even harder to achieve.

The City Centre has developed into a major economic asset for Birmingham; however in just a few short months life in the centre has dramatically changed. It is vital that we work with our partners and stakeholders to try and understand what the future holds for the city centre and the people living and working in it.Our responses will also move beyond the city centre and will prioritise our high streets and urban centres; helping to drive their reinvigoration and transform them into diverse, well-connected and unique hubs at the heart of local communities.

- **Green recovery**

  The City Council's declaration of a climate emergency together with the introduction of new development and transport policies will accelerate the opportunity to drive growth in new markets, including smart and future mobility, a shift to zero emission vehicles and green technology. Improvements in quality of life - including less pollution and congestion, need to be embraced after the pandemic; fortunately, the Council has a strong suite of policies, such as the Birmingham Transport Plan and Clean Air Zone, that can help support the shift and deliver new economic opportunities. There is also an opportunity to reframe the Big City Plan as a vital document in the next stage of city centre development, with a focus on low carbon and sustainable development.

- **Supporting people and businesses**

  As home to a young and ethnically diverse population, our region has been disproportionately exposed to the negative jobs impacts of the economic crisis. There is a risk that without urgent intervention, young people are at risk of entering the labour market during a severe downturn, exposing them to the risk of unemployment and longer-term scarring effects. Similarly, many older workers, including those in the automotive and manufacturing sector have lost their jobs or have been furloughed.

  We need to ensure that the recovery phase and planned economic growth creates broad-based opportunities that benefits all of our communities. It will be vital that we support our communities to obtain the right skills to access employment opportunities.

- **Unlocking and accelerating infrastructure investment**

  The city has some unique opportunities as a result of investment in HS2 and through being host to the Commonwealth Games. By accelerating major infrastructure investments we can unlock growth opportunities

across the city. The Council has a portfolio of major transport and infrastructure projects of a scale that has the potential to provide significant numbers of jobs as well as improving how people and goods move about the city. As well as the investment and jobs generated by the schemes themselves created in the construction phases better transport is key to opening up job and training opportunities, to providing access for all to essential services including health and education and to supporting individual self-development and fulfilment. Our focus needs to be on ensuring we stay committed and help deliver what is a major pipeline of transport and infrastructure projects.

Birmingham City Council

City Council

15th September 2020

Subject:	Route to Zero Interim Report
Report of:	Ian MacLeod, Acting Director – Inclusive Growth
Report author:	Maria Dunn, Head of Development Policy
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Does the report contain confidential or exempt information? ☐ Yes ☒ No

If relevant, state which appendix is exempt, and provide exempt information paragraph number or reason if confidential:

1 Executive Summary

1.1 This report to full Council follows on from the declaration of a Climate Emergency in June 2019. It updates members on the progress made to date including the work of the Route to Zero (R20) Task Force (the R20 Task Force) and the progress made against the City Council's own carbon reduction targets. It sets out the recommended next steps for working towards being net zero carbon as a City Council and across the wider City.

1.2 Birmingham City Council cannot achieve Route to Zero on its own. We will need to work with a range of partners to deliver the measures needed over the transition period. In particular we will require support from central government in terms of legislation changes and financial resources.

2 Motion

1. Approves the target date to achieve net zero carbon is set as 2030 for the City Council's own operations excluding its existing housing stock and procurement;
2. Notes the challenge of achieving the 2030 net zero carbon date for the City as a whole but commits the Council to working with partners and neighbouring local authorities to become the first City Region to become Carbon neutral. The Council's ambition remains to achieve a net zero carbon outcome as soon as possible and a revised date will not be set until these discussions have taken place.

3. Approves that an advisory group to Cabinet is established to oversee the City Council's own progress on achieving net zero carbon.
4. Approves that the City Council endorse the Recommendations for reducing the City Council's own emissions as set out in Table 2 of this report.
5. Notes the content of the Anthesis report and commits the City Council to work with partners to pursue the recommendations where practical and feasible, developing appropriate Action Plans for future Cabinet approval.
6. Notes that an annual report will be taken to Full Council to update on progress on reducing carbon emissions.

3 Background

3.1 On 11 June 2019, following a cross-party motion, a climate emergency was declared at Full Council and the target was set for the City Council and the city to be carbon neutral by 2030, or as soon as possible thereafter as a 'just transition' permits.

3.2 This emphasises the need to ensure the transition to a net zero carbon and resilient economy has a strong social dimension, bringing the city's communities with us and mitigating potential negative socio-economic impacts. This is the City Council's R20 commitment.

3.3 The City Council is committed to taking a leading role to tackle the climate crisis. Meeting this challenge and achieving the 2030 ambition will require widespread support and transformative action both locally and nationally.

3.4 We want everyone in the city to be empowered to respond to the climate emergency to ensure that Birmingham is a place in which all our residents can lead healthy, sustainable, safe, and fulfilling lives.

3.5 The Anthesis report suggests that achieving the 2030 target date for the City as a whole will be very challenging. Birmingham though is committed to achieving net zero carbon as soon as possible and in advance of the national target of 2050 and the 2041 target date set by the West Midlands Combined Authority (WMCA). Greater Manchester, for example, have set a target date of 2038. The Council will therefore work with neighbouring authorities with the aim of becoming the first City-Region to achieve net zero carbon and will not set a revised date until these discussions have taken place.

3.6 Achieving net zero carbon must though be achieved in a way which does not worsen the outcomes of the most deprived communities in the City and wider region. Developing action plans which enable a 'just transition' will be a key focus for the next stages of the Route to Zero work.

Understanding Local Opinion

3.7 One of the commitments made in the June 2019 Full Council motion was to establish a programme of engagement and collaborative action that enables the

development of a carbon reduction action plan, ensuring we develop approaches that are in line with regional work.

The West Midlands Combined Authority

3.8 The West Midlands Combined Authority (WMCA) has set out a commitment to be net zero carbon by 2041. They have published an Action Plan which includes 74 actions that businesses, public bodies, individuals and the WMCA can take to reduce the impacts of climate change. The Action Plan underwent consultation in early 2020. Following on from this, the WMCA will publish a more detailed 5 year action plan to set out how carbon emissions will be delivered. The City Council will be working closely with the West Midlands Combined Authority in delivering net zero carbon and are already part of the WMCA's Low carbon Officers group, bringing together low carbon leads from across the area.

Birmingham City Council Citizen Engagement

3.9 Since the Climate Emergency was declared, the City Council has undertaken engagement with citizens through a Be Heard Survey and a series of focus groups which consultants One Black Bear were commissioned to undertake.

3.10 The purpose of the Be Heard Survey was to engage with Birmingham citizens to find out about their awareness and understanding of climate change and the climate emergency, as well as to understand what barriers citizens face and what can be done differently to ensure everyone can make positive changes to help tackle climate change. It should be noted that the survey was undertaken before the impacts of Covid19 began to be felt and this should be borne in mind particularly when considering responses concerning transport and working from home.

3.11 The focus groups were designed to understand more about specific groups of audiences, their thoughts on climate change, and what sort of engagement and communications on this issue would work best for them. This was done through a series of focus groups and tele-depths (in-depth telephone interviews) with six audience groups centred around Experian segments. A full report on the findings of the survey is set out at appendix 1 to this report.

The Big Green Conversation

3.12 During 2019, Greener Birmingham, a coalition of environmental organisations consulted the city's residents on the local environmental issues that matter most to them. The key findings were that the people of Birmingham want a greener city because of green health benefits (26%), environmental impact (18%), future of the planet (17%) and greener neighbourhoods (14%). Respondents to the survey felt that over the next 5 years the City Council should address; eco building code

(90%), prioritise environment (88%), ban single use plastics (87%), pedestrian and cyclist priority in the city centre (86%), build a central park (67%) and that over the next 5 years the City Council should prioritise: transport (26%), recycling (16%), green spaces (15%), waste management (8%) and Clean Air Zone (8%).

National Engagement: Energy Catapult Systems

3.13 Research by Energy Systems Catapult found that while 75% of people believe climate change is a serious threat, they are still unclear as to which activities in their lives emit carbon – with only 49% realising natural gas heating contributes to carbon emissions.

3.14 As part of the Innovating to Net Zero project undertaken by Energy Catapult Systems that recently modelled 100s of potential pathways to achieve 2050 carbon emissions targets – over 2,000 people were surveyed and focus groups conducted to understand public attitudes, including:

- Perceptions of climate change, its severity and what activity contributes to it.
- Attitudes towards low carbon technologies and behaviours in heating, diet and transport.

3.15 The research shows that most people believe that climate change is a big problem (75%) and accept they have a personal responsibility to do something about it (77%). But this concern does not necessarily translate into understanding the biggest sources of carbon emissions or the actions that will make the most difference to cutting them. It also finds that:

- 75% of people believe climate change is a global emergency
- 84% of people think Government should do something about climate change
- 77% of people think individuals should take some responsibility

The Impact of Covid 19

3.16 Covid 19 has changed the context and baseline from which we are working. It has presented both opportunities and challenges in terms of carbon reduction. It has also triggered a significant recession. The global disruption and impacts of the COVID-19 pandemic have forced the City Council, citizens and businesses to radically reassess their policy decisions, lifestyles and the ways in which they work. The initial lockdown and on-going easing of restrictions offers the chance to reflect on the way that we operate as a society. This time also presents the opportunity to shift our collective values and review the demands of “emergency action” in a climate context. Local and national commitments to emissions reductions have not changed as a result of the COVID-19 crisis.

3.17 The cost of delaying action on the pandemic has been felt in many countries. Similar decisiveness will be required as we recover from this crisis, respond in a way that is centred around the resilience, health and wellbeing of local communities. UN Secretary General Antonio Guterres acknowledged this in a statement in April 2020: "… ensuring a future for the planet must be a core element in rebuilding society after lockdown measures are lifted".

3.18 The next few years will be pivotal for climate change mitigation as we enter the decisive decade for action. The urgency of the situation is growing as we approach planetary tipping points and are held to account as a nation against international climate targets.

3.19 The impacts of the pandemic have forced significant changes in the way cities operate across all sectors:

Transport: Cycling and walking have now taken priority and to allow for social distancing, pedestrian and cycle access has encouraged the uptake of pavement widening, cycle path creation and reduced vehicle access. The Birmingham Emergency Transport plan aims to enable increased active travel across the city. As a result of the sharp increase in working from home and reduction in vehicle use, there have been huge improvements in air pollution in cities. Conversely, due to huge reductions in public transport usage during and coming out of lockdown, there will be difficulties in funding public transport.

Energy demand: Many commercial and institutional buildings are temporarily shut down and will be operating at reduced capacity when they reopen to adhere to social distancing measures. Due to isolation measures, citizens are now forced to spend more time at home, requiring higher energy use in homes.

Waste: Domestic household waste will likely increase as more food is consumed at home due to closing of restaurants and cafes.

Natural capital: There is increased need for access to parks and green spaces during lockdown, especially for those in flats and homes without gardens, to ensure availability of open spaces for socially distanced exercise. In addition, the pandemic has highlighted existing inequalities in society: those in low-paid jobs or zero hour contracts, ethnic minorities, older populations and those from a lower socioeconomic status are far more likely to be impacted by the pandemic either from a health or income perspective. It is therefore even more imperative that the way we rebuild the economy and reshape our cities coming out of the pandemic is inclusive of these vulnerable communities and follows the pillars of the just transition.

Challenges and Opportunities

3.20 The transition to net zero carbon poses some challenges for Birmingham around current levels of deprivation and inequalities. However, it is also an opportunity

to address these challenges and create a more equitable and healthy society. Some of the key challenges are outlined below.

- **Deprivation** – Birmingham suffers from high levels of deprivation, data from the 2019 Index of Deprivation shows that 43% of the population live in neighbourhoods that are in the 10% most deprived in England, and 51% of children (under 16s) live in the 10% most deprived areas. Birmingham is ranked the 7th most deprived local authority in England. The city is also the most deprived authority in the West Midlands Metropolitan area and Birmingham is ranked the third most deprived English Core City after Liverpool and Manchester.

- **Fuel Poverty** – Fuel poverty is measured in relation to the energy consumption required for households to be warm, well-lit, with hot water for everyday use, and the running of appliances. Fuel poverty in England is measured using the Low Income High Costs (LIHC) indicator, which considers a household to be fuel poor if they have required fuel costs that are above average (the national median level); and were they to spend that amount, they would be left with a residual income below the poverty line (less than 60% of average disposable income).

  The latest fuel poverty data from BEIS for 2018 shows there are 61,500 households in the city who are fuel poor, 14.2% of all households in the city. This is well above the national average of 10.3% and Birmingham has the 13th highest fuel poverty proportion amongst the 326 English local authorities. Fuel poverty levels vary significantly across the city with 7.4% of households in Sutton Coldfield being fuel poor compared with 20.3% in Hodge Hill constituency

- **Health and Wellbeing –** Health deprivation data from the 2019 Index of Deprivation which measures the risk of premature death and the impairment of quality of life through poor physical or mental health shows Birmingham having higher than average levels of health deprivation being ranked the 37th highest local authority.

- **Life expectancy** in Birmingham is lower than the national average, for males life expectancy at birth is 77.2 years (England 79.5) and females 81.9 years (England 83.1). Birmingham has the worst infant mortality rate of all the local authorities in the country – 7.9 per 1,000 live births (England 3.9) (2014-2016). Birmingham also has a higher prevalence of child obesity. More than one in ten 4-5 year olds are obese (11.5%) and a quarter of all 10-11 year olds (25.5%).

- **Skill Levels** - The working age population in the city has a relatively poor skills profile, with a lower proportion of its working age population with degree level or higher qualifications; and a higher than average proportion with no qualifications. 94,300 local working age residents have no qualifications accounting for 12.9% of the working age population, well above the

corresponding no qualifications rate for the core cities (10.1%) and the UK (7.9%). 241,700 working age residents have NVQ4+ (degree level) qualifications, around a third (33.1%) of the workforce. Again, underperforming in comparison with the corresponding core cites (41.5%) and UK rate (40.2%).

- **High Carbon Sectors**- Defining industries and sectors based on their carbon use is challenging as the official methods of defining industrial activity, the Standard industrial Classification (SIC) does not classify activity in this way and an industry definition could include activities that are high and low carbon. For example, electricity generation will not separate out renewable production from traditional fossil fuel production.

  Taking these limitations into account if we take a broad view of sectors that are traditionally high carbon, we can see that over a fifth of workplace employment and economic output in the city is within sectors that have a high carbon footprint. The table below gives a broad sectoral breakdown of high carbon sectors and shows that in 2018 119,000 local jobs were in these sectors 22.9% of total employment in the city and nearly £7bn (23.8%) of economic output locally.

Table 1: Employment & Economic Output by High Carbon Sectors in Birmingham 2018

Sector	Employment	% of Total	GVA £m	% of Total
Manufacturing	38,000	7.3%	4,071	14.0%
Electricity, Gas, Water & Sewerage and Waste	36,000	6.9%	241	0.8%
Construction	20,000	3.8%	1,598	5.5%
Transportation and storage	25,000	4.8%	1,025	3.5%
Total High Carbon Sectors	**119,000**	**22.9%**	**6,935**	**23.8%**
Total	520,000	100.0%	29,079	100.0%

Source: ONS BRES

3.21 Tree canopy cover varies significantly across the City. There is a target of 25% canopy cover across the City, however many wards fall short of that. The table at appendix 4 shows the percentage of canopy cover within each ward in the city as well as the Index of Multiple Deprivation (IMD) rank of that ward within Birmingham and the decile it falls into nationally. Whilst there are some exceptions, it is noticeable that the wards with lower levels of canopy cover are most likely to be deprived in relation to the city and nationally.

3.22 The local benefits of a green economy include:

- New possibilities for sustainable economic growth: new technology requires innovation meaning new businesses and new jobs will be created.

- Going green translates into efficient streamlined practices; this saves materials and saves money.
- Green workplaces are happier and healthier.
- Individuals live more efficiently in the home, saving money on fuel and water costs, home grown food and community food gardens make access to healthy food easier and cheaper.
- Less air pollution is beneficial for health.

3.23 In 2018, businesses active in England's low-carbon and renewable energy economy (LCREE) generated close to £37 billion in turnover and employed 185,000 full-time workers. Around 71% of workers (132,000) are employed in the energy efficiency sector installing insulation materials, lighting and control systems. A further 12% are employed in the low-carbon electricity sector working mostly in the wind, solar and nuclear industries. Nearly 700,000 direct jobs could be created in England's low-carbon and renewable energy economy by 2030, rising to more than 1.18 million by 2050. These jobs will be in:

- Clean electricity generation and providing low carbon heat for homes and businesses.
- Installing energy efficient products ranging from insulation, lighting and control systems.
- Providing low carbon services (financial, legal and IT).
- Producing alternative fuels such as bioenergy and hydrogen.
- Manufacturing low emission vehicles and infrastructure.
- It is anticipated that within the West Midlands there will be 97,015 jobs in the low carbon sector by 2030; this is 8.2% of the national total.

3.24 Moving to a low carbon economy will require a change in the education and skills sector in order to ensure that the right training opportunities are provided for young people as well as those seeking a career change, to develop the skills and knowledge necessary to pursue a career in this sector. Additionally, large numbers of the workforce will need to be reskilled as technologies around heating and construction, for example, change to respond to the net zero challenge. We will need to work in partnership with energy providers and relevant employers in the sector to ensure that the education sector adapts and expands to deliver the necessary courses.

The Route to Zero (R20) Task Force

3.25 One of the commitments in the climate emergency motion was to constitute a climate emergency Task Force. The R20 Task Force was set up in September 2019 and an update was provided to Full Council in February and as described in sections 3.35 to 3.41 of this report. Since February, Covid-19 restrictions have meant that the R20 Task Force meetings have been held virtually. The R20 Task Force met remotely in March and again in June and the agenda items included the Anthesis report which makes recommendation on how we can reduce carbon emissions across the City, as well as updates from the R20 Taskforce policy development sandpits set out in 3.25 to 3.29 of this report and the R20 Task Force Communication and Engagement Working Group, specifically feedback from the online survey and focus groups which have taken place.

3.26 The R20 Task Force met remotely in July and August for two workshop sessions led by Anthesis. These sessions provided R20 Task force members with the opportunity to shape and influence the recommendations and next steps. At the R20 Task Force meeting on 26th August members were asked to endorse this report to Full Council.

3.27 The initial suggestion was made to hold a Birmingham citizen assembly in March 2020. This has been reviewed and is currently on hold due to Covid 19 restrictions. Once there is more clarity over the easing of restrictions this will be reviewed again.

Policy Development Sandpits

3.28 As part of the R20 Task Force work, policy development sandpits are being held on key themes. The original intention was for these to be in person workshops held in March and April, however, due to Covid 19 restrictions some sandpits have been held virtually and others have been delayed. The sandpits are being led by officers and partners, and themes include: housing; transport; planning; education, skills and employment pathways; East Birmingham and North Solihull; and engagement.

3.29 The overarching purpose of these sessions is to provide R20 Task Force members, officers, subject matter experts, and key partners and stakeholders with the opportunity to share knowledge and understanding of what we already know, how that helps us on the R20 journey, and what else we need to explore. The outputs of the sandpit sessions will help to shape the more detailed action planning work which will follow-on from this City Council report.

3.30 Sandpits have taken place covering Housing, Planning and Transport and summary reports are set out at appendices 2 and 3.

3.31 A community engagement sandpit was held virtually in July over 4 sessions and a report from that sandpit will be prepared and again will inform the action planning and future community engagement work in relation to Route to Zero.

3.32 Sessions on education and a visit to East Birmingham and North Solihull are currently on hold.

The R20 vision

3.33 The climate emergency declaration set out a commitment to achieve net zero carbon by 2030 or as soon thereafter as a 'Just Transition' permits. The Anthesis Report suggests that it is not possible to achieve net zero carbon across the city by 2030 without significant carbon offsetting. Whilst the challenges of achieving the 2030 date are recognised the Council is still committed to achieving net zero carbon as soon as possible and in advance of the national target of 2050 and the regional target of 2041 set by the West Midlands Combined Authority (WMCA). A revised date will be discussed with neighbouring local authorities and other partners and the City's ambition is to become the first City Region to achieve a carbon neutral outcome. It is also still recommended that the 2030 target remains for the City Council's own emissions, excluding the City Council's own housing stock and procurement where further work needs to take place to determine when carbon neutral can be achieved.

Key themes and ways of working

3.34 In order to achieve the vision transformational shifts will be required. There are some actions that the City Council and partners can put in place now and other actions that will require help and support from UK Government. There are actions which individuals, communities and businesses will need to take; this is a city-wide endeavour which will require buy-in from all parts of society – it will be everyone's responsibility. To achieve the vision the City Council and other institutions will need to make a clear commitment to work differently.

3.35 The City Council and anchor institutions have a responsibility to drive system change and lead by example. These organisations need to prioritise sustainability and have a leveraging position to influence others and facilitate positive change. This can deliver a city-wide change.

3.36 To deliver net zero we need to bring about democratic and participatory change. We need to use new methods of community engagement, for example, community assemblies, to help shape local decision-making.

3.37 Individuals and communities will have a significant role to play in achieving the target. Changes to how we all live, including, what we eat, how much we travel and how we travel, our shopping habits and recycling rates can all reduce individual carbon footprints. Collectively we can significantly reduce carbon emissions. We need to build on the existing good work and empower communities to play their part in delivering a sustainable future with greater equality.

Future Governance of the Route to Zero Task Force

3.38 The Route to Zero (R20) Task Force was created in autumn 2019 and brings together Members and officers from the City Council and representatives from the West Midlands Combined Authority, the NHS, higher education, the business community, trade unions, faith communities, young climate strikers, climate campaigners, and other key partners and stakeholders.

3.39 The R20 Task Force is the advisory group for the R20 project and members have worked together to provide a voice for the city and to discuss, debate, and make recommendations on Birmingham's priorities for achieving the ambition of a Just Transition to net-zero carbon by 2030. The R20 Task Force has now been in operation for 9 months and has played a valuable role in preparing the recommendations set out within this report.

3.40 There is a consensus that Birmingham City Council should continue to have accountability and convening powers for the R20 Task Force as the democratic body for the City. There was also a high level of support for the meetings to continue to be held in public and that there should be a Memorandum of Understanding for all partners to sign up to as well as more regular updates to the public.

3.41 It is also recommended that an advisory group to Cabinet is set-up to oversee delivery of the City Council's own actions and progress towards meeting the net zero target. It is recommended that this advisory group is made up of:

- Cabinet Member for Transport and Environment (Chair)
- Cabinet Member for Street Scene and Parks
- Cabinet Member for Homes and Neighbourhoods
- Three relevant opposition members
- Two backbench Labour members

3.42 It is anticipated that this sub-committee could be established in Autumn 2020.

The Baseline

3.43 When the climate emergency was declared there was a commitment to establishing the baseline position. Consultants Anthesis were commissioned by the City Council, on behalf of the R20 Task Force, to undertake a study to establish the carbon emissions baseline for the City Council and the City as a whole and to make recommendations as to how carbon emissions can be reduced. The full report is set out at appendix 5 to this report.

3.44 Carbon emissions are classified into three 'scopes:

- **Scope 1 (Direct emissions):** All direct GHG emissions from the activities of an organisation or under their control. For the City Council, this primarily relates to natural gas for heating and fuel used by owned or controlled vehicles.
- **Scope 2 (Indirect emissions):** GHG emissions occurring as a consequence of the use of grid-supplied electricity, heat, steam and/or cooling within the city boundary. For the City Council, this relates to purchased electricity.
- **Scope 3:** All other GHG emissions that occur outside the City Council boundary as a result of activities taking place within the boundary. For BCC, Scope 3 emissions include schools, housing, procurement activities and employee commuting.

3.45 The City Council's own emissions from scope 1, 2 and 3 account for around 8% of the City's total emissions. It should be noted that there is some overlap between the City Council's scope 3 emissions and the wider City's emissions. Although the direct emissions that the City Council controls or has strong influence over is relatively small, the City Council still has an important role in stimulating and influencing action across the city.

3.46 Procurement spend is the largest emissions source, accounting for 80% of the City Council's total emissions and relates to services that the City Council procures to support services across the city, such as road or building maintenance. The operation of buildings; electricity, gas and water account for another 17% of the City Council's Scope 1, 2 and 3 emissions. The operational control of these buildings are different depending on the letting arrangement in each and hence, the impacts are split across Scope 1, 2 and 3. Mobile Supplies (highways) mainly consists of street lighting, contributing 17,881 tCO2e of emissions.

3.47 Birmingham's City Region emissions total 4,578 ktCO 2e. 68% of these emissions are from buildings (34% from residential buildings), 28% are from transportation, 2% are from waste, 2% are from Industrial Processes and Product Use and less than 1% are from the generation of grid supplied energy.

3.48 A full breakdown of Birmingham's emissions is set out on Page 25 of the Anthesis report at appendix 5 to this report.

3.49 In 2013 the City Council set a previous target to reduce carbon emissions in the city by 60% by 2027. The most up to date national data (from 2017) shows that good progress is being made: Birmingham's direct carbon emissions have decreased by 38.6% against 1990 levels.

Birmingham's Carbon Budget

3.50 The carbon budget (25.7 MtCO2 for the period 2020-2100) sets out a finite emissions limit that should not be exceeded in order that Birmingham remains in

line with the Paris Agreement 2016 The budget itself is derived from a 'scaling-down' approach.

3.51 If we were to assume no further action over and above current national Government policy we would achieve a 35% reduction on 2017 emissions by 2030, if we were to assume that the region goes significantly beyond national policy and grid decarbonisation, across both energy supply and energy demand measures but without using any carbon capture and storage technology we would achieve a 72% reduction against 2017 levels. This does not include any use of Carbon Capture and Storage Technology.

The Council's Route to Zero

3.52 This section sets out the actions the City Council can take within its own operations. The City Council is directly responsible for 8% of the City's overall emissions, whilst this is only a small proportion of the City's overall emissions the City Council has an important role in leading by example and therefore it is important that these emissions are reduced.

3.53 In order to facilitate a reduction in emissions we need to ensure that every part of the City Council is doing everything it can to reduce emissions. A One Council approach is needed to deliver a reduction in the City Council's own emissions. An Internal Working group has been set up to take forward the City Council's own actions, this group has been responsible for leading the work for setting out the City Council's actions which were agreed at Full Council on 4th February 2020, and subsequently working to deliver these. An update on this work is set at appendix 6 to this report.

3.54 The table below sets out the actions (taken from the Anthesis report) that the City Council can undertake to reduce its own carbon emissions. Some of these actions will take longer to deliver than others. The actions set out below require further investigation, costing and delivery plans in order to be put in place. This work will be carried out following the September Full Council meeting and a full action plan will be reported to Cabinet which will set out a detailed timeframe for the delivery of the actions and costings. These actions cut across all aspects of the City Council's responsibilities and a One Council approach will be crucial to delivery. The Climate Emergency needs to feature in every aspect of the City Council's work and resources need to be made available across all of the City Council's directorates in order to deliver on this ambition.

3.55 The City Council is a large organisation and can act as an agent of change, driving behaviour and cultural change through the organisation will be key. This can be achieved through training and awareness raising across the City Council.

Table 2: Recommendations for reducing the City Council's own emissions

Action	Anticipated Timeframe and Costs	Next Steps
City Council Behaviour Changes		
Develop a Strategy for reducing staff and City Council's own emissions alongside ambitions for the City.	Work can start on this in the short term. The cost would need to be established.	Identify a staff resource and funding to support the preparation of the strategy.
Facilitate competitions between departments in low carbon behaviours or provide each department with a carbon budget.	Work can start on this in the short term. The cost would need to be established.	Identify a staffing resource to establish what the carbon budget would be for each directorate and ways in which we could incentivise reduced carbon emissions within teams and directorates.
Develop a monitoring and communication campaign to reduce waste and increase recycling.	Short term action	Identify a staff resource to promote recycling internally within all City Council buildings. Make more information available to ensure that all materials that can be recycled are. Identify champions within each directorate and building to support the promotion of recycling.
Develop a monitoring and communication campaign to reduce energy use.	Carbon trust estimates that the cost of an average campaign is 1-2% of the annual energy bill.	Some work can be done around reinforcing existing energy saving messages and this could be picked up within existing staffing and budgets. A more intensive campaign would require a commitment of 1-2% of the City Council's overall energy bill and staff resource to deliver it.
Deliver education programme such as Carbon Literacy Training to all staff	Carbon Literacy Project are designing a toolkit to provide	Cost options for delivering training. Investigate the feasibility of delivering a module

Action	Anticipated Timeframe and Costs	Next Steps
and members and incorporate training into the new starter process.	guidance to authorities on delivering training	on the corporate training software.
Continue to review departments suitable for home-working and update HR policy to enable flexible working. Ensure staff have continued access, training and support for using remote technology and develop a plan for sustained remote working coming out of lockdown.	This work is already being undertaken and has been accelerated as part of the Covid-19 response. Increased flexible working could generate a cost saving for the City Council as it offers the opportunity to reduce the amount of office space that is needed and to use space more efficiently.	Ensure that carbon savings are considered as part of the strategy for returning to the office and the longer-term flexible working strategy. This will be addressed as part of the New Ways of Working Programme.
Conduct an updated staff commuting survey and regularly review business travel to target actions and develop guidance on sustainable travel.	Short term action. This would require staff time.	Undertake the survey and analyse how people travel for business. Prepare an action plan and establish whether there are cost implications associated with encouraging more business travel to be undertaken by public transport or in pool cars.
City Council Strategy		
Embed carbon reduction into every decision and policy, particularly core strategies such as the Local Plan.	This could be addressed by ensuring that all reports to committees include a 'Carbon Emissions Impact Analysis' to explain how the Route to Zero has been taken into account in making the decision and the implications of the decision for carbon management.	Add a section to all committee reports to cover this.
Develop a SMART Action Plan and monitoring system	The City Council will need to establish a system to monitor its	Use existing staffing resources to investigate the tools available

Action	Anticipated Timeframe and Costs	Next Steps
and share experiences with other businesses and organisations.	carbon emissions and progress in reducing them.	to monitor emissions and make recommendations on the best approach. This is likely to need funding for purchasing software licences.
Update planning policy and investigate opportunities within the planning function to drive carbon reduction. Impacts would span various sectors (transport, buildings, natural environment).	This will be addressed through reviews of the Big City Plan and the Birmingham Development Plan – however, there is an uncertain context for this at the moment because of forthcoming changes to national planning policy.	The Big City Plan Route to Zero is underway and will address some of these issues. Respond to the current Government consultations on planning reform.
City Council Procurement and Commissioning		
Change procurement policy to incorporate carbon neutral consideration including through social value and more rigorous carbon criteria.	This requires a more detailed understanding of the cost implications for goods and services and is therefore a longer term action.	Undertake work to establish what the cost implication would be to achieve net zero in all procurement.
Work with all commissioned services and major procurements to ensure they have carbon reduction policies in place.	Achieving net zero within all commissioned services and procurements is a longer term action.	Undertake work to establish the baseline in respect of current procurements and to understand the cost associated with ensuring all commissioned services and procurements are net zero carbon.
Establish monitoring systems for contracted suppliers to account on their carbon performance.	This will require additional staff resource.	Monitoring systems including 1B to be explored to determine if this tracking mechanism can be developed and subsequently costed.
City Council External Engagement		
Work with WMCA - localise campaigns and policies	This can be done within existing staff resource; there is already a Low Carbon Officers' Group	Continue to engage in WMCA Low Carbon Officers' Group

Action	Anticipated Timeframe and Costs	Next Steps
	hosted by WMCA which BCC attend.	
Develop a brand and communications around the climate change programme.	Early engagement work has already been undertaken as set out in this report. Further work will be undertaken but this will need resourcing.	Establish a Communications strategy and cost this.
For major planning applications and development, include a requirement on carbon reduction and management measures.	Current policies do not allow us to require this.	Look at how we can work with developers who are willing to provide this information voluntarily.
Prepare a strategy for community engagement over climate change and work with community champions.	Short term action.	Prepare and cost a strategy for Community engagement.
Host a citizen assembly to engage local people.	This was due to happen in Spring 2020 however, Covid-19 restrictions have resulted in this being postponed.	Host a citizen assembly once Covid-19 restrictions are sufficiently relaxed to allow this to happen in person.
Form partnerships with businesses to report and reduce emissions and support them to access funding.	This would require additional staff resource.	Identify staffing resource and ways in which businesses can be supported to reduce emissions.
Encourage businesses to run training in low carbon industries.	This would require additional staff resource.	Identify staffing resource and ways in which businesses can be supported to run training.
Develop website content and materials to be a hub of information for businesses and communities on city climate action.	This could be delivered within existing staffing resources and budgets.	Develop web pages over the next 12 months, identifying any gaps in internal knowledge or capacity which may require a further resource to deliver.

The City's Council Route to Zero

3.56 Delivering the action plan should not be the sole responsibility of the City Council. This section focuses on 'city-wide' actions and make clear that the recommendations are for the whole city, i.e. not just the institutions in either the public or business sectors but also our communities and individual citizens.

3.57 The recommendations set out in the Anthesis report were discussed by R20 Task Force members in a workshop session led by Anthesis. Anthesis gave the R20 Task Force an opportunity to feedback on the recommended actions and identify barriers and opportunities associated with their implementation. The final set of recommendations are set out at appendix 7 to this report. The table includes some commentary from relevant City Council officers in relation to how these could be taken forward, where work is already underway to implement the actions and where existing resources will be required. The City Council will not be responsible for taking forward all of the recommended actions, whilst the City Council has a significant part to play in the City's journey to net zero, through reducing its own emissions, leading by example, and acting as a trusted source of information as well as setting local policy and implementing and enforcing national policies, there will also be a need for businesses and individuals to take voluntary action to reduce their own emissions in order to work towards achieving net zero.

3.58 Many of the actions set out are only deliverable with additional resource, both funding and staffing resources across the City Council will need to be increased to maximise the City Council's ability to minimise emissions both in its own activity and across the City. There will also need to be a programme of lobbying Government to make changes to legislation to facilitate the transition to net zero.

3.59 The recommendations set out will need to be given further consideration by the City Council and the R20 Task Force and detailed action plans setting out timeframes and costings will need to be prepared in order to deliver them. Where implementation of the recommended actions requires a formal decision by the City Council, reports will be considered at Cabinet.

3.60 Food supply is not currently considered within the recommendations, however, awareness is growing nationally around the impact of the food supply chain on carbon emissions. The response to Covid 19 and associated issues around the provision of food throughout the pandemic have raised concerns around how we ensure security and affordability of food supply. It is suggested that the R20 Task force should include reducing carbon emissions from food supply within their scope.

Monitoring of Progress/Next Steps

3.61 Monitoring will be an important part of R20 One of the recommended actions is to establish a monitoring and reporting system and investigating the possible options and costs associated with this will be important. Both the City Council's

own emissions and the wider City's emissions will need to be monitored and reported in a clear and transparent way so that everyone within the City can access the information and understand how much progress is being made towards the net zero target. Partners could play a key role in helping to support monitoring activity.

3.62 Following on from this report, a series of detailed action and delivery plans will need to be prepared to progress and implement the recommendations set out within it. These will require significant resourcing and monitoring as they are implemented. Some of the actions that the City and the City Council need to take to achieve net zero carbon will require changes to Government policy and additional Government funding to facilitate delivery. Therefore, it will be important that we lobby Government to make these changes and maximise the opportunities we have to feedback to Government through consultations on changes to policy and funding arrangements to try and bring about the changes that are needed to achieve net zero. Detailed action plans will be signed off by Cabinet as they are prepared and updated, a process which is expected to continue over the coming years. It will also be important to monitor our progress in reducing carbon emissions and to report this in an open and transparent way. It is recommended that an annual report is presented to Full Council to set out the progress made each year and the work programme for the following year.

4 Appendices

Appendix 1 - Consultation Report

Appendix 2 - Housing and Planning Sandpits Report

Appendix 3 - Transport Sandpit Report

Appendix 4 – Tree Canopy Cover by Ward

Appendix 5 - Anthesis Report

Appendix 6 - Update on Council's Own Existing Commitments

Appendix 7 - Summary of Task Force Recommendations

CLIMATE EMERGENCY CITIZEN SURVEY AND FOCUS GROUPS ANALYSIS

INSIGHT AND PERFORMANCE, BUSINESS IMPROVEMENT AND CHANGE
BIRMINGHAM CITY COUNCIL

APRIL 2020

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1. INTRODUCTION

1.1 BE HEARD SURVEY

The Climate Emergency Citizen survey took place on Birmingham's online consultation platform, Be Heard, between 20 Jan and 21 Feb 2020. There were 1,394 total respondents.

The purpose of the survey was to engage with Birmingham citizens to find out about their awareness and understanding of climate change and the climate emergency, as well as understand what barriers people face and what can be done differently to ensure everyone can make positive changes to help tackle climate change.

This report covers all the results from the survey, including both quantitative and qualitative responses.

Note: The survey took place before the impact of COVID-19 on the UK became a major issue. This should be borne in mind, particularly for themes and comments concerning public transport and working from home.

1.2 FOCUS GROUPS

The Council also commissioned One Black Bear to understand more about specific groups of audiences, their thoughts on climate change, and what sort of engagement and communications on this issue would work best for them.

This was done through a series of focus groups and tele-depths (in-depth telephone interviews) with six audience groups centred around Experian segments[1] - Senior Security, Transient Renters, Family Basics, Urban Cohesion, Vintage Value, and Municipal Challenge. Details of their findings can be found at Section 8.

[1] Experian segmentation is centred around grouping households with similar sociodemographic characteristics into different 'segments'.

2. KEY FINDINGS

2.1 OVERALL ATTITUDES TOWARDS CLIMATE CHANGE IN BIRMINGHAM (SURVEY AND FOCUS GROUPS)

The survey and focus groups outcomes are not strictly comparable due to differing socio-demographics and different methodologies used to research how they felt about climate change.

Additionally, the survey and focus groups demographics are not necessarily reflective of Birmingham's demographics, but the research did cover a wide range of demographic groups and attitudes.

Across both the survey and focus groups, **most agreed that Birmingham's climate is changing,** with only a few sceptical responses. The respondents to the survey were more passionate and knowledgeable about climate change. Those in the focus groups, however, were more uncertain and felt that they didn't know enough. This could be due to the nature of self-selecting surveys, i.e. that those who have an interest in a topic are more likely to answer a survey about it than those who don't.[2]

There was a lot of agreement on **what could be improved to help people or organisations impact climate change**:

- Cost and accessibility of relevant facilities, products and services, and the lack thereof, was very important.
- The quality of public transport was criticised.
- **Cheaper and more accessible public transport** was a priority for both groups, as well as making **recycling and waste collection easier** to do. A wider range of options and more information available to the public for both services were considered crucial, e.g. more transport links, more recycling facilities.
- **Small changes**, such as reducing the use of plastic bags, seem to be the easiest for people to accept.
- Raising awareness and education: authorities need to **inform and educate** on what people can do and the best way to do it, to help people make better decisions for the environment in a convenient, and easy to understand way.

2.2 BE HEARD SURVEY FINDINGS

VIEWS, CAUSES, AND IMPACTS

Most respondents are **knowledgeable about different aspects and impacts of climate change** and related environmental issues, with proportions who are knowledgeable never falling below 91% on each aspect.

Most respondents **believe** in the existence of climate change and its impact, with almost all agreeing that climate change is occurring (95%), that there is a climate emergency (89%) and that it will affect their family and friends (90%).

Most respondents are extremely concerned about it (70%).

[2] https://en.wikipedia.org/wiki/Self-selection_bias

INDIVIDUAL ACTIONS

MOST POPULAR INDIVIDUAL ACTIONS

What people already do:

- Bringing their own bag for shopping (98%)
- Turn off lights when leaving the room (94%)
- Use energy efficient light bulbs (93%)
- Plastic, paper or glass recycling (94 – 95%)
- Double glazed windows (90%)

What people are willing to do:

- Install solar panels (65%)
- Buy locally produced products (57%)
- Avoid buying products with non-recyclable packaging (55%)
- Compost food waste (47%)
- Use a green energy provider (43%)

What people would not consider doing:

- Eat less dairy (24%)
- Install water meters (19%)
- Install solar panels (19%)
- Install smart energy meters (16%)
- Buy second-hand items (15%)

The most popular forms of transport were walking (26%) or using a diesel/petrol car (25%).

WHAT WOULD ENCOURAGE PEOPLE TO DO MORE – IN THE HOME; TRAVEL, WASTE AND RECYCLING; WHAT TO EAT, BUY AND USE

Overall, **cost and affordability** have a major influence on what would encourage people to do more, as well **as quality of services, accessibility of suitable facilities and businesses**, and **more education** on what people can do.

In the home

- Cost of green products and services are inhibitive
- Impartial information and advice
- Financial assistance with cost of solar panel loans
- Financial incentives, tax rebate or returns on expenditure to help with cost

Travel/Transport

- Improved, reliable, cheaper, safer, and more integrated and accessible public transport
- Improvements to walking and cycling provision in the city
- Prohibitive cost of electric vehicles

Waste and Recycling

- Reduce - Supermarkets, manufacturers and the Government have a big part to play in reducing waste, excessive packaging and single use plastics
- Recycling Service - Better information/education is needed around reliable and easy to use waste and recycling collections
- Recycling Streams - Introduction of food waste recycling and the provision of neighbourhood/local recycling and composting facilities

Disincentives

- A lack of trust that collected recycled waste is actually recycled rather than going to landfill, and
- A lack of recycling facilities in apartments and flats

What to Eat, Buy, And Use

- Too expensive to eat, buy and use in a sustainable fashion – affordability is key
- Availability of sustainable options to buy from supermarkets, including clear labelling and reduction or total removal of single use plastic
- More accessible and clear information to improve understanding
- Accessibility of local shops, independent businesses and farmers' markets

YOUR VIEWS ON HOW DIFFERENT PEOPLE AND GROUPS CAN HELP TO TACKLE CLIMATE CHANGE

Overall, **improving public transport and recycling and refuse services**, as well as **more education and awareness**, were the main themes across how different groups could help tackle climate change.

Individuals, Businesses and Communities

- Transport - Improve public transport, reduce reliance on cars, and improve cycling and walking facilities
- Packaging - Reducing single use items and excessive plastic packaging
- Recycling - Improved recycling facilities and increasing recycling rates
- Education - Increasing awareness, information and knowledge sharing

The Council

- Recycling - Improve recycling and refuse options available, including suggestions on how to do so
- Awareness - Duty to ensure the population has access to information, including a greater focus on sustainability in school education
- Transport - Improvements to public transport a major factor, including higher quality, more affordable, and a broader range of transport options. Also, improving cycling and walking infrastructure.

The Government

- Government financial investment in the country to help combat climate change - financial incentives, subsidies or grants
- Transport - encourage the use of public transport through better quality and accessible services
- The Government to enforce or create regulations to encourage changes towards better practices and take climate change more seriously

- Energy efficiency – supporting greener and more renewable sources of energy such as solar panels and relevant home/building improvements

DEMOGRAPHICS

The most popular demographic categories for survey respondents:

- Age: In their 30s and 40s (43.6%)
- Sexuality: Heterosexual or straight (74%)
- Long-term health conditions: None (73%)
- Ethnicity: White (92%)
- Gender: Female (57%)
- Religion: No religion (53%)

2.3 FOCUS GROUPS

1. Residents' worries are **closer to home or reactionary to national news** (e.g. health, their local area, financial concerns). Climate change never spontaneously came up, and resident knowledge of its impact was low. Few are sure about what is happening, or why.

2. Although doubt of climate change existing is rare **there were mixed thoughts regarding who or what is responsible,** along with feeling helpless over being able make any impact.

3. **Children** could prove to be **the emotional driver** with which to engage with residents, especially those with children/grandchildren.

4. There is an **overarching sense of shame** from many of the groups for not having enough or being able to buy the best. Some were already engaging in environmentally friendly behaviours because of financial circumstances, e.g. **buying second hand, using public transport**, and there should be encouragement of these actions, not stigmatisation.

5. Encourage cohesion and **sharing of ideas to help between communities**, not just from positions of authority.

6. **Educate and inform** across all touchpoints and tailor the messaging.

7. **Small enforcements** work, e.g. the carrier bag charge which has effectively changed behaviours and raised awareness.

8. **Cleaning up local areas** is essential to engage residents and encourage changes in behaviour. **Make recycling easier** for residents, with bigger bins and more collections.

9. Explain **the benefits to residents**, followed by the additional environmental benefit., e.g. financial savings by turning items off or making some dietary changes.

10. Everything is interconnected, and the focus could be on 'be kinder to you, be kinder to Birmingham, be kinder to the planet'; often these changes will **benefit the individual as much as the collective.**

Specific demographics were not available, but the main groups involved were diverse urban communities, older people, short-term renters, and families/individuals on low incomes or receiving state support.

3. YOUR VIEWS ON CLIMATE CHANGE

Figure 1: Changing climate

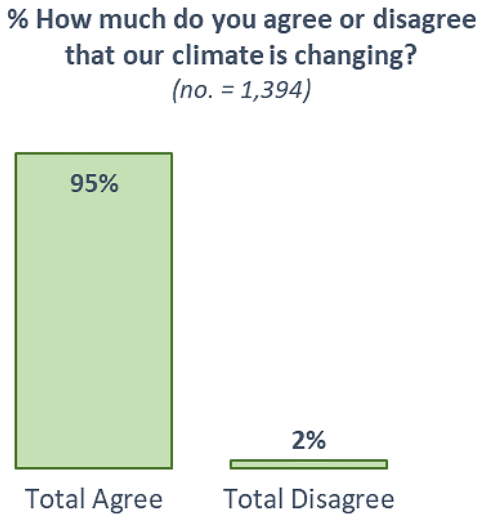
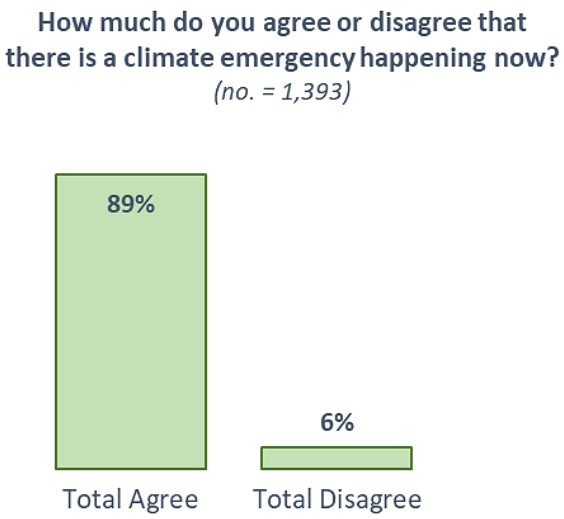
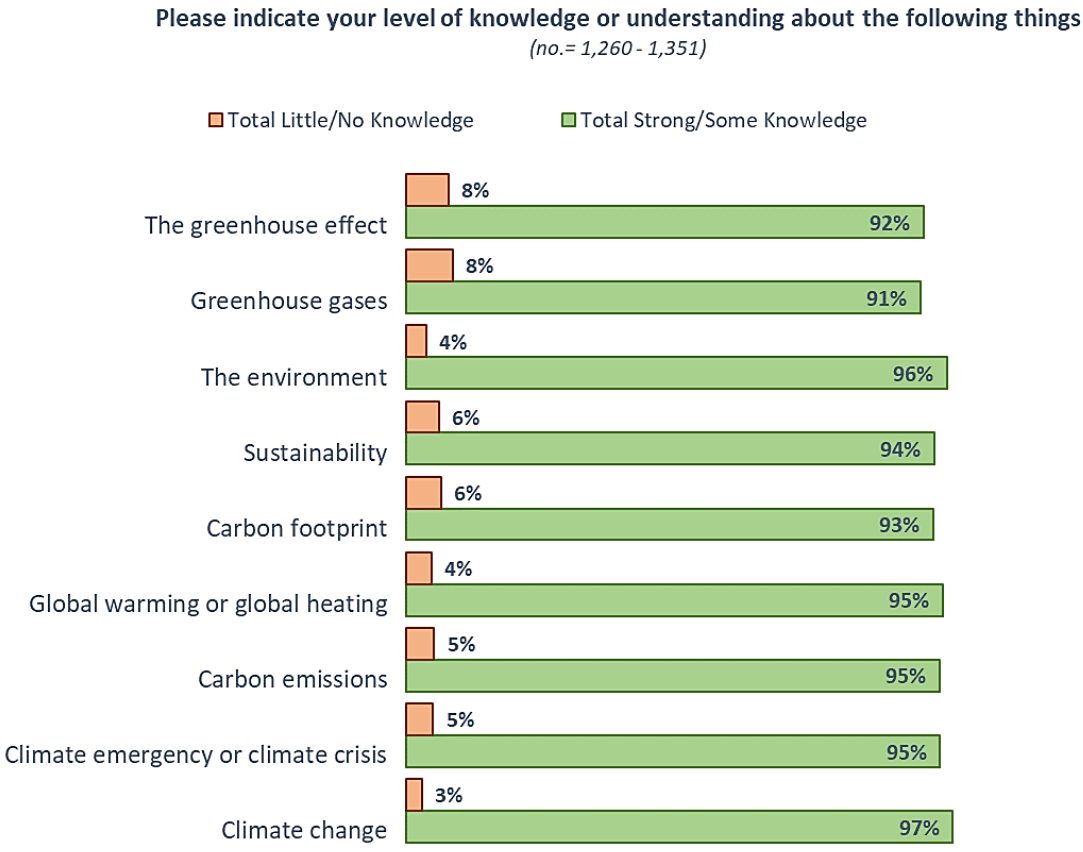


Figure 2: Climate Emergency



Almost all respondents agree that there is climate change and that a climate emergency is happening now.

Figure 3: Knowledge/Understanding



91% or more of respondents said they had strong or some knowledge of all listed aspects of climate change and the environment.

4. THE CAUSES OF CLIMATE CHANGE

Figure 4: Causes

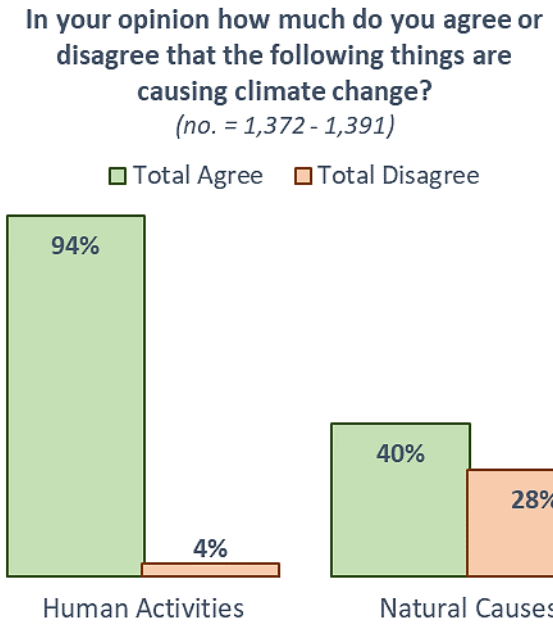
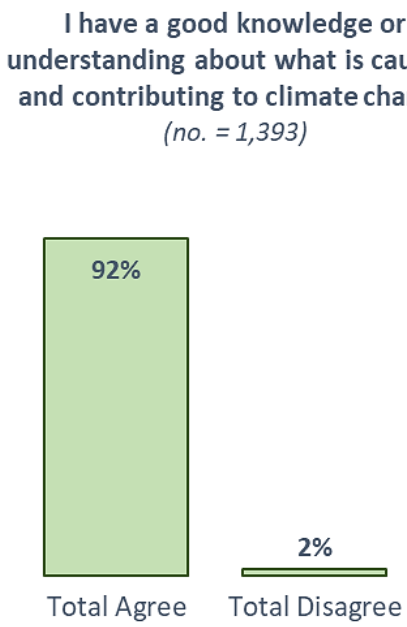


Figure 5: Knowledge



Most respondents agree that human activities are causing climate change but are more split on whether natural causes have had an impact.

For natural causes, nearly a third (30%) answered Neither Agree Nor Disagree. This may be due to a lack of knowledge on whether natural causes are causing it, or uncertainty over what 'natural causes' means in terms of this question. Given that the majority say that they have good knowledge over climate change causes (92%), it is unlikely to be due to a lack of knowledge over natural causes.

Also, the high proportion who say they have good knowledge of climate change causes reflects the high level of environmental knowledge in the previous question's results (see Section 3). Along with the high level of agreement over whether there is climate change and a climate emergency, this suggests most respondents to this survey already have an established interest and knowledge of environmental issues. Therefore, this survey will less reflect the views of those who do not.

Figure 6: Impact on family

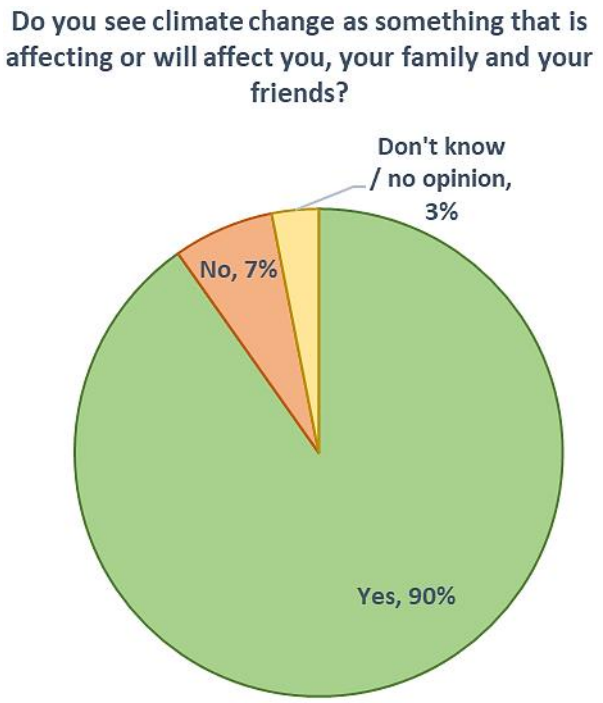
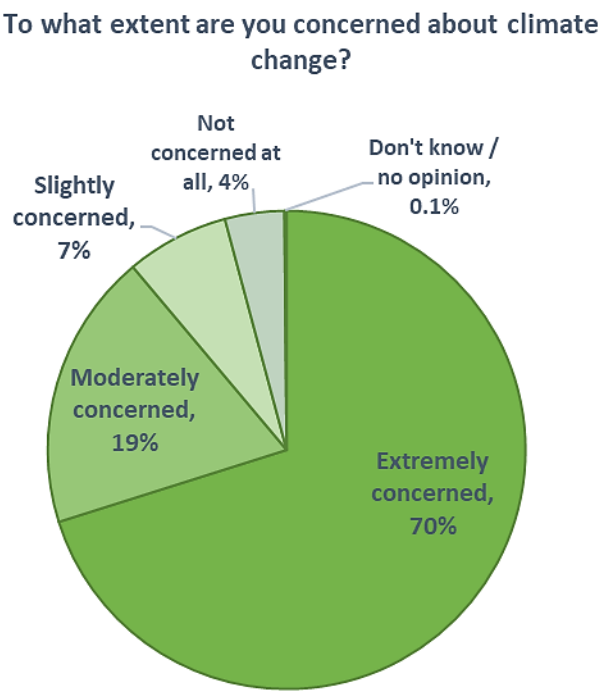
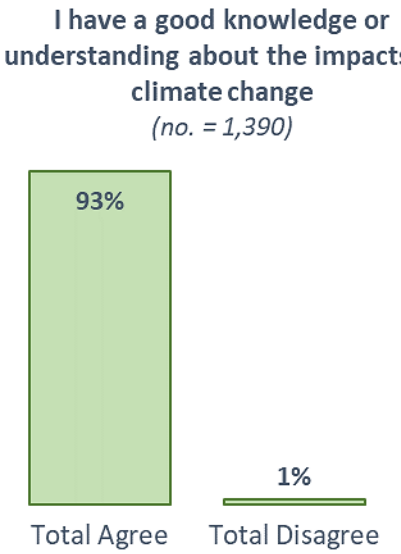


Figure 7: Concern



Concern over climate change and its impacts are high for the majority of respondents. Almost all think it will impact their family and friends, and the majority are extremely concerned about it. This is not surprising considering that most respondents think there is a climate emergency happening (see Section 3).

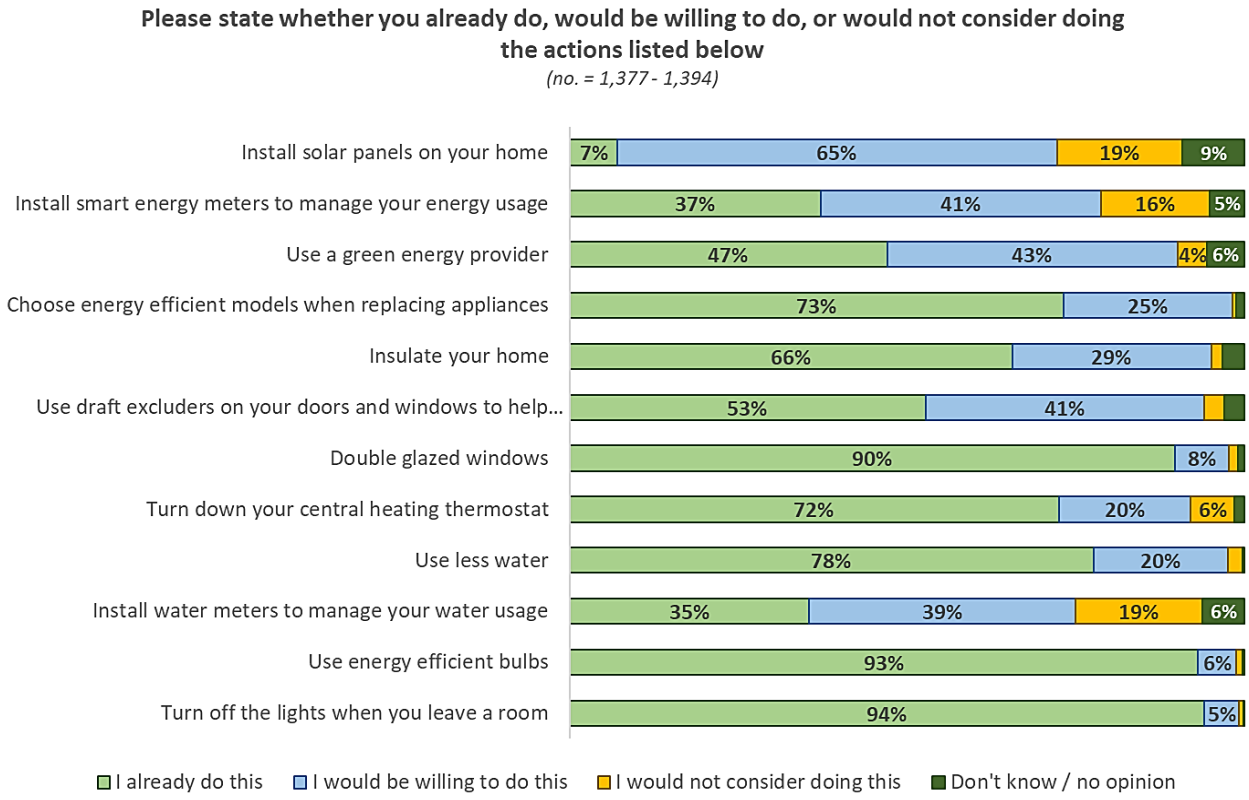


Almost all respondents believe they are knowledgeable about climate change impacts. This ties in with the high level of knowledge/understanding from previous questions on climate change and the environment.

6. YOUR VIEWS ON INDIVIDUAL ACTIONS

6.1 IN THE HOME

Figure 8: Actions in the home – willing to do



The results are positive overall, with high proportions already doing or willing to do a particular action to help with energy efficiency and other issues in the home.

Actions with the highest proportions 'already doing this':

Turning the lights off when leaving a room had the highest proportion – this does not have any cost attached to it and is already a well-known habit to save money.

Replacing older products with **new energy efficient products** – lightbulbs (93%) and appliances (73%) – also had high proportions who already did this.

Most respondents also say they already have **double glazing**, which ties in with statistics that show most households do have it[3].

Actions with the highest proportions 'willing to do this':

Solar panels by far had the highest proportion not currently but willing to do this (65%). However, this action also had one of the highest percentages of 'not consider doing this'. This could likely be due to the expense of solar panel installation, or being in a property not suitable for this, such as a rented property, flat, etc.

Energy management also had high proportions who were willing to install smart energy meters and use a green energy provider. However, **smart meter installation** for both energy and water usage also had amongst the highest proportions who would not consider it.

[3] English Housing Survey: Energy Efficiency of English Housing. July 2015. ONS & MCLG.

IN THE HOME - WHAT WOULD ENCOURAGE YOU TO DO THESE THINGS MORE?

In the Home part of the climate change survey received 1,012 responses including comments and suggestions.

The top themes were:

- Cost inhibitive (26%)
- Information and advice (18%)
- Solar panel loans, assistance or grants (17%)
- Financial incentives, tax rebate or returns on expenditure (14%)

The most popular theme relates to the **cost of products and services,** which could be classed as green, being out of reach in affordability to many: *"A lot of this simply comes down to cost. We insulated the house when there was a scheme. We do have double glazed windows, but they are 20 years old and we cannot afford to replace them although they are not as efficient as we would like. I would be happy to install solar panels but again could not afford it. It always seems to be the middle-income earners who are expected to be able to afford things like this and are offered little or no support and yet our budgets only go so far too."*

Respondents also wanted to be able to **receive impartial information and advice**, perhaps regulated and made available via Government or councils. People were not sure where they could go for trustworthy advice or surveys on their home, feeling that a company would only try to sell their products without the possibility of genuine need: *"better non-bias knowledge on energy providers via government."* Pre-approved suppliers and installers would people with a confident approach to do more in the home.

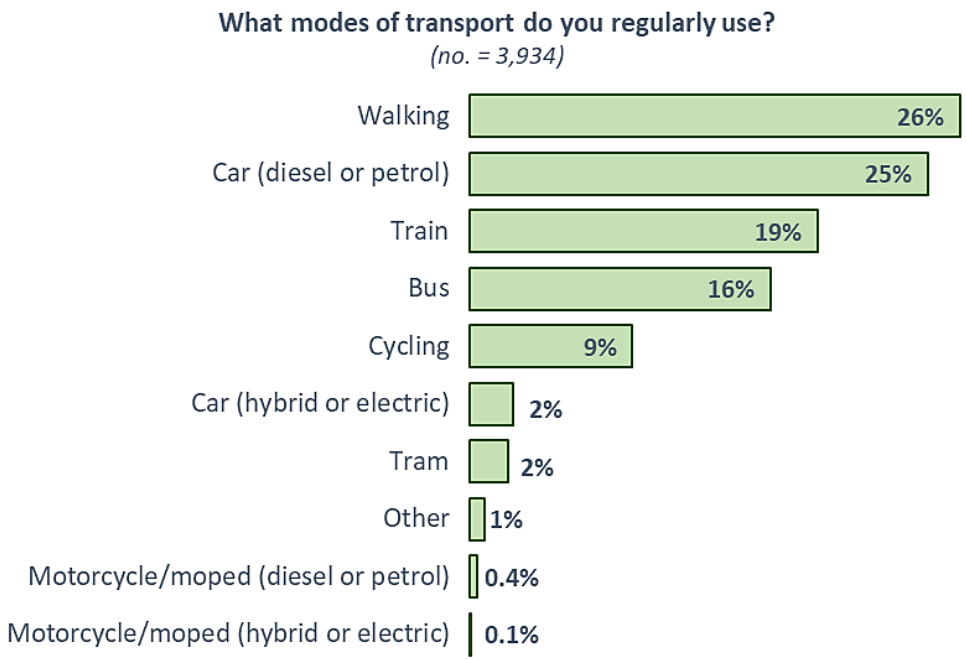
Comments in relation to **solar panels** was a big draw for many. Solar panels are seen as quite expensive for people to pursue and many recalled when there was a Government subsidy available for solar panels and other green products. There were suggestions for the **Government to bring back loans or grants to provide assistance** with costs and of course an independent body that does not just wish to sell but provides a guaranteed service.

Suggestions for **financial incentives, tax refunds or returns** were along the similar lines of cost inhibitive. If the cost of green products were lower or there was assistance towards the products, then they may well be more attractive. Tax refunds or returns were also seen as an incentive to move towards green products: *"Government incentives or tax relief for example would assist with these choices otherwise the payback is often not worth the change."*

There was also several comments where people felt they have done or **are already doing enough**. Some put this down to affordability, others unable to see that there was anything else they could do. Others were not convinced with the climate change agenda or felt that **Government and/or local councils should be leading by example** and 'going green' themselves, e.g. using and providing green energy providers, solar panels on their buildings and new builds being eco-friendly.

6.2 TRAVEL

Figure 9: Transport Use



Walking and cars are the most popular modes of transport, each with about a quarter of responses. Few of those who travel by car have a hybrid/electric vehicle.

Over a third of respondents (37%) travel by public transport (train, bus, tram). However, usage may be impacted in different ways by the following:

- Media concerns over safely using public transport due to COVID-19[4]
- Birmingham Clean Air Zone implementation this summer 2020

WHAT WOULD ENCOURAGE YOU TO USE MORE SUSTAINABLE AND ENVIRONMENTALLY FRIENDLY MODES OF TRANSPORT MORE OFTEN, OR MAKE FEWER JOURNEYS?

There were 1,188 total respondents to this question.

More than 60% of respondents wanted **improved, reliable, cheaper and much integrated and accessible public transport**. Cost was the most dominant issue. The cost of public transport often exceeds the cost of using vehicles.

There were also small numbers who felt public transport was **not safe or disabled friendly**. There were a few respondents who felt they could not change how they were travelling due to disability or work purposes or pointing out that it would be impossible on some journeys, e.g. carrying a weekly shop home on a bus. Safety is a theme which was directed towards all forms of public transport including cycling. *"Greater awareness of the safety implications (for women and children in particular) of walking or using public transport."*

[4] https://www.telegraph.co.uk/global-health/science-and-disease/coronavirus-time-stop-using-public-transport-no-walking-cycling/

Respondents mentioned the **lack of reliability**, problems with cancellations, ability to travel by a single integrated system like London's instead of having to negotiate different transport operators, and the **availability of public transport, especially for shift workers**, when public transport is poorly available or even non-existent e.g. Sundays or a night service. The length of time it takes to travel using public transport is also an issue with many responding that they use their vehicle because the public transport would put add lengthy extended travel times to their journey.

"This is not London where a GOOD transport system exists for you to make drastic changes because there isn't a good system to replace it. There are older cars on the road because people can't afford new ones which pump out less fumes. Where are the incentives to help? Those who can afford better cars can't afford electric ones. Where's the incentive for them? You don't have enough local train systems and your bus connections around the city are appalling."

The second biggest issue raised by respondents was the **improvements to walking and cycling provision** in the city (21.6%). Improvements suggested included: improved infrastructure to help people walk and cycle more, thereby reducing congestion in the city; exploring and enhancing additional safer cycling routes to help keep less confident cyclists off the roads, such as canal routes or even in parallel to train lines. In addition, safe and secure bike storage at place of employment and train stations, and employers providing more showering facilities for staff.

"I would not consider cycling on the roads at present-too dangerous. A separate cycle network would make me reconsider."

About 8% of the respondents felt the **cost of electric vehicles** was a deterring factor in purchasing them. Respondents would switch to these modes if finances were made available or cost was to come down, with some mentioning that an increased number of charging points and a better range of electric cars would help.

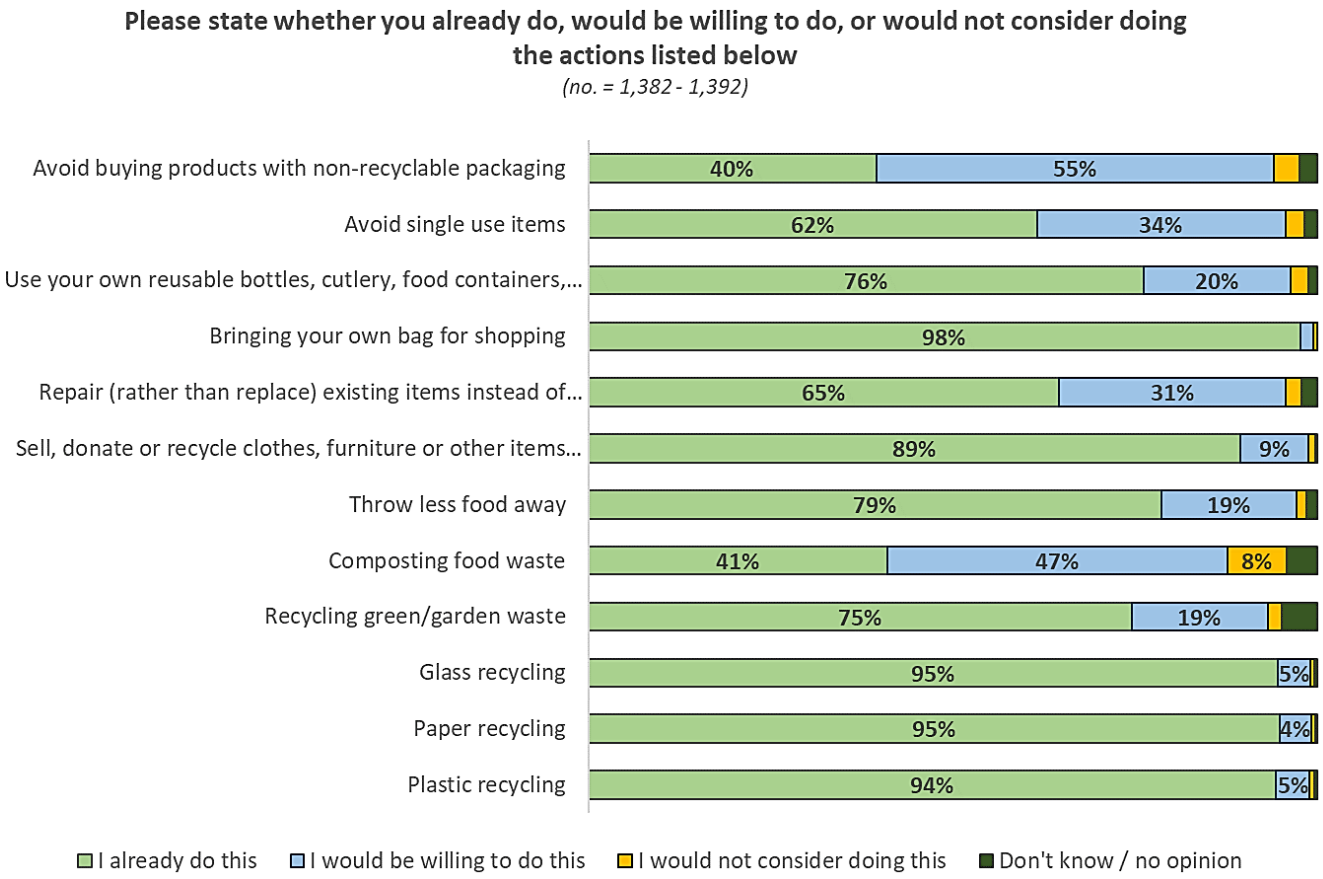
"More electric charging points and better management of existing ones would encourage me to replace my diesel car with an electric one."

There were several other miscellaneous themes, particularly around respondents feeling that employers should allow **more home working** to ensure less travel. There were quite a few responses suggesting **local train stations** such as Kings Heath, Moseley, Sutton etc., **to be reopened**. Some other issues highlighted were improved better lit canals, clearer government legislation on what type of fuel is best and making local towns more vibrant. A small minority of respondents felt that the transport strategy was geared towards younger people and the needs of the wider population were not given priority.

Of 1,188 responses, 86 were not relevant to the question asked and ranged around "no comment", "Already use public transport", "can't do more", and "live near work". There were a few who mentioned the use of car either due to work purposes or because of disability. Very few mentioned personal health problems or old age.

6.3 WASTE AND RECYCLING

Figure 10: Waste and recycling - willing to do



The results are positive overall, with high proportions already doing or willing to do a particular action to help with energy efficiency and other issues in the home.

Actions with the highest proportions 'already doing this':

Bringing your own bag for shopping (98%) – due to the introduction of a charge for plastic bags, plastic bag usage has decreased by over 90 percent, according to some estimates.[5]

Recycling of paper, glass, and plastic (94 - 95%) – there are kerbside collections for this across Birmingham.

Sell, donate or recycle clothes and other items also has a high proportion (89%). There are numerous charity shops across the city and in surrounding towns to which people can donate clothes and other items, with some local charities that will collect items from people's homes.

Actions with the highest proportion 'willing to do this':

Avoid buying non-recyclable packaging (55%) and **avoiding single use items** (34%) – this will depend more on what's available in local shops or online retailers.

Composting food waste (47%) – this would rely on being in a suitable property with outside space where it was possible to compost: e.g. a flat with no outside space would not be able to compost.

Repair existing items – most say they already do this, but there is a third willing to do this (31%).

[5] https://www.theguardian.com/environment/2019/jul/31/shoppers-use-of-plastic-bags-in-england-continues-to-fall

WHAT WOULD ENCOURAGE YOU TO DO MORE TO REDUCE YOUR WASTE AND RECYCLE AND REUSE MORE?

There were 1,041 respondents who commented on this question. Please note that respondents can comment on more than one theme. The main themes were around:

- Reduce (45.3%)
- Reuse (15.5%)
- Recycling Service (43.8%)
- Recycling Stream (31.3%)
- Disincentives (23.2%)

Reduce

The reduce category attracted the highest number of responses (45.3%). 60% of survey respondents thought that **supermarkets, manufacturers and the Government had a big part to play in reducing waste, excessive packaging and single use plastics**. Supermarkets were criticised for plastic packaging particularly on fruit and vegetables and multi pack items. Consumers were left with no choice but to buy products in plastic wrapping. Many would like to be able to return packaging back to the supermarket it came from. Manufacturers should shift their production to create more recyclable packaging and reduce excessive packaging.

Government action was also seen as a solution via legislation calling for a ban or imposing a system of fines or increasing taxation on all non-recyclable packaging: *"It's not for the consumer, it is the manufacturer and retailer to sort this problem out. The government needs to make them conform"*

Supporting zero waste supermarkets was the most popular way for the public to reduce plastic packaging.

Re-use

The re-use category attracted the **lowest number of responses** (15.5%). The most popular re-use option (6% of total respondents) was establishing within communities, **repair centres, community workshops, or repair cafes** where items that would otherwise have been thrown away were repaired - *"Basic workshops in repair skills would be good"*. Concerns were raised over repair costs being high and sometimes more expensive than replacing with a new item and that manufacturers by design were making repairs more difficult or building in obsolescence.

Second most popular was the ability to **refill their own bottles and containers picking** up both liquids and dry goods. Some supermarkets had started to make this possible in a small way and it was felt this should be expanded to more stores with a bigger product range. *"Companies delivering products direct to the door, that can be put straight into refillable containers".*

Recycling Service

The recycling service was the second highest category for responses overall (43.8%) and the top three things that would make people recycle more were very close together. **Better information/education** came out top (15.4%). The recent strikes and disruption to the service was a factor in this and so the reliability of the collections was a constant issue raised. **Reliable and easy to use waste and recycling collections** came a close second (14.7%).

The two stand out issues here were firstly the **labelling on packaging** was seen to be unclear using a variety of symbols and labels that were not understood by the general public. Clearer labelling was needed across the industry. Secondly, there was confusion with the information issued by the Council about **what could and couldn't be recycled**, with greater detail needed on items that could be recycled.

In third place was the number of respondents who wanted to see a **greater range of material recycled** (14.6%). Respondents saw Birmingham as having a very limited range of recycling, particularly plastics. A constant request was for Tetra Pak to become part of mainstream recycling in Birmingham – *"Collecting a wider range of materials for recycling (tetrapaks, toothpaste tubes as examples) would be a huge benefit to many".*

Recycling Streams

Comments on the recycling streams were the third highest (31.3%). The introduction of food waste recycling and the provision of neighbourhood/local recycling and composting facilities accounted for the majority of responses in this category (24.6% of total survey respondents). *"Bring back recycling bins in e.g. supermarket car parks for glass, paper, textiles".*

Food waste: respondents were aware that this was already in place in a number of local authorities across the country and it was seen as the most popular way to increase recycling in Birmingham – *"Food waste recycling at the kerbside".* **The provision of neighbourhood/ local recycling and composting facilities** was particularly relevant to those without a car and/or were living in flats without recycling facilities - their recycling was put in the general household waste as there was no other alternative available (see disincentives to recycling below).

The third most commented stream (6.7%) related to the **garden waste collection** with a majority asking for this to be returned to a **free collection or the current fee reduced**. Many commented that individuals making separate car journeys to the household recycling centres with garden waste was itself adding to pollution.

Other responses were around why Birmingham was not selling the compost produced from garden waste as this could be used to offset collection costs. An idea to increase capacity of cardboard and paper recycling at no additional cost was to make the main body of the wheelie bin for paper and card and the pod for the other recyclable materials.

Disincentives

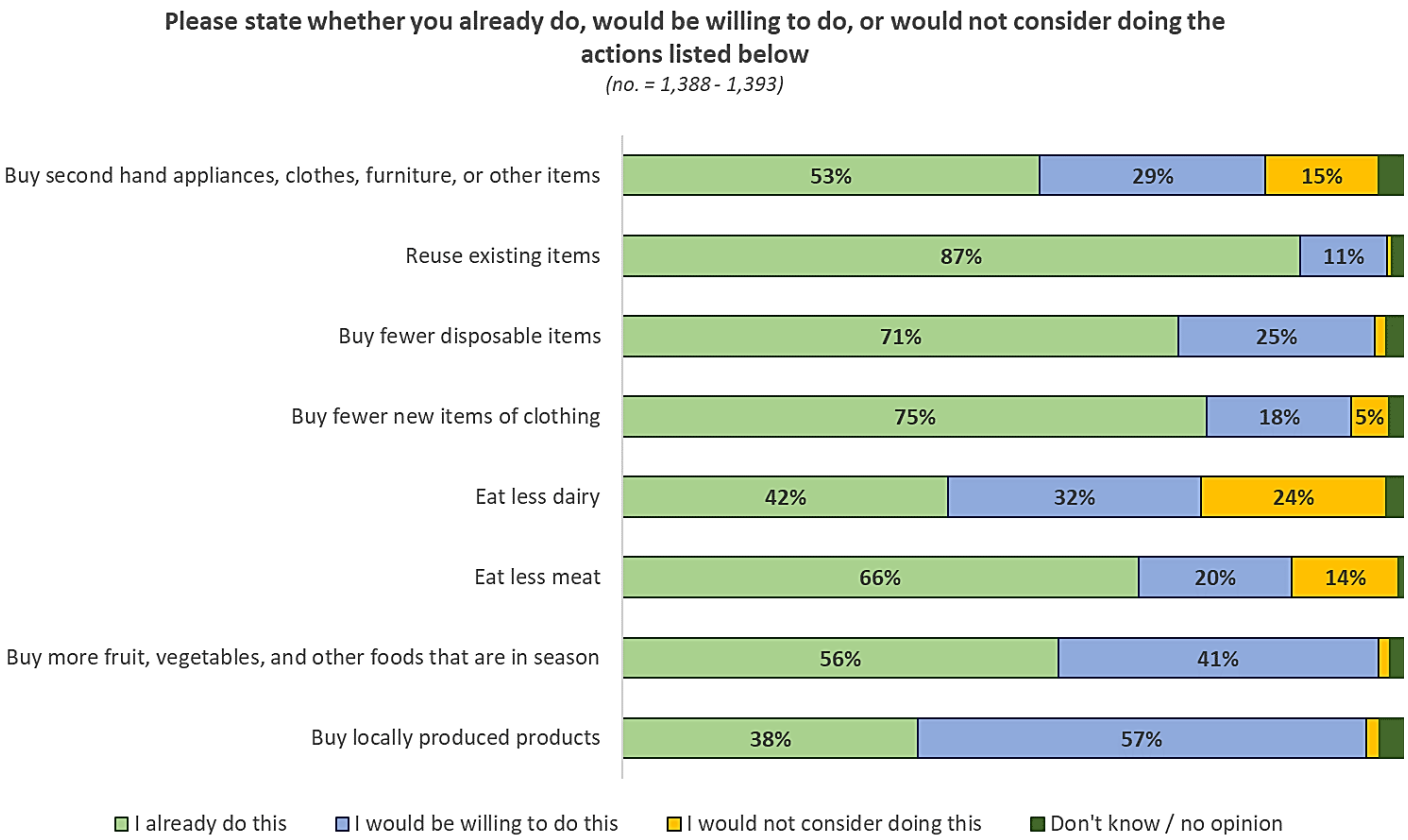
A number of disincentives to recycling were identified, accounting for 23.2% of total respondents. The biggest concern was one of **trust** (9.5%), with a number of respondents **wanting assurance that collected recycled waste is actually recycled rather** than going to landfill, incineration or shipped abroad. Many observed sorted recycled waste being put in the same bin lorry as domestic waste and so questioned if their recycling efforts were really worthwhile – *"I have observed all my carefully separated items being tipped in the general waste bin, seeing this happen discourages people who then lose trust in the Council".* The Council was criticised for being poor at informing residents what was being done with their recycling once it left the kerbside.

The second disincentive was the **lack of recycling facilities in apartments and flats** (5.6%). A number only had a general waste bin so effectively nothing was being recycled – *"My flat in the city centre has taken away the recycling bins! This means over 100 in the flat complex are no longer able to recycle items"*. There were no local or neighbourhood recycle points available to flat dwellers to allow them to recycle. A lack of recycling facilities was also noted in some council offices, schools and community centres.

Other disincentives included the concern that **unpackaged goods were often more expensive** than their plastic wrapped counterparts and made them unaffordable for many people. Although there was support for zero waste supermarkets there were concerns about accessibility both opening hours and limited locations. This would often require travel by car so adding to emissions and pollution.

6.4 WHAT YOU EAT, BUY AND USE

Figure 11: Eat, buy, use - willing to do



The results are positive overall, with high proportions already doing or willing to do a particular action to help with energy efficiency and other issues in the home.

Actions with the highest proportions 'already doing this':

Buying fewer items, including **disposable items** (71%) and **clothes** (75%), as well as **reusing existing items** (87%), are what most respondents are currently doing.

This trend ties in with the question on Waste and Recycling, where high proportions of respondents said they bring their own bags for shopping (98%) and repair items instead of replacing them (65%), and use their own reusable bottles, cutlery, etc (76%).

Actions with the highest proportion 'willing to do this':

Buying **locally produced products** (57%) and **seasonal food** (41%), were the most popular actions that people were willing to do. Transporting goods from other countries impacts on the UK's carbon footprint.

Nearly a third of respondents (32%) would be **willing to eat less dairy**. However, this action also had the highest proportion of respondents not willing to do it (24%), too.

WHAT WOULD ENCOURAGE YOU TO MAKE MORE SUSTAINABLE CHOICES WHEN DECIDING WHAT TO EAT, BUY, AND USE?

A total number of 812 individuals answered this question. Each answer contained a variety of responses, which were then categorised using 19 themes that were reoccurring.

The most common answer was that individuals found it **too expensive** to eat, buy and use in a sustainable fashion. Answers such as*, "simply can't afford to have principles"* and *"it's not easy to pay for this"* appeared frequently, with 25.2% of total respondents commenting on issues around the **affordability of items**, making this the most dominant out of all answers. Recommendations to combat this issue were also made, such as companies leading by example, including the Council by reducing rent for shops that are promoting sustainable behaviour, as this could help reduce the price of items sold. **Increasing tax on unsustainable choices** was also a common answer to resolve the issue of affordability, as respondents felt that unsustainable items are promoted through cheap prices and therefore become easier to buy.

The second most common answer was the **availability of options to buy from supermarkets** (22.7%). Many of the respondents felt that supermarkets had the responsibility to identify which foods were in season and local, with 10.5% of respondents advocating for **clear labelling** in order to make more informed and sustainable decisions. 8.5% stated that a **reduction or total removal of single use plastic** and excess waste packaging is crucial in the effort to become more sustainable, whilst holding supermarkets and large companies responsible.

“Supermarkets supplying food without plastic packaging...it's not always practical [sic] to go to a market”.

20.7% of respondents said that by having **more accessible and clear information**, they would be able to improve their understanding of how to become more sustainable. Under this factor, there were several other issues that the respondents identified, such as clear labelling of carbon footprint (5.9%), better community networking to further educate the local population in sustainable practices (2.8%) and more refill, repair, recycle and swap shops (8.7%).

“Supermarkets should display 'in-season' and 'local' produce prominently, so that customers can shop those items first and then shop for other less-sustainable goods, in full knowledge of the impacts of their choices.”

Accessibility of local shops, including **independent businesses and farmers’ markets** was something that 15.6% of respondents stated would encourage them to make more sustainable choices. The absence of butchers, green grocers and other high street shops was held accountable as a factor that has prevented people from sustainable practices.

“Easy labelling and access to local foods and drink. Why isn't there a 'local goods supermarket' in Birmingham city centre?”

8.9% of the responses stated that they were either **already doing enough or nothing would encourage** them to make more sustainable choices.

7. YOUR IDEAS

The survey asked the following three free text questions for respondents to share their views and ideas on how different people and groups can help to tackle climate change.

7.1 WHAT CAN INDIVIDUALS, COMMUNITIES, AND BUSINESSES DO?

Of the 985 comments received, some of the main themes were:

- Transport (26.7%)
- Packaging (22.3%)
- Recycling (17.8%)
- Education (17.6%)
- Re-use (11.3%)

Transport was the most popular theme (26.7%). The main suggestions were to **improve public transport, reduce reliance on cars, and improve cycling and walking facilities**. Transport was also an important theme for what national Government could do to tackle climate change.

"Communities can work on encouraging more cycling, walking and reducing the use of cars."

"Individuals: Walk more, use public transport or car sharing where possible, Avoid flying"

Packaging was the second most popular theme (22.3%). **Reducing single use items and excessive plastic packaging** were the most common suggestions under this theme.

"Ban plastic carrier bags and non-reusable food containers."

"Avoid buying products/items with too much plastic packaging and also items that are plastic especially disposable plastic."

Recycling was another recurring theme (17.8%). **Improving recycling facilities** and **increasing recycling rates** were popular recommendations.

"Businesses need to tackle not easily recyclable packaging so the consumer has more choice not to have to get it."

Education in tackling climate change was considered important for individuals, communities and businesses (17.6%) **Increasing awareness, information and knowledge sharing** were common themes mentioned under this topic.

“Communities need education and we need honesty about what the health implications can be in the future.”

Re-use was also mentioned by some respondents (11.3%). The creation of sharing facilities for old items and community repair workshops and events were suggested.

"Set up forums for the sharing of goods/products, passing on secondhand items, reusing items."

7.2 WHAT CAN THE COUNCIL AND OTHER ORGANISATIONS DO?

A total of 1,059 individuals answered this question. Each answer contained a variety of responses, which were then categorised using 44 recurring themes.

The most common answer was that the Council should **improve the recycling and refuse options** available across the city (27.7% of respondents). These comments contained suggestions on how the Council could improve its recycling. Answers included issues around the Council not recycling Tetra Pak and other household items, with comparisons to other councils who are already doing so being made regularly.

"Introduce local recycling stations for recyclable items not collected in household waste such as hard plastic, tetra paks, paint etc "

"Advertising how to dispose of bulky waste and reducing the cost of doing so. Encouraging household composting. Advising on household systems for segregating waste."

Respondents also made recommendations, such as swapping the general refuse bin collection frequency with the recycling bin collection. This was suggested to **make people more aware of what they are disposing**, creating a general shift in attitudes and awareness towards sustainable behaviours. Similarly, 13.6% of respondents stated that the Council and other organisations have a duty to ensure the **population has access to information**, including a greater focus on sustainability in school education. 10.1% of respondents thought that the Council should lead by example.

"Run/ more widely advertise more sustainable options or community events. More green spaces and more recycling options."

"...I think that our children in all schools should be made aware and taught accordingly and educated so that they will automatically perform the new format of saving our planet which is needed."

The second most common answer was regarding transport (21.1%), with many calling for **improvements to public transport** (20.6%). Many of the respondents felt that to ensure Birmingham meets its net zero targets, it is important to make sure that public transport is at a standard that will enable a wider array of users. Respondents highlighted that the **affordability of public transport** must also improve, bus fares were highlighted as being more expensive than in London. 14.2% of respondents stated that improvements must be made to **walking and cycling infrastructure**, with a call for more pedestrian friendly initiatives, such as supermarket tokens for those who came without using a private car.

"Improve public transport - more regular, more links between areas without needing to go through town."

"Create low traffic zones with better routes for cycling, walking and using public transport."

Specific **food waste collections** were also suggested (4.9% of the responses). This strongly correlates with the general theme - that people think the Council's current refuse and recycling collection requires improvement.

7.3 WHAT CAN NATIONAL GOVERNMENT DO?

1,038 respondents commented on this question.

There were a number of interconnected themes from people's thoughts on what Government can do in terms of climate change. Respondents often discussed many different options within one response.

The most popular theme was on **financial investment** by Government to help combat climate change (29%). This included providing **financial incentives, subsidies or grants** (15%) to help individuals or businesses to be more environmentally friendly, or to invest more into research and transport infrastructure. There were also comments on more local funding, particularly to local government and businesses, to help empower them to do more at a local level.

".... Additionally, INVEST MONEY. Adapting quick enough to climate change will require major regional, local and national investment and this needs to be devolved to the appropriate levels. Make sure to invest in natural solutions (such as reforestation) as well as emission reduction efforts in order to meet targets."

Transport (29%) was another popular theme. This was centred particularly around how to encourage the use of **public transport** (18%), either through investment in better infrastructure, lower ticket costs, more reliable and high-quality services, or greater accessibility. There were also comments on how to increase electric vehicle usage (7%), either through grants, or through more charging points.

"Prioritise public transport over all other forms & ensure a regular, reliable, safe & clean services."

Another popular theme was calling on the Government to **enforce or create regulations to encourage changes** towards better practices (25%), particularly with businesses. In comparison with the incentives theme above, many respondents (12%) thought that **taxes and penalties** relating towards poor business practice would help, especially with larger companies. This included enforcing a carbon emissions tax on big businesses and industries, and taxing air and motor travel.

"Hold multi-nationals to account- Top down action is needed. There is no point of the average person getting their house in order when most emissions come from industry!"

Related to this, respondents in general wanted the Government to **take climate change more seriously** and focus on it more (21%). This included creating or enacting existing climate change legislation, making it a key focus across legislation generally, being a climate change leader on the international stage and working with other countries to improve environmental practices.

Energy efficiency was also raised by many respondents (19%), many of whom wanted the Government to support greener and more **renewable sources of energy** (17%), particularly solar panels, or encourage home improvements, such as insulation.

Other themes emerging from the comments included: reducing or banning non-recyclable packaging; raising awareness and promoting good practice across the country; a focus on protecting natural areas and green spaces, including planting trees and 're-wilding' areas; criticism of the fossil fuel industry, and of the meat & dairy industries.

8. FOCUS GROUPS

A company called One Black Bear were commissioned to understand more about people's thoughts on climate change through a serious of focus groups and telephone interviews.

8.1 OVERALL

- Residents' worries tend to be more focused on personal or local issues or national news (e.g. health, their local area, financial concerns). Climate change never spontaneously came up, it had to be raised in the discussion and many thought it referred to the weather. Some respondents made links between climate-related news stories, but few were sure about what is happening, or why. Respondents were even less able to identify how climate change is impacting them now, or how it will impact them in the future.
- Although few doubted the existence of climate change **cynicism regarding who or what is responsible was found**. There were mixed thoughts on where responsibility lies (i.e. Government/big business vs. individual responsibility) and some felt apathetic towards it, i.e. any changes they can make are pointless. There was often an undercurrent of climate change being too big a problem to comprehend and, therefore, tackle.
- Most think that the **responsibility for role modelling should come from both adults and children**. Children could prove to be the emotional driver with which to engage with residents, especially those with children/grandchildren.
- There is an **overarching sense of shame** from many of the groups for not having enough or being able to buy the best.

8.2 FOCUS GROUP AUDIENCES

The different audience groups were **broadly similar in attitudes and approaches**, however there were some key differences identified.

Senior Security are elderly people with assets who are enjoying a comfortable retirement. They are simultaneously the most engaged and the least engaged. Some had the **most knowledge, passion and informed choices** relating to climate change, however this group also had participants who were **unengaged and least likely to believe** in climate change.

Vintage Value are elderly people reliant on support to meet financial or practical needs. This group are making **good choices on the whole, but out of necessity rather than beliefs**. They were the group most likely to be influenced by those around them, in part due to their reliance on them. All felt that the Government should lead, and the general population should follow.

Family Basics are families with limited resources who have to budget to make ends meet. They are the group with **the least understanding** and for many, climate change is simply not on their radar. Some want to know more but there is **some confusion** about what climate change is and will mean to them. There is also a feeling that the **Government does not have any empathy towards them** or their lives.

Urban Cohesion are residents of settled urban communities with a strong sense of identity. This group is the most likely to be **angry and cynical about whose responsibility climate change is** and use that as a reason for not changing their behaviour. This group are those **living amongst fly tipping**, their environment made it difficult to have pride in it and want to take care of the planet more generally.

Transient Renters are single people privately renting low cost homes for the short term. This group had the **biggest concerns and were trying**. However, they were also the group who were **most defeatist in attitude** and felt that they were being expected to pick up the mess left by big corporations.

Municipal Challenge are urban renters of social housing facing an array of challenges. Similar to Vintage Value, this group are **making good choices but out of necessity**. Their financial situation dictates the choices they make; however, being told that it is good for the environment made them feel proud and happy. This is the group **most looking for help to recycle**, especially those who live in flats.

8.3 FURTHER FINDINGS

Most of the groups interviewed mentioned that it is **difficult to think about the environment when their immediate area was so run down**. There was a belief that immediate areas need to be cleaned up before people would start thinking more widely and that pride in their local area would help encourage better (and more environmentally friendly) behaviour.

The majority of people are **already recycling in some way**; however, the bin strikes did damage the belief that recycling takes place or makes a difference. All participants **try to reuse or take non-plastic bags** when shopping and the vast majority began to do this when carrier bag charges came into effect.

There was a mixture of initiatives identified that participants were doing in their homes, and these were often **driven by finances**. Generally, there was **a lack of understanding around energy usage** in the home. Smart and water meters have either been installed by the most environmentally engaged and the most financially savvy or are avoided out of a lack of understanding. Very few participants are using green energy suppliers.

When asked about purchasing goods, **very few participants made the link between consumption and climate change**, although they felt better about charity shop purchases when this link was pointed out. All participants donate to charity shops, but the language used to talk about buying from charity shops is associated with shame. There was less stigma attached to other ways of buying second-hand, such as online outlets. Those that did buy second-hand electronics did so for financial reasons, not environmental. Whilst **environmentally 'good' decisions were made when buying food, environment was rarely the driving factor** and attributed much more to finance or health reasons.

The groups interviewed were **mostly using public transport** as they generally can't afford private transport or could only afford older models. **Concerns were raised around public transport**, with the biggest issues being safety, cost, reliability and the network not being fit for purpose. Participants were understanding about the Clean Air Zone overall, however for those it is most likely to affect it was seen as frustrating and a money spinner.

8.4 COMMUNICATIONS RESPONSES

The participants were asked for their responses to types of communications regarding climate change and related issues.

It was found that **hard hitting or emotional campaigns have resonance**, are the most likely to be noticed, but need to be easily understood to really work. **Small changes** were felt to be manageable, but they need to be told what to do and what impact it will make.

8.5 RECOMMENDATIONS

The following recommendations were identified:

- **Celebrate the less affluent groups in society who are already contributing positively.** One Black Bear found that these groups have a sense of residual shame of what they aren't doing or can't do. Second-hand should be de-stigmatised and should be a point of pride by celebrating those already doing it.
- Encourage cohesion and **sharing of ideas between communities**, not just from positions of authority.
- **Educate and inform across all touchpoints** and tailor the messaging dependent on the medium or placement, e.g. highlight the health benefits of walking as well as environmental benefits in healthcare locations.
- **Small enforcements work**, e.g. the carrier bag charge which has effectively changed behaviours and raised awareness.
- **Cleaning up the streets and local areas** is essential to engage residents and encourage changes in behaviour. Make recycling easier for residents, with bigger bins and more collections.
- Communications need to **focus on what's in it for the resident**, followed by the additional environmental benefit. Explain the benefits that matter to residents, e.g. financial savings by turning items off or making some dietary changes.
- Everything is interconnected, and often **positive environmental changes will benefit the individual** as much as the collective Birmingham.

APPENDIX 1: BE HEARD SURVEY DEMOGRAPHICS

Figure 12: Age Group

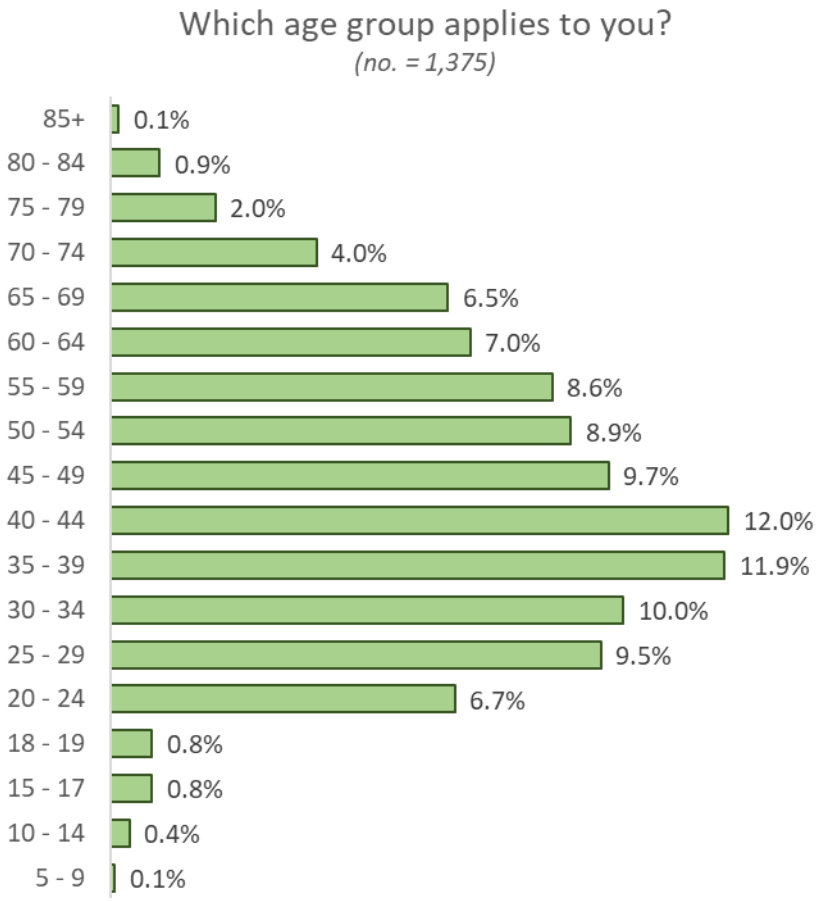


Table 1: Sexual Orientation

What is your Sexual Orientation?	% Total Respondents
Bisexual	4%
Gay or Lesbian	4%
Heterosexual or Straight	74%
Other	1%
Prefer not to say	16%
Total Respondents	100%

No. of respondents = 1,374

Table 2: Health Conditions

Do you have any physical or mental health conditions or illnesses lasting or expected to last for 12 months or more?	% Total Respondents
No	73%
Yes	17%
Prefer not to say	10%
Total Respondents	100%

No. of respondents = 1,373

Table 3: Detail of condition

Disability - conditions (Tick all that apply)	% Total Respondents
Vision (e.g. blindness or partial sight)	5%
Hearing (e.g. deafness or partial hearing)	15%
Mobility (e.g. walking short distances or climbing stairs)	22%
Dexterity (e.g. lifting and carrying and carrying objects, using a keyboard)	13%
Learning or understanding or concentrating	6%
Memory	8%
Mental Health	28%
Stamina or breathing or fatigue	21%
Socially or behaviourally (e.g. associated with autism, attention deficit disorder or Asperger's syndrome)	7%
Other (please specify)	11%

Based on 343 respondents who put an answer for at least one condition

Note: percentages do not add up to 100% as respondents may have selected multiple conditions

Table 4: Ethnicity

Ethnicity	% of Total Respondents
Asian / Asian British	5%
Black / African / Caribbean / Black British	1%
Mixed / multiple ethnic groups	3%
Other Ethnic group	1%
White	92%

No. of respondents = 1,204

Note: percentages do not add up to 100% as respondents may have selected multiple ethnicities

Table 5: Gender

Gender	% of Total Respondents
Female	57%
Male	35%
Prefer not to say	8%
Total Respondents	100%

No. of respondents = 1,313

Table 6: Religion or belief

What is your religion or belief?	% of Total Respondents
No Religion	53%
Christian (including church of England, Catholic, Protestant, and all other Christian denominators)	30%
Buddhists	1%
Hindu	1%
Jewish	0%
Muslim	3%
Sikh	1%
Any other religion (please specify below)	2%
Prefer not to say	10%
Grand Total	100%

No. of respondents = 1,329

The most popular demographic categories for respondents:

- Age: In their 30s and 40s (43.6%)
- Sexuality: Heterosexual or straight (74%)
- Long-term health conditions: None (73%)
- Ethnicity: White (92%)
- Gender: Female (57%)
- Religion: No religion (53%)

Emily Prestwood University of Birmingham

Executive Summary

This report summarises the findings from two sandpits/workshops on housing and planning held in March 2020 for the R20 Task Force. The sandpits brought experts together to explore ideas and solutions for how to retrofit and decarbonise the city's housing stock and planning for net zero-carbon built environment.

Discussions are wide-ranging, exploring different investment, regulation and legislation solutions and interventions needed to drive system change. The following areas are identified as key areas to focus further discussion, action and next steps:

- **Action planning and further forums** to bring experts together to explore ideas and solutions and link milestones and actions with the Anthesis baseline report and quantified carbon emission reductions.
- **Developing new business models**, financing solutions and public/private partnerships and collaborations to retrofit and decarbonise the city's housing, with longer term investment and payback models.
- **Differential strategy and prioritisation for the city** identifying interventions, business models and partnerships for different neighbourhoods that will create supply chains and facilitate delivery of R20 as soon as possible.
- **Develop systems thinking** and interdisciplinary working to integrate knowledge, policy and strategy development at different scales (local, regional and national) and across sectors and departments.
- **Evidence based strategy development** to support a more ambitious narrative and action on climate change with extra resource and capacity in planning to interpret evidence, regulation and policy.
- **Communicating an ambitious and integrated narrative** and engagement across the city to bring people along with the transition and the scale of change needed to retrofit the city's housing and built environment.

R20 Task Force

Summary of Planning and Housing Sandpits from a System Change Perspective

Introduction

In March 2020, the first two sandpit for the Route to Zero (R20) Task Force were held bringing together housing and community, and planning and built environment experts to provide ideas and evidence to feed into the City's strategic thinking on decarbonisation. The housing and planning workshops were led by Jane Trethewey, Assistant Director, Housing Development and Maria Dunn, Head of Development Policy, Planning and Development at Birmingham City Council (BCC) respectively. Alongside the baseline scenarios produced by Anthesis, the outputs of these sandpits and future ones will be used to identify potential carbon reduction interventions for the Birmingham R20 Action Plan.

This report provides an interim analysis of the first two sandpits. A fuller analysis will be conducted once all sandpits have been completed and will feed into the R20 Task Force final report. This summary identifies the common or occasionally conflicting themes from sandpit discussions and the potential solutions and interventions needed to drive the systemic change necessary for a just transition to net zero by 2030 (or as soon as possible thereafter). Further details of both sandpits are provided in the two proformas in Appendix A. and the sandpit briefing notes in Appendix B.

What is needed to drive system change?

The proforma to capture sandpit discussion was based on the CIA Framework from the R20 Task Force Terms of Reference and intended to identify the role of BCC and other stakeholders in owning the system change required to drive action at different scales. The broad categories of system change considered were investment, regulation, legislation and intervention.

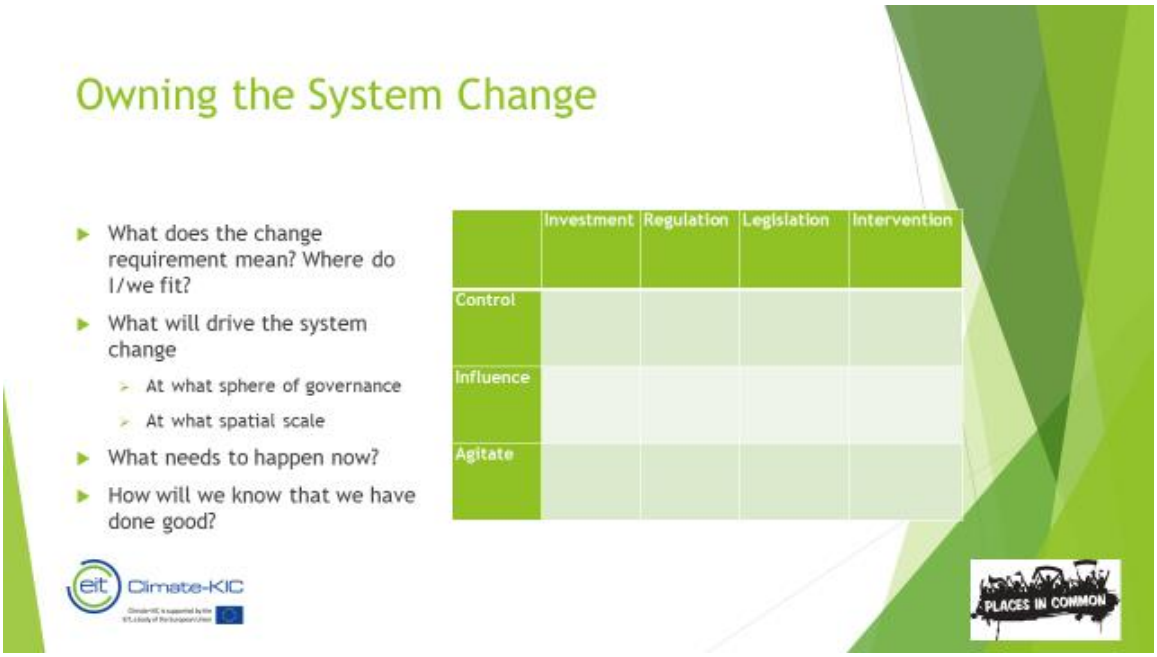


Figure 1: R20 Task Force CIA Framework

Investment

There was broad consensus at the housing sandpit that the technical solutions exist to retrofit Birmingham's housing stock but that the financial and supply chain barriers to doing so are significant (the estimated cost for Birmingham is £11bn). With it being unlikely that full funding will come from national government, new, innovative business models are needed to fund building works and create the supply chains needed. Long term partnerships between the public and private sector are likely to be essential to developing business models where retrofitting is funded by business and industry upfront with longer term repayment.

For new developments, financially viability is the overriding factor in what gets built and where. The condition and location of sites effects the cost to develop land and the market value, so extra costs to the developer to build sustainable/zero-carbon or affordable homes makes some parts of the city less viable. The emphasis on the lowest cost solution, and short term financial viability and economic growth were identified as barriers to system change in both sandpits. If whole life cycle cost, wider economic impact (e.g. health impact and cost to the NHS of poor housing or built environment) and legacy of technologies, retrofits and new developments were main criteria for assessing viability and comparing applications, it was felt that zero-carbon and green solutions would come out on top most of the time.

For this change to happen, a combination of market and policy solutions is needed. There needs to be demand from homebuyers in Birmingham for zero-carbon homes in sustainable, green developments. Developers will be incentivised to finance projects that go above the minimum standards if it's clear that there will be the demand for them. In terms of policy, both locally and nationally there would need to be a revision of regulations and planning frameworks to focus on whole life-cycle cost and carbon impact, with new evidence-based methodologies for assessing viability and compliance.

To facilitate the change to longer term investment in zero-carbon there is a need for the local and regional authority to set and lead the net-zero agenda for planning and development. Long term, strategic direction from the council is essential for creating public/private partnerships and bringing in investment from the private sector. The private sector needs to see a clear commitment to particular policy routes and plans to enable it to invest.

One way for the Council to set the agenda is to explore its role as the owner of significant assets in the City and how to leverage land purchasing and procurement powers to mandate higher local standards or carbon emission reduction clauses. Or to build new partnerships with developers and investors who will take a longer term payback if the risk is underwritten.

Differential and flexible approaches to planning and a retrofitting strategy were discussed in both sandpits and considered necessary for a number of reasons (though challenging to implement). Viability differences and the range of housing and tenure types across the city will require different retrofitting solutions and approaches, and different business models to deliver them. In addition, investment and funding is likely to be incremental and supply chains need to be built from scratch. A differential approach to developing business models can prioritise areas of the city where there is the greatest need (e.g. areas with high levels of fuel poverty) and where there will be the biggest carbon impact.

Regulation

A key theme from both sandpits was the Council's role in going above and beyond the standards set out in national regulations, in particular, Part L of the Building Regulations – Conservation of Fuel and Power. The planning sandpit discussed the Birmingham Development Plan (BDP) 2031 (adopted in 2017) and the need for a revision and update to address the Climate Emergency that should be ambitious and evidence based in setting out where to go beyond national regulation. The lack of resource, capacity and technical knowledge in the local planning team to understand energy statements, building regulations and SAP calculations, and assess different technologies was identified as a barrier to being more ambitious in progressing planning applications. To address this extra resource, training and access to technical information, guidance and materials aimed at lay people would help.

The government recently invited responses for the first round of consultation on The Future Homes Standard to be introduced in 2025, which proposes changes to the energy efficiency standards in Part L and Part 6 of the building regulations and other related sections. There was also an option in the consultation to increase energy efficiency standards in 2020 as a stepping stone to 2025. Attendees at the housing sandpit had responded to the consultation. There was support for introducing the new standard sooner than 2025 and to be more ambitious.

Increased energy efficiency standards for new and retrofitted homes were welcomed by both groups of experts. They would undoubtedly drive system change by underpinning market growth and supply chain creation for low-carbon heating technologies and building fabric improvements. Regulatory change also provides a level playing field for developers, as they must all adapt at the same time so do not lose out to competitors in terms of viability.

However, regulatory change needs to be backed up by increased monitoring of actual building performance and compliance with design standards. Experts at both sandpits highlighted the performance gap between design stage performance, built performance in terms of energy efficiency and sustainability of buildings and infrastructure. A target-based programme of monitoring of new build and retrofit schemes would be an essential part of delivering a R20 action plan for housing to ensure carbon reduction targets were achieved.

Legislation

The planning sandpit experts discussed a revised Birmingham Development Plan as the city's R20 delivery plan. The BDP sets out a spatial vision and strategy for the sustainable growth of Birmingham for the period 2011 to 2031, but needs revising and updating to deliver the transition to net zero carbon in the remaining period. The declaration of a Climate Emergency was considered legal justification, if challenged, for amending the plan earlier than expected. However there is normally a significant time lag to revise a strategic plan (approximately 3 years), so the Council would have to be ambitious in setting a timeline for revision and adoption. A revised plan could be more robust by, for example, requiring change of use of assets to contribute to net zero.

At the housing sandpit there was agreement that housing needs to be seen as essential infrastructure and hence retrofitting the countries building stock should be much higher priority for local and national policy and funding. National policy needs to be more consistent in its funding strategy and what is rolled out via national schemes so that local strategies don't have to be abruptly changed or abandoned when schemes change. The National Planning Policy Framework (NPPF) was also considered to be inconsistent from a Birmingham perspective and not robust enough to support local planning authorities to

deliver net-zero carbon development. It enables developers to appeal against local decisions on too many occasions due to the emphasis on viability.

From both sandpits there was a sense that there needs to be more of a systems approach to integrating national legislation and policy in local strategy and delivery plans across policy areas such as energy, buildings, planning, transport, and green and blue infrastructure. As an example, a 'fabric first' approach to retrofitting needs to align with a national strategy for decarbonising heating, and subsequent regional plan for deploying different technologies such as heat pumps and heat networks. In terms of green and blue infrastructure, there is a need for evidence-based national legislation and guidance that demonstrates the wider and longer term environmental, social and economic benefits, and sets out how to integrate with existing transport and energy systems.

Intervention

The biggest challenge in terms of retrofitting will be scaling-up interventions and exemplar projects that go beyond minimum standards and regulations to deliver low and zero carbon homes across the city in the next ten years. There was the suggestion that new governance structures at both city and regional level are needed to deliver this scale of change, bring in funding and build supply chains. In the near term, an ambitious attitude and culture is needed within the Council to move forward at speed on revising the Birmingham Development Plan and setting a strategy. Learning from and working in collaboration with other cities with perhaps more progressive and/or radical attitudes towards the climate change agenda was proposed as a way to change attitudes here through sharing of knowledge and best-practice.

A differential approach to decarbonising housing across the city will require analysis and engagement to prioritise areas for interventions and identify the most suitable technologies and retrofit programme to meet the local challenge and context. As an example, the top-down smart homes model where the private sector retrofits homes in exchange for supplying them with energy services and managing energy demand at an aggregate level may be suitable for parts of the city, but perhaps not all. For some neighbourhoods a more bottom-up community/social housing led scheme may be better received where people want to engage with climate change and be part of local planning. A retrofit programme should also consider whether there are neighbourhoods where optimising existing solutions could have a lower carbon footprint if the whole life-time embedded carbon of materials and technologies is considered. The private rented sector was highlighted as requiring an immediate focus in terms of intervention, investment, regulation and legislation due to the proportion of poor quality housing that is in this sector.

There was an argument put forward that the city should look to move away from the economic/clean/low-carbon growth paradigm and language for a just transition, at least in terms of how it engages with communities (as this would be challenging from a policy and funding perspective). There are many synergies between housing, energy, planning, healthy lives and the wider social and economic benefits of a net-zero transition such as new jobs and training that should be communicated to the city and should also inform the city's action plan. There is a piece of work that could be done to bring together and unlock data that shows these wider benefits (e.g. NHS data, natural capital accounting) that can underpin action planning and delivery.

In terms of local (and national) governance there is need for break down the siloes that exist by integrating R20 across government departments. A more interdisciplinary approach would help to break down these siloes identifying synergies and opportunities and avoiding unintended consequences. For example, integrating planning for climate resilience and adaptation with climate change mitigation to reduce urban heat island effects and reduce the likelihood of overheating in homes in the future.

In summary, the City needs to build a narrative around its planning strategy and retrofit programme that sets out a longer term vision that everyone can buy into including local communities, the council and its staff, the regional authority and government departments such as BEIS and MHCLG. The narrative should also engage with developers, investors, business and industry to build partnerships to rapidly scale up delivery across the whole city.

Control, influence or agitate? Where do the council and other stakeholders fit in?

At what sphere of governance and at what spatial scale?

Both sandpits recognised that the council faces significant resource and capacity issues that impacts its ability to integrate and plan for the R20 transition. Lobbying/agitating national government for more resource to increase capacity and expertise in local planning teams is something the WMCA could do on behalf of all West Midlands LAs. However, the current circumstances make the funding landscape for LAs even more challenging than usual so other solutions are needed to bridge this resource and capacity gap. Increased collaboration and partnership with stakeholders across the city could help – the sandpits identified a lot of enthusiasm and good will in the City from a variety of stakeholders to support the council on this journey.

National government, policy and regulations are in many ways seen as barriers to setting and delivering ambitious local policy and strategy. Birmingham can influence and agitate either itself or through WMCA for changes to regulation and legislation and ensure it is feeding in to consultations. However, it has limited control. Devolution of greater powers to the region would obviously enable a greater degree of local control to raise money and enforce standards. In the meantime, the regional authority could build its role in negotiating with national government, brokering finance and integrating planning strategies across the region to present a coherent and consistent regional narrative that leverages funding and greater influence.

Action Planning

The following is a starting list of recommended actions/milestones from the two sandpits that require further discussion:

- Set out timetable for revision/update of Birmingham Development Plan with time and resource requirements
- Review capital asset strategy
- Map natural capital across Birmingham and identify where to reallocate land.
- Birmingham Municipal Housing Trust to review their building spec
- Develop strategic plan for retrofitting Birmingham housing stock with prioritisation/phased approach for different neighbourhoods/house types, including
    - Different retrofit solutions
    - Different business models
    - Information for those who want to retrofit and can afford to pay.
- Set targets for level of retrofitting required by when for different house types/neighbourhoods e.g. in x years it needs to have double glazing, in x years it needs to have insulation etc.
- Set out the role of the Council and partners in facilitating the different stages

Communications and Engagement

A common thread in both sandpits was how Birmingham can be progressive in its climate planning and delivery, and how it can communicate this to the city. A question asked was whether Birmingham advertise its strengths enough, particularly its community orientated attitude and the great work of community organisations. Drawing together community activity across the city would be a valuable activity. The Communication and Engagement Subgroup are already looking at creating a stakeholder map. A better understanding of community organisations across the city will form part of this. Further thought is needed as to how this network could be better supported, resourced and engaged in R20 conversations and action planning.

Another reason for Birmingham to communicate it's progressiveness on climate change is to drive consumer demand in the city for sustainable, zero-carbon homes, technologies and retrofit projects. As identified, some of the transition will need to be funded by consumers so those who can afford to pay should be encouraged to do so. In addition, the private sector will be more incentivised to build sustainably if they see a market advantage in doing so. The narrative that Birmingham's develops should communicate the wider benefits of action to address the climate emergency, focussing on health (e.g. reduced air pollution, warmer homes), social (safer and cleaner environment) and economic (new jobs in the low-carbon sector) factors. It should ask and answer the question of how people want to live their lives in the future.

Planning needs to happen at a range of scales through a differential approach with different levels of engagement with different stakeholders. At the community and neighbourhood level, there are likely to be areas where bottom-up engagement with planning would be welcome and empowering to communities but others where this is less important. At the housing level, there are questions about the level of engagement people want to have with energy. The smart homes model generally assumes people want minimal engagement with their heating systems or electrical appliances. However, a number of housing experts identified the need for more training and engagement with householders on how to use and maintain new technologies such as heat pumps for them to be successfully integrated in to home energy systems. A programme of engagement on housing retrofit will need to consider these a range of communication strategies.

Further expert engagement events were suggested, in particular:

- A housing event with non-housing contributors to explore policy interventions, repeated annually to track progress on action planning and milestones (Low Carbon Homes have facilitated this type of event in Manchester.
- A further sandpit to focus on jobs and the regional economy

Conclusions and next steps:

Action planning: The planning and housing sandpits were useful forums to bring experts together and explore ideas and solutions but there was limited time for action planning and milestone setting. Further work is needed to set a timetable and link with the Anthesis baseline report and carbon emission reductions.

- What follow-on engagement can be organised with experts/stakeholders in the current situation to set actions and milestones for housing and planning?

New business models, financing solutions and public/private partnerships will be needed to retrofit and decarbonise the city's housing, as the full cost to decarbonise is unlikely to come from national government.

- What are the partnerships/collaborations we need to start developing (or renewing) now, locally and nationally, to support this work?
- How do we develop longer-term partnerships with a focus on longer term investment and payback rather than lowest cost solution?

A differential strategy and approach is required that prioritises areas where there will be the biggest impact, identifies different interventions, business models and partnerships for different neighbourhoods, and builds the supply chains to scale-up across the city.

- Who do we need to bring together to develop differential (and deliverable) strategies for different parts of the city and where do we focus first?

NB: The delay to the EBNS sandpit and changed approach provides an opportunity to develop thinking on this.

Systems thinking and interdisciplinary working is needed to integrate knowledge, policy and interventions at different scales and across sectors and departments.

- Should the R20 Task Force organise some internal and external workshops focussed on developing systems and interdisciplinary thinking?
- What is the role of the WMCA in breaking down siloes at the regional level and bridging the gap with national government and policy?

Evidence based strategy development will support development and delivery of a more ambitious narrative on climate change but needs resource and capacity in planning to interpret evidence, regulation, policy, and the life-cycle, energy and carbon (and wider) legacy impacts of technologies and solutions. Extra resource may not be forthcoming in the current situation but both sandpits highlighted a lot of good will towards supporting BCC.

- How can this good will and expertise from across the city be harnessed over the coming months (and years) to support evidence-based planning and delivery of the R20?

Communicating an ambitious and integrated narrative and engagement across the city is essential to bring people along with the transition and the scale of change needed to retrofit the city's housing and built environment.

- How can Birmingham develop a more ambitious or progressive attitude to climate change action?
- How and where do we start engaging communities with planning and the change needed to retrofit the city's building stock and build the demand for low and zero-carbon homes?

Appendix A: Birmingham R20 Sandpit Proformas

Topic:	**Housing and Retrofitting**	
Date & time:	11th March 2020	
Location:	University of Birmingham	
Conveners:	Jane Tretheway, Birmingham City Council	
Attendees:	Name	Organisation
	Naomi Todd	Birmingham City Council
	Serena Bacuzzi	Midlands Energy Hub
	Adam Coates	Global Partnerships
	Julian Pritchard	Birmingham City Council
	Carl Taylor	Accord Housing Association
	Cyril Bezant	Housing Association
	Harriet Martin	Footsteps
	Arthur Lee	Kier Living
	Clive Jessop	Jessop
	Graham Lock	Low Carbon Homes
	Melanie Biddle	Engie
	Simon Gates	Lovell
	Cheryl Hiles	Energy Capital
	Robert Stuart	University of Wolverhampton
	Rosemary Coyle	Connexus
	Roger Harmer	Birmingham City Council
	Tony Hopkin	Midlands Heart
	Greg Lakin	Bournville Village Trust
	John Christophers	Associated Architects
	Emily Prestwood	University of Birmingham

System Change

	Investment
What is needed?	• The technical challenge is solvable but the financial barrier is significant. The investment needed to retrofit Birmingham's homes is estimated at around 11 billion over 10 years. The council won't have this budget - it's unlikely it will all come from national government • Need to see commitment to the agenda and a clear strategy from local government, particularly in local planning, so there is certainty for long term investment in projects and infrastructure from the private sector. • Public and private partnership approaches are needed that can commission and work up bigger projects with longer term procurement and greater leverage to get the right solution. • A plan is required that prioritises retrofitting of different house types across the city – government/BEIS want to see business models that show the cost and the technologies needed for different parts of the city so we can access funding locally. • Developers have a lot of problems with utilities and need guarantee of cost of service for bigger projects, including heat networks • We need to start capacity building regionally that shows how we will finance the journey forward.
What will drive system change? • At what sphere of governance • At what spatial scale	• Investment can be driven by creating the appetite and demand for low and zero carbon homes from home buyers. Currently this doesn't exist so prices can't be raised to pay for decarbonisation. Developers need to financially benefit (or avoid penalties) from efficiency improvements. • Changing to a slow-burn economic model that looks at bringing in investment/funding through public/private partnerships that can be paid back over a longer time period.

	• Considering a whole life carbon and cash cost system that includes embedded carbon will favour retrofit over new build/passivhaus etc. • Regional support from the LEP for the low-carbon building sector can help drive the transition. • The WMCA can act as a broker around financing accessing funding opportunities and budgets to retrofit homes and build new affordable homes. • The Smart Cities agenda means that housing energy data has real value and there is a market for information on how energy and carbon is used within a property. Funding can be leveraged for retrofitting from private sector automation of home energy use. • Investment models for retrofitting social housing have catalysed wider regeneration and can be drivers of retrofitting in the private sector.		
Where do we fit in?	Control	Influence	Agitate

	Regulation		
What is needed?	• Revision of Building Regs Part L to outline standards for zero-carbon buildings and a new zero carbon standard/Future Homes Standard. • A fabric first approach continues to be needed that considers interdependencies between insulation and ventilation. • Better monitoring of the performance gap between designed and actual building performance to ensure developers compliance to standards. • Need to look at metering and regulations around district heating to level the playing field • Need to avoid unintended consequences from adhering to parts of building regs e.g. overheating and poor air quality caused by increased insulation. • Need to address retrofitting of private rented sector where there is a high proportion of poor quality homes and antisocial behaviour but currently it's not regulated.		
What will drive system change? • At what sphere of governance • At what spatial scale	• Regulatory changes will drive system change • Quantifiable targets for monitoring performance in new builds can ensure they meet design standard and will drive change whilst saving money in the longer term. • A better understanding of how people use buildings should inform regulations and standards to help drive a right first time approach to retrofitting.		
Where do we fit in?	Control	Influence	Agitate

	Legislation
What is needed?	• National and local planning policy needs to move away from encouraging lowest cost approach at all time to recognising legacy of continuing to build non-zero carbon homes. • National policy needs consistency of funding and to ensure that whatever is rolled out is consistent. • Nationally and regionally. Housing needs to be seen as essential infrastructure. • Local planning for smart housing where there are a lot of tech and investment opportunities.
What will drive system change?	• Reducing VAT rate on efficiency improvements/retrofit

• At what sphere of governance • At what spatial scale	• A public sector role in setting and ensuring standards that go beyond Part L in planning policy would drive change if regulatory approaches don't. • Council should be more accepting of planning applications where projects improve overall performance of the building.		
Where do we fit in? Can we….?	Control	Influence	Agitate

	Intervention		
What is needed?	• Need to go beyond Part L and regulations at scale • Supply chain experts are needed as part of housing retrofit action planning. • Need to understand how houses are used on a daily basis and how new technologies such as ASHPs, batteries, PV (required to replace GCH) will be used – if tenants can't work it then it's the wrong technology for the house. • Need processes and check lists to train householders to use and maintain technologies when they are installed and when houses transfer ownership/tenants. • Need to design a retrofit programme that meets the challenges of what's going on locally • Optimising existing legacy systems to prolong their life and reduce carbon footprint. E.g. most boilers massively over specified.		
What will drive system change? • At what sphere of governance • At what spatial scale	• Working in partnership with stakeholders and councils in different neighbourhoods across the city • Connecting up different local government programmes and infrastructure projects – e.g. housing, energy and waste to have an integrated approach. • Continued pressure from groups like Extinction Rebellion to raise profile of zero-carbon agenda and need for interventions. • Aligning our supply chains to create the critical mass to get the quality of retrofit right. • The current system can't deliver the transition, therefore new governance structures at WMCA and LA level will drive system change. • Identifying the synergies between housing, energy and healthy lives, including unlocking data sharing with the NHS to incorporate different costs, impacts (e.g. benefits of natural capital) and funding in to action plans and deliver the changes needed.		
Where do we fit in?	Control	Influence	Agitate

	Action planning

What needs to happen up to 2030 and when? (Agreed milestones)	• Develop strategic plan for retrofitting Birmingham housing stock with prioritisation/phased approach for different neighbourhoods/house types, including
	  ○ Different retrofit solutions
	  ○ Different business models
	  ○ Information for those who want to retrofit and can afford to pay.
	• Set targets for level of retrofitting required by when for different house types/neighbourhoods e.g. In x years it needs to have double glazing, in x years it needs to have insulation etc.
	• Set out the role of the Council and partners in facilitating the different stages.

What actions need to be taken and what CO_2 emission reductions will they deliver?	
How will we monitor and measure progress?	

	Best practice
Links to previous work/publications/reports	• Energiesprung finance model. • Example scheme for Bristol CC: a district heat pump using biomass - future proofing. Chose to take a lower receipt to put infrastructure in from day 1. • Warwickshire County Council approach – referendum to raise council tax to pay for decarbonisation.

	Communication and Engagement
Who do we need to engage with and when?	• Need to engage with residents and get their feedback. • Need to change hearts and minds and make climate justice issues more important. Low/zero carbon needs to become aspirational and saleable to people (e.g. Zetland Road in Manchester). Looks great. Doing at scale • Need to identify the right locations in the city where the LA could take this approach. • Perceptions around district heating so people feel confident in system. • How to sell it to tenants and homebuyers so that they are getting the message that energy efficiency is important • Need to have a programme of discussions to look at how Birmingham compares nationally and determine the hot issues that might stop Birmingham being as progressive in terms of retrofit. This programme of events would also examine: What policy interventions might be conceivable? What could those bigger asks be from government. It could be an annual event to keep on track with action planning and milestones. A key theme: getting more and more non housing contributors to housing workshops to join the dots between sectors. (GL/Low Carbon Homes have facilitated in Manchester).
How will we engage with different stakeholders?	

Topic:	Planning	
Date & time:	9.30 -12.30, Friday 13th March 2020	
Location:	UG10, Murray Learning Centre, UoB	
Conveners:	Maria Dunn, Birmingham City Council	
Attendees:	**Name:** Simon Needle Ellie Crook Uyen Phan-Han Melanie Biddle Sandy Taylor Cllr Julien Pritchard Nina Pindham Austin Barber Chris Martin Craig Jordan Mike Grace Emily Prestwood Claudia Carter Emma Ferranti **Apologies:** Maggie Fennell	**Organisation:** Ecology, BCC Planning policy, BCC Planning policy, BCC Engie Urban Energy Chair of WM RTPI, Trustee Black Country Wildlife Trust Green Party Number 5 Chambers Urban/Regional Planning, UOB Footsteps Lichfield District Council/GBSLEP Subgroup Birmingham City University University of Birmingham Birmingham City University University of Birmingham Boningale Greensky

System Change

	Investment
What is needed?	• Developments need to be financially viable. The condition and location of the site effects the cost to develop and the market value. Extra costs to the developer to build sustainable/zero-carbon or affordable homes makes some sites unviable, so there needs to be flexibility and a differential approach to planning in different areas of the city • New funding models are needed for ongoing maintenance cost of green infrastructure such as SUDS • More funding and resource is needed for planning departments at local and regional level so they are able to plan and negotiate what future places should look like. • There is a need to map BCC assets and integrate net-zero in plans for how those assets should be utilised or new assets acquired to assist and help clarify planning decisions.

What will drive system change?
• At what sphere of governance
• At what spatial scale
	• A clear long term vision and strategy in a revised Birmingham Development Plan will demonstrate to developers that infrastructure projects (e.g. heat networks) will be deliverable and commercially viable, driving investment.
	• Additional resource and investment in training for the council planning team will help drive:
	  ○ Better engagement with developers (who have more resource and capacity) to negotiate on net-zero in new developments and as well as other S106 decisions
	  ○ Better understanding of when and where developments need to be fully policy compliant and where the rules can be relaxed
	• Lobbying for regional powers to raise taxes locally, utilise funding from OFGEM locally, or to put a reward on carbon benefits would enable the local planning to push back against developers and provide autonomy in how money is spent locally.

	• Linking investment to the City's zero-carbon ambitions and strategy could drive better development (though could also see volume house builders walk away if this makes it less financially viable to build in certain areas). • An increased LA role in land procurement and better understanding of current assets would enable them to mandate standards or write clauses in to the property strategy to use certain technologies • Lobbying national government for a redefinition of viability to include wider health, social, environmental and climate change costs of developments could drive better built environment development		
Where do we fit in?	Control	Influence	Agitate

	Regulation		

What is needed?	• Additional resource, capacity and technical knowledge within the planning department is needed to be able to assess energy applications and understand:
	  ○ Regs in particular Part L of Building Regs and SAP calculations
	  ○ Understand the long term carbon impact and legacy of different products and technologies in different decarbonisation scenarios e.g. CHP, electrification of heating
	• Increased standards in national regulation are needed but aligned to planning framework.
	• Need to address minimum space standards to enable changing attitudes to density linked to current design of urban housing.
	• The Future Homes Standard needs to be implemented more quickly and be more ambitious.
	• Better enforcement and monitoring to ensure developments are built to standard is needed.		

What will drive system change? • At what sphere of governance • At what spatial scale	• A change in attitude and culture in local authorities to be more accepting of climate change and the need for action could drive a change in how planning application which address net zero are progressed and prioritised. • Lobbying for greater resource and local powers in planning could drive the Planning Authority and WMCA to be more ambitious and go beyond national regulations and minimum standards. • Though financial viability will still be important, revising regulations helps provide a level playing field for developers. They will adapt to the new standards driving zero-carbon housing developments. • Increasing technical and carbon/energy impact knowledge and expertise in the LA planning department would enable greater discernment in assessing the benefits of different and new approaches against regulations, particularly for green and blue infrastructure such as green roofs and SUDS.		
Where do we fit in?	Control	Influence	Agitate

	Legislation
What is needed?	• Birmingham Development Plan (BDP) needs updating and revising to integrate an evidence based net-zero ambition, to be worded in a way that enforces rather than just encourages appropriate actions, and establishes how Birmingham can go above and beyond national policy. The Climate Emergency can be used as justification for revising the plan.

	• The National Planning Policy Framework (NPPF) is top down and not robust enough and changes frequently. It is easy for a developer to appeal against local decisions. A clearer framework is needed from a Birmingham point of view. • Local and regional plans need to align with energy policy and strategies e.g. District energy scheme there is no been a planning mandate to connect schemes or for future developments to feed into it. • Evidence based national policy and standards on green infrastructure that recognises longer terms environmental, social and economic benefits.		
What will drive system change? • At what sphere of governance • At what spatial scale	• Better evidence-based guidance and policy at national and local level on the health, social, environmental, economic benefits of green/net-zero infrastructure will drive change in attitudes, culture and planning strategy. • A revised, evidence based BDP can lead the way on net zero in the City, and increase the local authorities' abilities to go beyond the National Planning Policy Framework. The plan should include a better framework for climate adaption, green infrastructure and implementation. • National government legislating to make the Future Homes Standard mandatory would support Birmingham being more ambitious with local planning strategy. • NPPF requires a review every 5 years. The council should keep a close eye on the NPPF and submit appropriate responses when requested so it reflects the needs of Birmingham. • Review permitted development rights and require change of use to contribute to zero-carbon e.g. subject to BREEAM. • Lobby national government lobby for clearer strategy on heat decarbonisation and devolution so can set clear strategy local energy systems and integrate in Development Plan. .		
Where do we fit in? Can we….?	Control	Influence	Agitate

	Intervention
What is needed?	• There needs to be better integration with planning across different council departments to bring different departments and strategies together, e.g. retrofitting housing, transport, and waste. • A strategic lead for natural capital is needed as currently this area is multidisciplinary and cross-boundary/cross-teams with different strands of work and more resourcing. • Spatial planning at regional level needs to integrate R20 action planning in Birmingham and have regional alignment with other LA targets. • Conversations about density are needed. Birmingham is in line with other core cities but not European Cities and is still quite low-density. • Need to benchmark ourselves against and connect with other cities to identify best practice, learning and opportunities • Need to create climate resilient spaces to address overheating, urban heat island affects • Need to improve green transport infrastructure to reduce unnecessary car journeys. Birmingham is cycle-able and walkable, but the infrastructure is not well embedded.
What will drive system change?	• Integrating themes in the council, perhaps establishing a R20 department, that planning (and planning policy) can lead on could

<table>
<tr><td>• At what sphere of governance
• At what spatial scale</td><td colspan="3">drive delivery of the R20 action plan and avoid unintended consequences from siloed activities - e.g.
○ Integrating climate adaptation with mitigation to reduce urban heat island in Birmingham and overheating in future homes. Need for nature based cooling solutions.
○ Considering air pollution levels of areas considered for development i.e. site under Spaghetti Junction.
○ Better and innovative use and development of natural capital.
• Changing the attitude in the city to increased urban and strategic density would drive change in terms of the type of development that could be built.
• The Council should look to collaborate with other UK, European and International cities who are leading the way in terms of zero carbon and have a more positive, ambitious or radical attitude e.g. Toronto, Canada to drive a local change of attitude.
• Regional alignment and collaboration on planning through for a regional economy through the WMCA (e.g. WMCA design principles) will mean best practice is exchanged and synergies, opportunities and conflicts between different LA climate change strategies are identified, driving system change at the local level.
• Moving away from the economic/low-carbon growth paradigm and looking at how to harness and empower Birmingham's community orientated society through community led developments, planning and place-making to drive a just, inclusive transition.
• Building a body of evidence linked to Anthesis baseline and scenario report to inform a revised Birmingham Development Plan and help a city-wide/cross department implementation of R20 Action Plan to:
• Provide evidence that plans are deliverable and justify local planning approaches that should be
• Bring developers on board with local plan to ensure they are part of it rather than fighting against it later – work in partnership with the private sector with new or smaller developers.
• Birmingham to use its land for exemplar projects, working in partnership with industry/business e.g. Tyseley Energy Park, Smithfield.</td></tr>
<tr><td>Where do we fit in?</td><td>Control</td><td>Influence</td><td>Agitate</td></tr>
</table>

	Action planning
What needs to happen up to 2030 and when? (Agreed milestones)	• Set out timetable for revision/update of Birmingham Development Plan with time and resource requirements • Review capital asset strategy • Map natural capital across Birmingham and identify where to reallocate land. • Birmingham Municipal Housing Trust to review their building spec • Spatial planning clarify our spatial dimensions as a city.
What actions need to be taken and what CO_2 emission reductions will they deliver?	. -

How will we monitor and measure progress?	

	Best practice
Links to previous work/publications/reports	• **Witton energy hub**- https://wittonlodge.org.uk/our-projects/environmental-projects/our-environmental-projects/ • **Future Parks Accelerator Project as emerging example** - https://www.heritagefund.org.uk/our-work/landscapes-parks-nature/future-parks • **Ickneild Port Loop as emerging example** – good example of high density housing - https://www.urbansplash.co.uk/regeneration/projects/port-loop • **Endless village theory** - planning in for less of a need to travel - https://generalpublic.org.uk/project/the-endless-village/the-endless-village-information/ • **Green Roof Organisation (GRO) UK guidelines** -The next update of UK guidelines for green roofing is due to be published in June this year- https://livingroofs.org/code-practice-green-roof-organisation/ • **Temporary Urbanism** https://www.citymetric.com/horizons/here-s-how-temporary-urbanism-can-transform-struggling-industrial-towns-3275 • **Cohousing, Marmalade lane in Cambridge** - enrich the living experience and encourage a more social way of life- https://marmaladelane.co.uk/ • **UK Green Building Council** - https://www.ukgbc.org/our-work/?work-type=resources&work-area=&work-topic=

	Communication and Engagement
Who do we need to engage with and when?	• Targeting schools: campaigns. School Streets Initiative. • Raise the profile of the work R20 Task Force is doing and place Birmingham as a city and regional driver. • Talk to communities about how our lifestyle and choices may change in the future as we try to be move towards zero carbon. Ask people what sort of place they want to live in? • Win over hearts and minds to help build consumer demand for zero-carbon developments. • Create the space for new things to happen and to bring activities together and communicate across the city. Map the key communities and organisations we should be bringing together and encouraging to engage with planning so that action isn't reliant on 1-2 people in an area. • High level national debate on what it means for the country. Need to be able to say what our route is and what we will need to do. • Currently we're responding to a crisis but planning is about buying into something more - job and wealth creation and the economy. Need to engaging with landlords and financial. Run a jobs/commercial R20 sandpit.
How will we engage with different stakeholders?	

Appendix B: Sandpit/workshop briefing notes

R20 Housing Workshop

Thursday 11 March, 2.30-5.00pm, arrival and refreshments, 2.00pm

Room 111, Chemical Engineering Building Y11, South West Campus, University of Birmingham

Background

Birmingham City Council (BCC) declared a climate emergency on 11 June 2019 with an aspiration that the city and Council would be net zero carbon by 2030 or as soon as possible thereafter as a 'just transition' permits, ensuring we mitigate negative socio-economic impacts for our communities.

On 25 June 2019, Cabinet added a sixth priority outcome to the Council Plan for Birmingham to be a city that takes a leading role in tackling climate change.

The Route to Zero (R20) Taskforce was created in autumn 2019 and brings together BCC Members and officers and representatives from the West Midlands Combined Authority, NHS, higher education, business, faith communities, the third sector, youth climate strikers, climate campaigners, and other stakeholders and partners. The Taskforce will work to provide a voice for the city and inform the development of an action plan for how Birmingham can tackle climate change and become net zero carbon by 2030. This will empower individuals, communities, businesses, partners, and others to tackle the climate emergency together and ensure Birmingham is a city in which all residents can lead sustainable, healthy, safe, and fulfilling lives.

BCC has commissioned Anthesis to prepare a baseline report of the Council's and City's current CO2 emissions and to undertake scenario modelling and impact and viability assessments to identify potential carbon reduction interventions and understand the relative social and economic impacts and viability of these potential interventions. The outputs of the study will support the development of a carbon reduction plan. Recommendations for how the city can take action will be presented to Full Council in June 2020.

This workshop will bring together housing and community experts to provide ideas and evidence to feed into the Anthesis study. This will help to identify potential carbon reduction interventions in relation to housing.

Purpose:

To identify what can be done in both new and existing homes to help us achieve net zero carbon by 2030.

The aims of the workshop are:

- To map out the milestones we need to reach in order to progress towards zero carbon
- To consider actions to be taken locally, regionally and nationally to deliver zero carbon
- To identify plausible regulatory changes that could deliver net zero carbon
- To identify what we need to lobby Government for to deliver net zero carbon
- To identify best practice that demonstrates what is achievable; and identify how to break down the barriers to rolling these out.
- To identify the measures that we need to put in place to deliver net zero carbon, the potential carbon savings of these measures and the lead-in times to deliver them.

Background Reading

Retrofitting at scale - https://www.rics.org/uk/news-insight/future-of-surveying/sustainability/zero-carbon/

Energiesprong - https://energiesprong.org/about/

The Future Homes Standard - https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/852605/Future_Homes_Standard_2019_Consultation.pdf

Best Practice Examples:

Examples of zero carbon development from within the UK. Important to understand how the barriers were overcome and think about how these examples could be rolled out more widely or applied to Birmingham.

- Goldsmith Street - https://passivhaustrust.org.uk/news/detail/?nId=840
- Bicester Eco Town - http://www.zerocarbonhub.org/sites/default/files/resources/examples/profiles/ZCH-Profile-NORTH%20WEST%20BICESTER%20ECO-TOWN.pdf
- Passivhaus for Bournville Gardens - http://www.greenboxassociates.co.uk/news/item/passivhaus-for-bournville-gardens

Examples of Zero Carbon retrofit

- Zetland Road Passivehouses - https://www.ecospheric.co.uk/zetland
- Beattie Passive Retrofit Plus Project Birmingham - http://beattiepassiveprojects.com/RetrofitPlusBirmingham/

Planning Workshop

Friday 13th March – 10am -12:30pm, arrival and refreshments from 9:30am

Room LC-UG10 the Murray Centre, University of Birmingham

Background:

Birmingham City Council declared a climate emergency on 11 June 2019 with an aspiration that the city and Council would be net zero carbon by 2030 or as soon as possible thereafter as a 'just transition' permits, ensuring we mitigate negative socio-economic impacts for our communities.

On 25 June 2019, Cabinet agreed to add a sixth priority outcome to the Council Plan for Birmingham to be a city that takes a leading role in tackling climate change.

The Route to Zero (R20) Taskforce was created in autumn 2019 and brings together Members and officers from the Council and representatives from the West Midlands Combined Authority, the NHS, higher education, business, faith communities, the third sector, youth climate strikers, climate campaigners, and other key stakeholders and partners. Members of the Taskforce will work together to provide a voice for the city and inform the development of an action plan for how Birmingham can tackle climate change and become net zero carbon by 2030. This will ensure individuals, communities, businesses, partners, and others are empowered to tackle the climate emergency together and ensure Birmingham a city in which all of our residents can lead sustainable, healthy, safe, and fulfilling lives.

The City Council has commissioned Anthesis to prepare a baseline report of the Council's and City's current CO2 emissions and to undertake scenario modelling and impact and viability assessments to identify potential carbon reduction interventions and understand the relative social and economic impacts and viability of these potential interventions. The outputs of the study will help prepare for the development of a carbon reduction plan. Recommendations for how the city can take action are due to be presented to Full Council in June 2020.

This workshop will bring together planning and built environment experts to provide ideas and evidence to feed into the Anthesis study. This will help to identify potential carbon reduction interventions in relation to planning.

Purpose:

To identify what planning can do to help us achieve net zero carbon by 2030.

The aims of the workshop are:

- To identify the planning barriers facing us in achieving net zero carbon
- To identify plausible regulatory changes that could deliver net zero carbon
- To identify what we need to lobby Government for to deliver net zero carbon.
- To identify what best practice examples that demonstrate what can be achieved; and to identify the barriers preventing these examples being rolled out more widely and how we might break down those barriers.
- To identify the measures that we need to put in place to deliver net zero carbon, the potential carbon savings of these measures and the lead-in times to deliver them.

Route to Zero Carbon: Transport Sandpit

Aims

The aims of the sandpit were to:

a. bring together local stakeholders,

b. understand how the stakeholders and their organisations can help Birmingham City Council (BCC) and the Route to Zero (R20) Taskforce reduce the city's emissions from transport and achieve carbon neutrality by 2030, and

c. develop a network of stakeholders to maximise and champion the city's transport decarbonisation efforts through collaboration.

Background, sandpit format

The transport sandpit took place on 13 May 2020. Originally planned for 25 March 2020, it was delayed due to the COVID-19 breakout and the lockdown. The sandpit took place via Zoom, once we were confident that most participants would be comfortable to participate digitally as the lockdown and remote working practices had settled in. Approximately 30 people attended, representing the R20 Taskforce, Council officers, transport consultants, local universities, TfWM, local and international businesses, transport operators, and local community and activist organisations. Some of the participants left the sandpit for short periods of time to attend other meetings and then returned, taking advantage of the flexibility of a digital meeting.

Clear information on how to join was sent in advance of the sandpit, while the BCC team had a test session in advance of the sandpit and a dedicated technical assistance person during the sandpit to ensure that any issues would be addressed without interrupting the main session. Except for some small technical problems, the sandpit lasted for 3 hours and ran smoothly without interruption. The use of shared documents where participants could write their thoughts (instead of using post-its on a wall) and communicate with each other, and the use of 'breakout sessions' on Zoom, where discussions took place in smaller groups, received very positive feedback from participants.

Participant contributions

Following a short presentation on the role of transport in the climate emergency, participants were asked to contribute in a shared document their thoughts on how their organisations can help BCC and the R20 Taskforce achieve net zero by 2030.

The wide range of participants meant that there were multiple contributions suggested, that would could help BCC and the Taskforce with the development and implementation of climate action focusing on transport. The proposed contributions are categorised briefly below:

- Engaging with business to disseminate information about sustainable and active travel opportunities.
- Universities can offer broad interdisciplinary collaboration to make links across different systems in relation to decarbonisation issues.
- Universities can support more sustainable travel among staff and students.
- Developing innovative infrastructure and technology solutions to deliver renewable heat and power, energy storage solutions, clean transport fuels, and advanced waste processing to the city of Birmingham.

- Specialist transport consultancy guidance and lessons from across the world on issues such as parking policies and first/ last mile trips.
- Lobbying across government organisations.
- Community engagement on climate action through various groups, including faith and neighbourhood groups.
- Best practice examples from other places across the world.

Breakout sessions

The first breakout sessions focused on **going from contribution to commitment** and identifying **opportunities for collaboration**. Participants were asked what their wider contribution is and how this could be translated into a short, medium or long-term commitment to working with BCC and the Taskforce. In addition, participants were asked to identify opportunities for collaboration among them and with the council.

The second breakout session focused on how the sandpit could evolve into a **network of local stakeholders**, and how this network will **continue to evolve in the future**. In addition, the participants discussed how their **commitments can be 'formalised'** as part of this network and how **the network can be expanded**.

The breakout sessions allowed participants to expand on their initial contribution statements and discuss the opportunities and challenges of creating a network of key stakeholders that support transport decarbonisation in the city. Some participants also identified different opportunities for collaboration among themselves. Overall, the participants were open to the idea of creating a network and formalising their commitment following the sandpit. Multiple options about the network's contribution were discussed as well as different options for formalising each organisation's commitment.

More specifically, because of the multiple areas of expertise and types of contributions, it was suggested that specialist subgroups of the network could offer their expertise as technical advisory groups or 'task and finish' groups that will help ease the burden of this task for the Council. Specific pieces of work could either focus on climate action, research or engagement of specific communities in the city. Alternatively, it was also suggested that different 'workstreams' are created within the network so that the existing expertise can be directed to specific tasks.

In terms of how this network can be formalised, most participants were open to the idea of signing a Memorandum of Understanding/ collective pledge that outlines the collaborative relationship between BCC, the Taskforce and the network and the shared goal of decarbonising transport and achieving net zero by 2030. However, it was also stressed that different organisations may prefer different levels of commitment, which the network should allow.

Conclusions

This sandpit was an excellent opportunity to bring diverse stakeholders in the same space and discuss the shared commitment to transport decarbonisation. It is considered a helpful and positive start of a network of experts and stakeholders that will help the Council and the Taskforce accelerate transport decarbonisation action.

We believe that establishing and continuously engaging with a network of local stakeholders will be of great benefit for the local transport decarbonisation and for lobbying the central government for more resources and powers. At the same time, it is a unique opportunity to communicate to these

stakeholders and by extension to communities, the scale of the challenge at a system level and the scale of change required to achieve net zero.

It is noted that during the sandpit there were multiple references to the present pandemic that are not included in this note. During the sandpit it was made clear that the decarbonisation agenda spans beyond the current conditions and, however challenging and unique the present situation may be, achieving net zero requires systemic changes that are aligned with but not substituted by our emergency responses.

Next steps

As the Emergency Birmingham Transport Plan and the Emergency Active Travel Fund schemes have now been shared with the public, we will follow up with the participants linking the sandpit with the COVID-19 emergency actions and BCC's unchanged commitment to achieving net zero by 2030. We aim to:

- Map the fields of expertise of each participant.
- Get a better understanding of the level of commitment from different organisations.
- Get the stakeholders' detailed views on the network can be formalised.
- Understand how this network relates to existing networks in the city to ensure that action s mutually reinforcing rather than overlapping.

Feedback from the Taskforce will be greatly appreciated.

Additional materials

Sandpit materials and participant contributions: https://bit.ly/3fHFMHh

List of attendees:

Emily Prestwood, University of Birmingham

Kath Turner, Birmingham City University

Bob Whitehead, CANWM

David Horsfall, Tyseley Energy Park

John Nightingale, Footsteps

Michael Addison, ecobirmingham

Adrian Taylor, Atkins

Johnny Ojeil, Arup

Cllr Julien Pritchard, Birmingham City Council

Andrew Page, TfWM

Deborah Phelpstead, Birmingham City University

Louise Reardon, University of Birmingham

Chris Coyle, ebikebrum

Ewan Hamnett, Retired GP

Shivaji Shiva, VWV

Anna Wilson, WSP

Lydia Barnstable, AECOM

Maria Dunn, Birmingham City Council

David Harris, TfWM

Mike Stringer, Renault Trucks

Andrew Goodwin, Certas Energy

Karen Seehra, University of Birmingham

William Bloss, University of Birmingham

David Cox, The Birmingham Cycling Campaign

Jacqui Roberts, ebikebrum

Tim Egan, Sustrans

Byeronie Epstein, WBCSD

Chris Martin, Footsteps

Alex Greatholder, TfWM

Ali Bell, National Express

Naomi Todd, Birmingham City Council

Ioanna Moscholidou, Birmingham City Council

John Myatt, Birmingham City Council

Appendix 4: Tree Canopy Cover by Ward

Wards	Canopy % (25% baseline target)	B'ham Indices of Multiple Deprivation Ward Rank	2019 Decile (1 = 10% most deprived nationally
Bordesley & Highgate	9.66	19	1
Sparkbrook & Balsall Heath East	10.15	1	1
Holyhead	10.8	23	1
Aston	11	14	1
Lozells	11.4	3	1
Garretts Green	11.4	13	1
Newtown	12	6	1
Alum Rock	12.6	5	1
Castle Vale	13	4	1
Balsall Heath West	13.14	9	1
Nechells	13.2	24	1
Ladywood	14.6	42	2
Small Heath	15.1	21	1
Bordesley Green	15.2	2	1
Sparkhill	15.4	30	2
Ward End	15.8	18	1
Kingstanding	16	12	1
Tyseley & Hay Mills	16	20	1
Handsworth	16.4	16	1
Shard End	16.4	11	1
Gravelly Hill	17	8	1
Stockland Green	17.4	26	1
Sutton Reddicap	17.4	58	4
Pype Hayes	17.4	39	2
Highter's Heath	18.2	47	3
Birchfield	18.4	10	1
Oscott	18.6	52	3
Soho & Jewellery Quarter	18.8	29	2
Rubery & Rednal	18.8	37	2
Stirchley	19	46	3
Sutton Walmley & Minworth	19.2	64	7
Weoley & Selly Oak	19.29	35	2
Sutton Roughley	19.8	69	9
Perry Common	19.8	28	2
Heartlands	20	7	1
Perry Barr	20	56	4
Erdington	20.4	38	2
South Yardley	20.4	48	3

Glebe Farm & Tile Cross	20.6	15	1
Druids Heath & Monyhull	20.6	25	1
Allens Cross	20.8	32	2
Bournbrook & Selly Park	21.94	60	5
Yardley East	22	49	3
Bromford & Hodge Hill	22.2	33	2
Sutton Mere Green	22.6	66	7
Yardley West & Stechford	22.6	27	1
Sheldon	23.2	45	3
Longbridge & West Heath	23.2	40	2
Northfield	23.4	59	4
Handsworth Wood	23.8	54	3
Frankley Great Park	24.8	22	1
Hall Green North	25.3	50	3
Brandwood & King's Heath	25.5	53	3
Acocks Green	25.5	36	2
King's Norton South	26.1	17	1
Bartley Green	26.1	31	2
North Edgbaston	26.7	41	2
Sutton Wylde Green	28.1	67	7
Bournville & Cotteridge	28.2	57	4
King's Norton North	30.3	44	2
Harborne	30.5	55	3
Quinton	30.9	51	3
Billesley	31.5	34	2
Edgbaston	33.6	61	5
Moseley	33.6	43	2
Hall Green South	34.1	62	6
Sutton Vesey	36.5	65	7
Sutton Four Oaks	46.7	68	8
Sutton Trinity	46.8	63	6

Birmingham City Council

Carbon Emission Reduction Study for the City of Birmingham

June 2020

Anthesis

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Introduction and Context
Council Commitment

Introduction

This work is being commissioned by Birmingham City Council (BCC) on behalf of the Route to Zero (R20) Task Force.

Aim

The aim of this body of work is to support Birmingham's response to the Climate Emergency. Birmingham has an ambitious target to achieve net zero carbon emissions across the city by 2030, and the evidence outlined by this scope of work serves to understand the main drivers for emissions and identify the best methods for reducing emissions in line with this target.

Council context

On 11 June 2019, Birmingham City Council declared a climate emergency and established a Climate Emergency Task Force. The ambition was set for the Council and city to become net zero carbon by 2030, or as soon as possible thereafter as a 'just transition' allows – ensuring protection and buy in from communities. This is the city's 'route to zero' (R20). On 25 June 2019, the Council's Cabinet agreed to add a new priority to the Council Plan which states that Birmingham will be a city that takes a leading role in tackling climate change.

Within the Notice of Motion, the council acknowledged:

- The findings of the Intergovernmental Panel on Climate Change (IPCC) report 'Global warming of 1.5°' published on 8 October 2018.
- Given the planet is currently heading for 3-4°C warming, keeping to 1.5°C requires a radical shift across energy, land, industrial, urban and other systems to reduce emissions, unprecedented in history for the breadth, depth and speed of change required.
- All governments (national, regional and local) have a duty to limit the negative impacts of Climate Breakdown and in recognising this local government should not wait for national government to change their polices.
- The impact of climate change will not just be felt in far-away lands or coastal areas, the impact on Birmingham residents of increased extreme weather events, including flooding, droughts and heatwave is likely to be profound, with increasing risks to both life and property.

The Council agreed to various actions, and with particular relevance to this commission to:

i) Ensure the Council has a robust evidence base to support recommendations for carbon reduction interventions.
ii) Identify potential carbon reduction interventions in line with BCC's 2030 city-wide target.
iii) Understand the relative positive and negative social and environmental impacts.
iv) Explore the viability of these interventions and the risk posed if the interventions were not undertaken

Anthesis' report will support each of the points above and ultimately seeks to better inform actions taken hereafter.

Introduction and Context
The Need to Act

A growing consensus

It is now widely agreed that climate change poses an urgent and unprecedented threat and that action is required across all aspects of society. The recognition of urgency is no longer just the message from environmental groups but is now being reiterated across a variety of sectors:

- UK Local Authorities: As of 2020, 68% of Local Authorities have declared a Climate Emergency.[1]
- UK Climate Strike action and increased media profile: In 2019 schools and businesses demonstrated unprecedented levels of support for climate action. This has been mirrored enhanced scrutiny and coverage on climate related issues, including legal challenges brought to councils by Client Earth warning councils of their legal obligation to take climate action. The latest YouGov polls also listed climate change as the third most important public concern.
- Global Businesses: Climate change has become more common on the agenda of businesses with more organisations making ambitious emission reduction targets. Nearly 800 companies globally are setting Science Based Targets and over 700 companies are supporting the TCFD by better disclosing climate related information for investors. It was also recently announced that UK banks will be stress tested for climate risks.[2]
- Internationally: The decade began with record breaking temperatures and drought leading to massive bushfires in Australia. This followed a year where record numbers of fires were observed in the Amazon rainforest in Brazil .

Locally felt disruption

- The UK has also seen new extremes with last summer providing the highest ever recorded temperature in England.[3]
- Birmingham is already at risk from severe flooding and has suffered from a series of flood events in recent years.
- The flooding events in June 2016 caused significant damage in the city with 23 areas reporting internal property damage and significant transport disruption.[4]
- These events are likely to become more frequent/severe with climate change, posing a significant economic, social and environmental threat.

The next few years will be pivotal for climate change mitigation, combined with resilient adaptation to a changing climate. The urgency of the situation is growing as we approach planetary tipping points and are held to account as a nation against international climate targets. There must be a decade of unprecedented and disruptive action if we are to limit dangerous temperature rise.

1 – https://www.campaigncc.org/councils_climate_emergency
2 – https://www.ft.com/content/a5177bee-2176-11ea-b8a1-584213ee7b2b
3 – https://www.metoffice.gov.uk/research/climate/maps-and-data/uk-climate-extremes
4 – 2016 Flood Event Report

Introduction and Context
COVID-19 recovery

Leading a sustainable recovery

The global disruption and impacts of the COVID-19 pandemic have forced governors, citizens and businesses to radically reassess their policy decisions, lifestyles and the ways in which they work.

The ongoing lockdown offers the chance to reflect on the way that we operate as a society. This time also presents the opportunity to shift our collective values and review the demands of "emergency action" in a climate context. Local and national commitments to emissions reductions have not changed as a result of the COVID-19 crisis.

The cost of delaying action on the pandemic has been felt in many countries. Similar decisiveness will be required as we recover from this crisis, respond in a way that is centred around the resilience, health and wellbeing of local communities. UN Secretary General Antonio Guterres acknowledged this in a statement in April 2020: *"... ensuring a future for the planet must be a core element in rebuilding society after lockdown measures are lifted".*

The next few years will be pivotal for climate change mitigation as we enter the decisive decade for action. The urgency of the situation is growing as we approach planetary tipping points and are held to account as a nation against international climate targets.

The impacts of the pandemic have forced significant changes in the way cities operate across all sectors:

- Transport: Cycling and walking have now taken priority and to allow for social distancing, pedestrian and cycle access has encouraged the uptake of pavement widening, cycle path creation and reduced vehicle access. The Birmingham Emergency Transport plan aims to enable increased active travel across the city. As a result of the sharp increase in working from home and reduction in vehicle use, there have been huge improvements in air pollution in cities. Conversely, due to huge reductions in public transport usage during and coming out of lockdown, there will be difficulties in funding public transport.
- Energy demand: Many commercial and institutional buildings are temporarily shut down and will be operating at reduced capacity when they reopen to adhere to social distancing measures. Due to isolation measures, citizens are now forced to spend more time at home, requiring higher energy use in homes.
- Waste: Domestic household waste will likely increase as more food is consumed at home due to closing of restaurants and cafes.
- Natural capital: There is increased need for access to parks and green spaces during lockdown, especially for those in flats and homes without gardens, to ensure availability of open spaces for socially distanced exercise.

In addition, the pandemic has highlighted existing inequalities in society: those in low-paid jobs or zero hour contracts, ethnic minorities, older populations and those from a lower socioeconomic status are far more likely to be impacted by the pandemic either from a health or income perspective. It is therefore even more imperative that the way we rebuild the economy and reshape our cities coming out of the pandemic is inclusive of these vulnerable communities and follows the pillars of the just transition.

Introduction and Context
The Need to Act

Birmingham Mail (May 2018)

Dramatic photos show the severe flooding in Birmingham

Birmingham Mail (February 2020)

Flood alerts and flood warnings in place for Birmingham

Birmingham Mail (September 2019)

Full list of Birmingham roads flooded amid Met Office 'danger to life' rain weather warning

Introduction and Context
The Need to Act

Global emissions performance: A shift in the wrong direction

The UN Environment Programme published their 2019 Emissions Gap Report, which found that the Nationally Determined Contributions were insufficient to ensure that global temperature rises stays below 1.5 °C, and that nations must triple their efforts in order to meet even a 2°C target. It also found that global emissions had increased in 2018 after a period of stability between 2014 and 2016.

A key finding of the report is that: '…non-state and subnational action plays an important role in delivering national pledges. Emission reduction potential from non-state and subnational action could ultimately be significant, allowing countries to raise ambition.'

Research by the Global Carbon Project issued in December 2018 reported that since 1990, there has been a 43% increase in total radiative forcing – the warming effect on the climate – by long-lived greenhouse gases.

In November 2019, the World Meteorological Organization reported that during 2018 concentrations of CO_2 peaked at 407.8 parts per million – a level last seen 3 million years ago when average global temperatures were 2-3 °C warmer.

The above evidence makes clear that immediate and drastic action is required to avoid global warming to dangerous levels, whilst encouraging sub-national policy measures and action as a necessary means of reducing emissions.

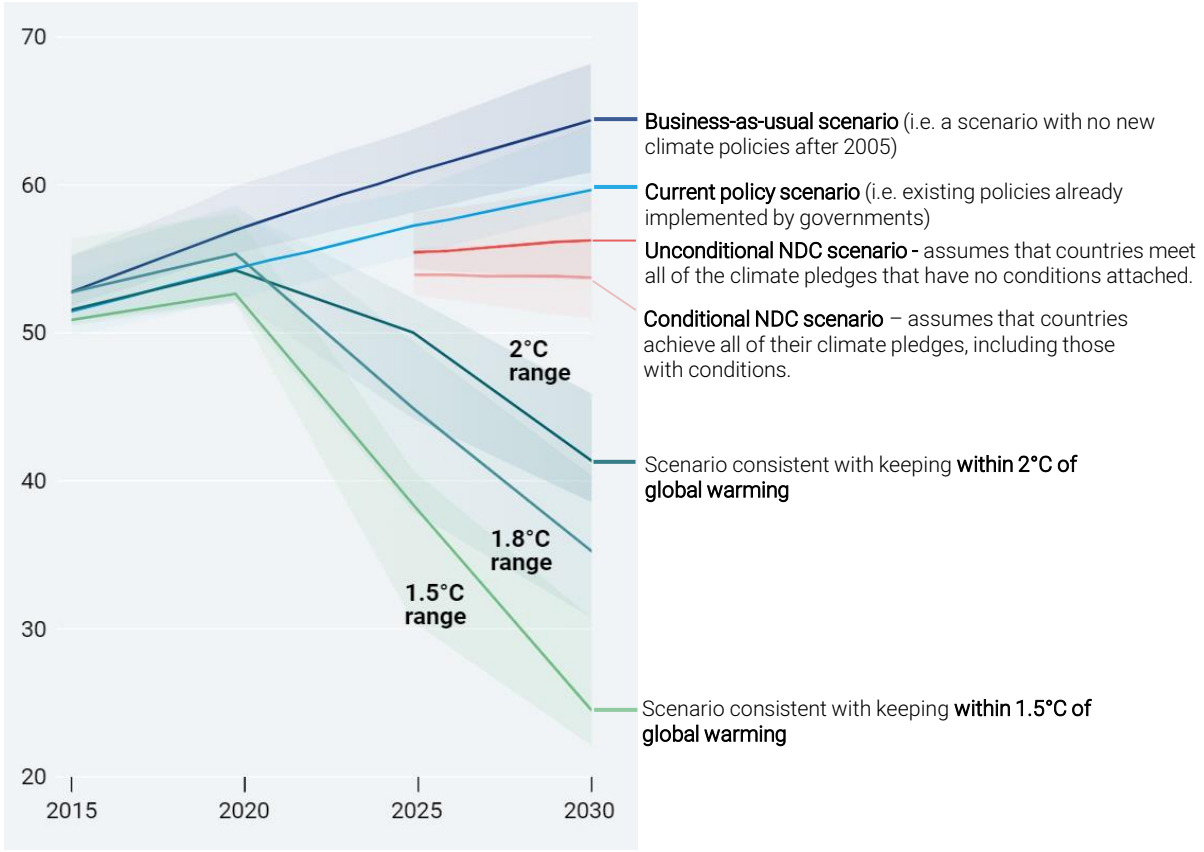
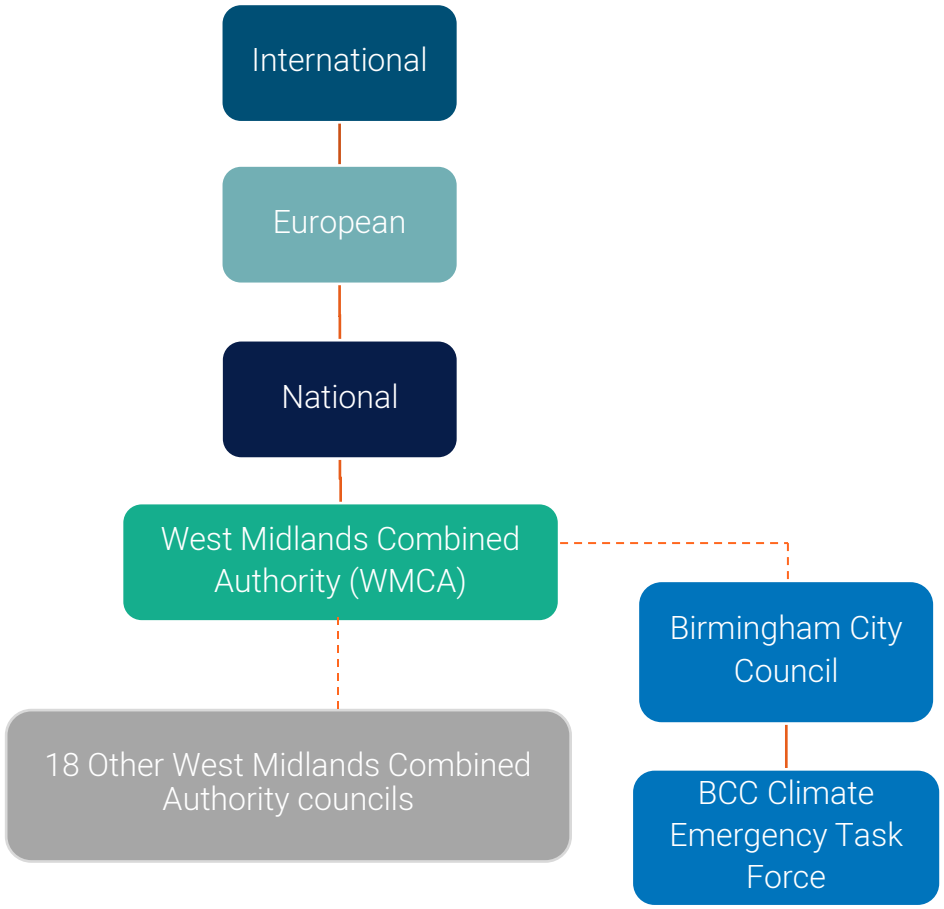


Figure 1: Chart showing possible global emissions scenarios for 2015-2050
Source: UN environment programme interactive Emissions Gap Report

Emissions Gap Report
Global Carbon Project research
World Meteorological Organization publication

1. Governance

1. Governance
Climate Change Obligations



The Paris Agreement[1] set the international target to limit global temperature rise to well below 2°C with the aim of 1.5 °C above pre-industrial levels. The follow up report from the IPCC stated that this requires a reduction in GHG emissions by 45% by **2030**.

As part of the Paris Agreement, the EU and its member states committed[2] to a minimum of 40% reduction in emissions by 2030. In December 2019, the EU agreed to set a target of becoming carbon neutral by **2050**.

The Climate Change Act 2008[3] introduced a legally binding target for the UK to reduce greenhouse gases by 80% by 2050 against a 1990 baseline. In June 2019, the target was updated to reach Net Zero by **2050**.

On 28 June 2019, the West Midlands Combined Authority (WMCA) declared a climate emergency[4] and in July 2019 set a target to reach net zero emissions no later than 2041 based on research by the Tyndall Centre.

10 of the other 18 West Midlands Combined Authority (WMCA) councils have declared a climate emergency and have committed to becoming carbon neutral.

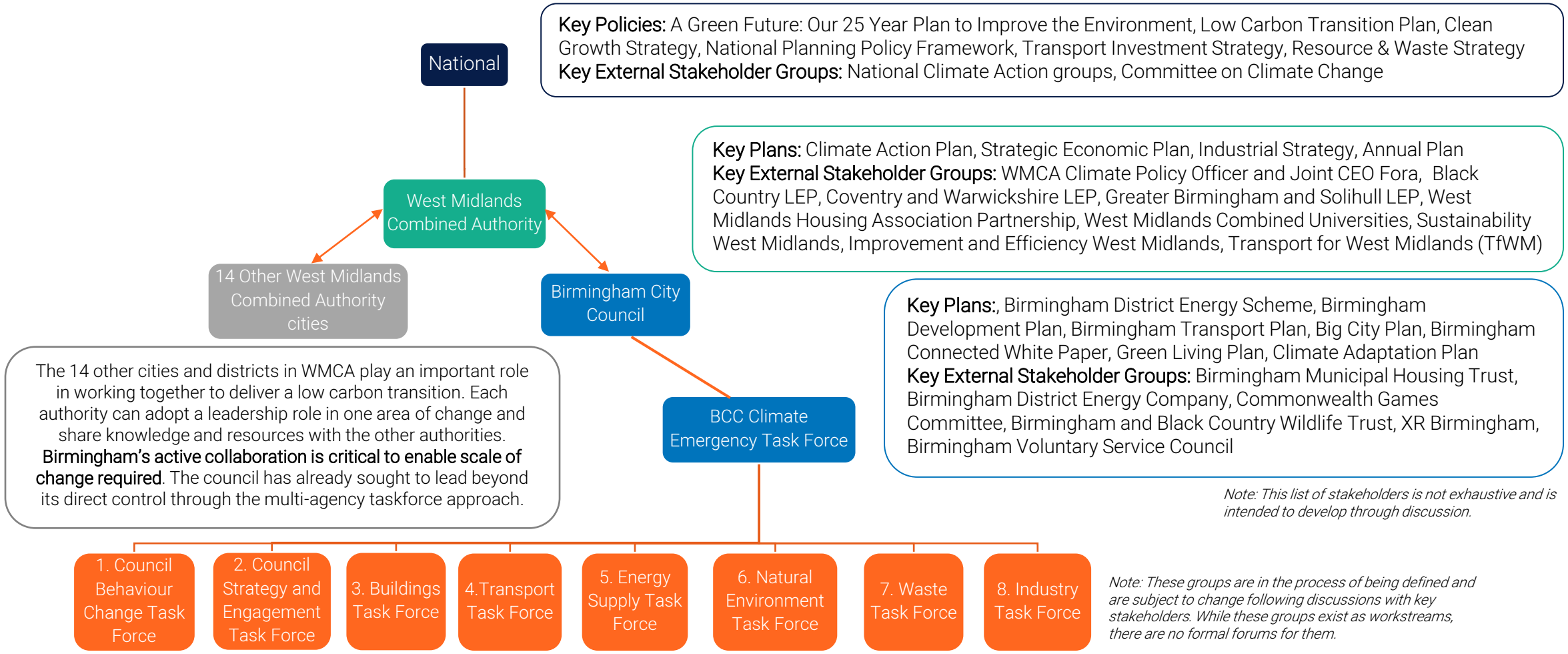
On 11 June 2019, Birmingham City Council declared a climate emergency and made the commitment for the Council and city to become net zero carbon by **2030**, or as soon as a 'just transition' allows. In autumn of 2019, the cross-party and cross-sector Birmingham Route to Zero (R20) Task Force was set up to work towards the net zero ambition and define an outline plan with key actions. In order for Birmingham to make it's fair contribution to the Paris Agreement and keep temperatures to 1.5 °C, the Tyndall Centre recommend a maximum cumulative budget of 27.5 $MtCO_2$

Anthesis

1- The Paris Agreement and IPCC 1.5 Report
2 - The INDC of the European Union
3 - The Climate Change Act
4 - West Midlands Climate Action Plan

1. Governance

Policy and Stakeholders Summary



1. Governance

Birmingham City Council

Birmingham City Council

Birmingham City Council Plan: 2018-2022

1. Council Behaviour Change

2. Council Strategy and Engagement

3. Buildings

Key policy documents:
Birmingham Property Strategy
Birmingham Development Plan
Big City Plan

4.Transport

Key policy documents:
Birmingham Transport Plan
Birmingham Connected White Paper

5. Energy Supply

Key policy documents:
Birmingham's Energy Baseline
Perform Green Decentralised Energy Study
Birmingham Energy Strategy

6. Natural Environment

Key policy documents:
Birmingham Health Economic Assessment & Natural Capital Accounts
Birmingham Development Plan
Green Living Spaces Plan
Nature Conservation Policy

7. Waste

Key policy documents:
Waste Strategy 2017-2040
Birmingham Development Plan

8. Industry

Key policy documents:
West Midlands Local Industrial Strategy
Birmingham Development Plan

2. Delivering Change

2. Delivering Change
What can the Council do?

Council control vs influence

This section explores the potential for the Council to enact change, appreciating the limited control but considerable influence it has on a wide range of critical stakeholders.

By comparing the overall emissions attributable to the Council's activities and operations with emissions across the city, we can begin to understand the scale of direct control that the Council has over the city's emissions.

- Emissions directly related to Council Scope 1, 2 and 3 activities and operations represent **417,772 tCO_2e**, just **8%** of the total emissions of the city.
- Note that there is some overlap between the Council's Scope 3 emissions and the emissions of the city.
- Although the direct emissions that the Council controls or has strong influence over is relatively small, the Council still has an important role in stimulating and influencing action across the city.

The following pages of this section will explore the influencing ability of the Council and the potential actions the Council should consider to encourage the transition to a net zero city, beyond the Council's own operations. Through using its influencing powers, the Council can demonstrate leadership, provide direction and encourage a positive knock-on effect to businesses, third sector organisations, educational institutions and individuals to take climate action.

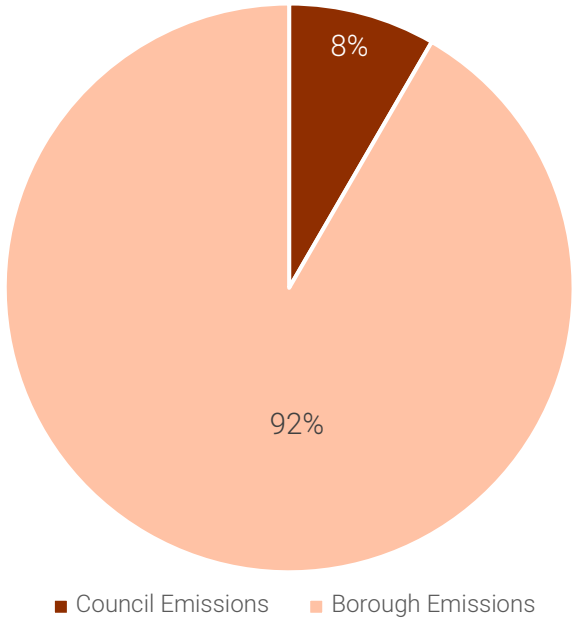


Figure 2: Council vs city Emissions

"Cities and local authorities are well placed to understand the needs and opportunities in their local area, although there are questions over whether they have sufficient resources to contribute strongly to reducing emissions. They have important roles on transport planning, including providing high-quality infrastructure for walking and cycling, provision of charging infrastructure for electric vehicles, and ensuring that new housing developments are designed for access to public transport." Committee on Climate Change

2. Delivering Change
What can the Council do?

Using the Council's influence

Key ways of influencing emissions outside of the Council's direct control are listed to the right, adapted from Ashden's Climate Action Co-Benefits Toolkit.

Birmingham City Council will need utilise their influencing power to act as a catalyst for enabling change across other key stakeholder groups in the city such as:

- Businesses
- Third-sector organisations
- Academic institutions
- Residents of Birmingham

As well as other key stakeholder groups outside of the city, including:

- Other levels of government
- Visitors to Birmingham
- Investors
- Wider public

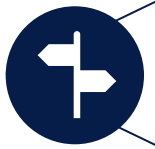
Leadership:
Birmingham City Council can lead by example in the city and demonstrate the benefits of decarbonisation to other stakeholders. The Council can share their knowledge and experiences and can ask partners to replicate their efforts.

Partnership:
There is an opportunity to leverage existing partnerships to ensure the delivery of multiple benefits from interventions. There is also a key role in partnering with businesses to support their carbon reduction actions.

Communication:
Birmingham City Council can be a key information source for climate change action in the city. It is essential the good communication channels are developed to spread information about the need to act, what can be done and to facilitate knowledge sharing.

Lobbying:
Birmingham City Council alongside local authorities, businesses and community groups can lobby national and regional governments for funding and more ambitious national policies.

Planning
There are opportunities with a future review and update of the Birmingham Development Plan to incorporate greater carbon reduction measures into new developments. Where argued not viable, supplementary information and training can be provided.



Signposting:
The Council have a unique role as a trusted source of information to be able to recommend business in the low carbon industry. They can also utilise their networks to signpost useful resources for other stakeholders.

Health and Social Care:
The council should work alongside health and social care providers to deliver interventions that have multiple benefits.

2. Delivering Change

Re-thinking Council Influence

The Council cannot do this alone

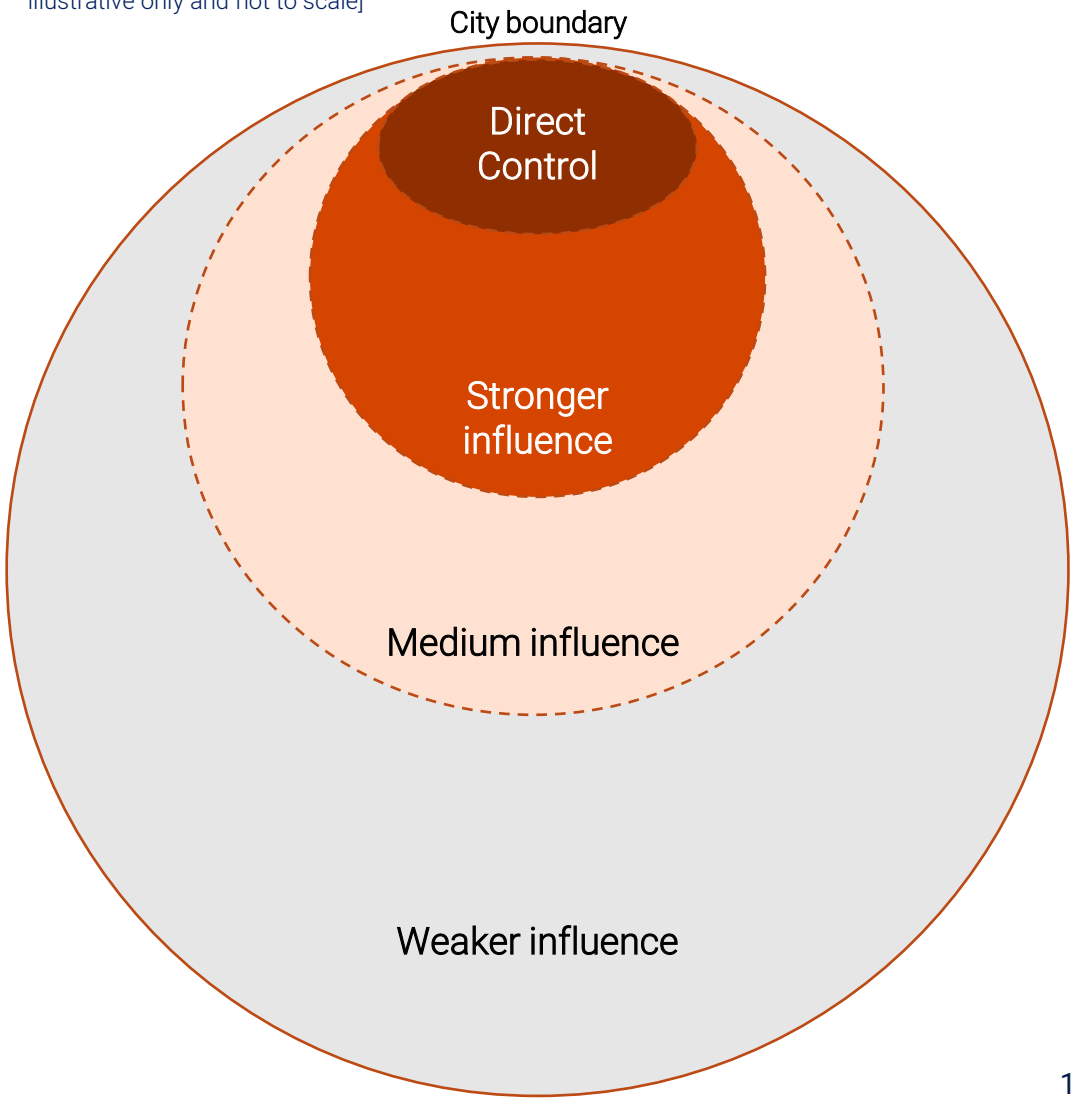
This chart illustrates that BCC's influence is varied and complex across the different activities that occur within their own operations and also across the city. Influence bandings are based on Anthesis' judgment following discussion with officers, and are by no means definitive. The examples that relate to each banding are intended to highlight opportunities for BCC to apply their influence in areas or ways previously not fully explored (e.g. by using 'convening power' and/or policy).

Influence extends beyond the city boundary, whereby BCC's demand (and supply) of goods and services is likely to result in emissions from supply chains around the world. Such emissions are referred to as consumption based emissions. The quantification and consideration is beyond the direct scope of this commission, but may still be influenced by the Action Plan.

Table 1: Council influence bandings

Influence	Description
Direct Control	Emissions sources are directly owned or operationally controlled by the Council, such as council buildings or council fleet.
Stronger	Owners and operators of emissions sources are clearly defined but are not directly operated by the Council. For example, emissions related to commercially leased buildings that the council owns but does not operate.
Medium	Emissions sources do not relate to council owned or operated assets, procurement or council led activities, however some convening power may exist with specific actors in the city, such as major businesses within city boundaries.
Weaker	Owners and operators of emissions sources are not clearly defined, influence limited to lobbying central government or trade associations. For example, national planning policy limited the extent of improvement to new build energy efficiency.

Figure 3: Council Influence [Chart is illustrative only and not to scale]



2. Delivering Change

City-wide Priorities

Where to start?

- Ultimately every sector requires action, it is not an option to only pick specific ones. However, the Council only has a finite amount of resource so may need a basis upon which to prioritise action.
- Across each of the sectors analysed, there are roles for both the council and other stakeholders to act.
- Priorities and timing of activities are a matter of judgement (there is no right or wrong), and this can really vary from council to council, and from city to city. However, we have set out below come factors that may be useful in BCC's prioritisation of action. These should be considered by BCC when formulating the plan that follows this work.

Speed & magnitude carbon reduction

Urgently reducing carbon is the ultimate aim of efforts from all Climate task force and sub-groups.

Sector priorities: Looking at the various sectors analysed, reducing energy demand is typically the most financially efficient way of saving carbon (compared to renewable energy supply). However, we acknowledge that as demand for heating and cooling are likely to increase over the coming decades, supply still needs to be considered.

Sector projects: Appraising the relative carbon impact and timing of specific carbon saving projects (see Chapter 4).

Playing to your strengths

Local delivery partners: Every sector will have a range of sub-sectors or stakeholders that are relevant to delivery. Identifying engaged, supportive partners is a pre-requisite to carbon reduction project development.

Existing expertise: We have identified lots of positive activities that have taken place in the city to date. The ability to use already established groups and/or scale up existing initiatives may inform priorities.

Local geography: Birmingham is geographically unique, and may lend itself better to certain reduction measures than others based on it's physical characteristics.

Timing

Cumulative impact: It is important to consider the future cumulative carbon legacy of decisions made to today i.e. the emissions produced over the operational life of assets or projects.

Disruption: Many low carbon projects can carry an element of short term disruption before longer term gain can be realised.

Skills development: Retrofit of buildings is commonly cited as an area that is lacking; therefore activities that can stimulate this sooner rather than later will be beneficial (if not necessary) in the longer term.

Funding: Various source of funding may be available for specific types of projects.

Technology costs: Councils have a major role to play in stimulating demand and helping to bring costs of low carbon technology down.

Waiting for this to happen may compromise carbon targets and cost savings for other stakeholders within the city.

Other Co-benefits

Given that all measures highlighted in this report promote a range of other benefits (e.g. social, health, economic).

Alignment with other strategic or political priorities in certain sectors may also influence priority here.

2. Delivering Change

Funding Mechanisms

BCC needs to continue to build project specific business cases for investment into a low carbon transition as financing will be one of the key barriers to achieving the net zero ambition. The table below outlines the different types of funding that could be utilised in order to deliver BCC's Climate Action Plan. Note, this list is not exhaustive and other private funding mechanism outside of the council's control may also apply. **BCC should actively explore which may be relevant.**

Table 2: Potential funding mechanisms to support city-wide carbon reduction.

Type	Description	Examples
National Level Funding	There are a variety of national initiatives that could be utilised to provide funding for climate change projects including: ECO funding, Salix Finance.	Southampton City Council- worked with Salix Finance (interest free government funding) to deliver energy efficiency projects in eight of their schools.
European Funding	There are several EU grants available to support climate change projects including: LIFE Climate Action, European regional development fund (ERDF), European social fund (ESF).	Homes as Energy Systems (HAES) – ERDF and Retrofit Works Project, Greater Manchester.
Section 106	A financial contribution used to mitigate the impact of new developments on infrastructure and communities.	Waltham Forest – using Section 106 funding from new developments to improve walking and cycling infrastructure
Community Infrastructure Levy	A charge which can be levied by local authorities on new development in their area to deliver infrastructure. (Tariff-based). BCC is currently making use of this to support the growth aspirations for the city.	City of London - allocated to broad infrastructure spending priorities: public realm and local transport improvements (40%); social and community enhancements (10%); and open spaces (5%).
Workplace Car Parking Levy.[1]	This could be an annual fee paid by businesses with 10+ parking spaces. BCC is currently investigating the possibility of its use to support sustainable transport infrastructure.	Nottingham City Council - introduced a parking levy which has been used to fund extensions to the existing tram system.
Crowdfunding and Municipal Community Bonds	See Financing for Society: Local Authority Guide for information about crowdfunding as a potential model of finance for the public sector.	Swindon City Council – used a crowdfunding platform to raise a total of £4.3m to operate a solar park.
Local Taxation	Explore opportunities to leverage local taxation.	Various Councils nationally are considering how Business Rates could better stimulate lower carbon action and investment. No published info at present.
Revenue Generation Projects	Potential to generate finance from renewable energy or 'Clean Air Zone' charges for most polluting vehicles.	Telford & Wrekin Council 4MW ground mounted solar farm, on agricultural land owned by the council. Generates a profit of approximately £150k/year over 25 years.
Local initiatives	There may be other local initiatives from organisations or institutions in the region	ATETA - University of Birmingham provides free access for SMEs to its team of Knowledge Exchange Fellows to aid adoption of zero carbon energy technologies.

3. Current and Future Emissions Profile
Baseline Validation

Anthesis

3. Current Emissions Profile – Birmingham City Council's Own Emissions

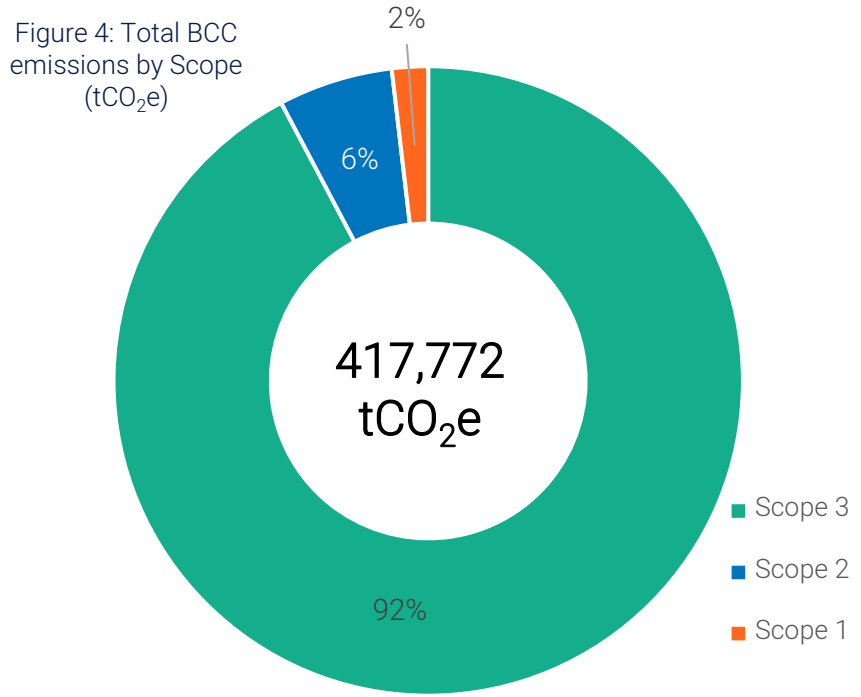
Summary

- The analysis of Birmingham City Council's own emissions focused on six key emissions sources, including: Buildings & Other Assets, Vehicle Fleet, Business Travel, Employee Commute and Procurement Spend.
- An **operational control approach** to GHG accounting has been used for the analysis of emissions from owned/leased buildings and assets. In reference, the GHG Protocol define operational control as an organisations 'authority to introduce and implement its operating policies at the operation' (GHG Protocol, 2019).
- Under this approach, assets owned by BCC but leased out to third parties fall into Scope 3 as activities are outside of the direct control of BCC. Assets that are leased to BCC by a third party, or fully owned and operated by BCC will fall into Scope 1 and 2 as BCC has direct control over their operation.
- The table below provides further detail of the operational control approach that has been applied and the rationale behind the inclusion/exclusion of key entities.

Buildings / Asset	Operational Control	Owned	Scope
Schools	×	✓	Scope 3
Social Housing	×	✓	Scope 3
Commercial Properties	×	✓	Scope 3
Leased (BCC are the Lessor) to a third party e.g. Museums	×	✓	Scope 3
Leased (BCC are the Lessee) from a third party e.g. Shelforce	✓	×	Scope 1 & 2
Owner Occupied	✓	✓	Scope 1 & 2

Table 2: Accounting Judgements

Figure 4: Total BCC emissions by Scope (tCO_2e)



Definitions

- Scope 1 (Direct emissions): All direct GHG emissions from the activities of an organisation or under their control. For BCC, this primarily relates to natural gas for heating and fuel used by owned or controlled vehicles.
- Scope 2 (Indirect emissions): GHG emissions occurring as a consequence of the use of grid-supplied electricity, heat, steam and/or cooling within the city boundary. For BCC, this relates to purchased electricity.
- Scope 3: All other GHG emissions that occur outside the Birmingham City boundary as a result of activities taking place within the boundary. For BCC, Scope 3 emissions include schools, housing, procurement activities and employee commuting.

3. Current Emissions Profile – Birmingham City Council's Own Emissions

Summary

Total footprint – Further analysis

- Procurement spend is the largest emissions source, accounting for **80%** of the council's total emissions and relates to services that the council procures to support services across the city, such as road or building maintenance.
- The operation of buildings; electricity, gas and water account for another **17%** of the Council's Scope 1, 2 and 3 emissions. The operational control of these buildings are different depending on the letting arrangement in each and hence, the impacts are split across Scope 1, 2 and 3.
- Mobile Supplies (highways) mainly consists of street lighting, contributing 17,881 tCO_2e of emissions.
- Building emissions only account for buildings where utilities are purchased through Birmingham City Council's Corporate Procurement Service.
- At the time of writing, data was not available on the emissions associated with waste and bereavement fleet.

Glossary
Mobile Supplies: demand from Unmetered Supplies (UMS) for example street lighting, speed cameras and communal lighting.

WTT: '*Well-to-tank (WTT) fuels conversion factors should be used to account for the upstream Scope 3 emissions associated with extraction, refining and transportation of the raw fuel sources to an organisation's site (or asset), prior to combustion.*' (DEFRA, 2019)

T&D: '*Transmission & Distribution (T&D) factors should be used to report the Scope 3 emissions associated with grid losses (the energy loss that occurs in getting the electricity from the power plant to the organisations that purchase it).*' (DEFRA, 2019)

Emission Source		2018/19 tCO2e
Scope 1		
Buildings and other assets	Owned and Occupied Building Natural Gas	7,007
	Building Oil	0
Vehicle Fleet	Fleet Adult Social care & Health	588
	Fleet Waste Services	unknown
	Fleet Bereavement	unknown
Scope 1 Total		7,595
Scope 2		
Buildings and other assets	Owned Building (Highways) Elec	617
	Mobile Supplies (Highways) Elec	14,588
	Owned and Occupied Building Elec	8,805
	Leased and Occupied Building Elec	83
Scope 2 Total		24,093
Scope 3		
Social Housing	Building Natural Gas	2,404
	Building Electricity	2,986
	WTT + T&D	1,123
Schools	Building Natural Gas	13,116
	Building Electricity	8,141
	WTT + T&D	3,974
	Building Water	219
Commercial Properties	Building Natural Gas	1,642
	Building Electricity	1,049
	WTT + T&D	505
Procurement	Procurement (Supply Chain)	334,861
Water	Water	291
Owned buildings and other assets	Owned and Occupied Buildings (WTT + T&D)	3,485
	UMS (WTT + T&D)	3,854
Mobile Emissions	Grey Fleet	533
	Business Travel	70
	Commuting	7,831
Scope 3 Total		386,084

Table 3: Total BCC emissions breakdown by scope and sector (tCO_2e)

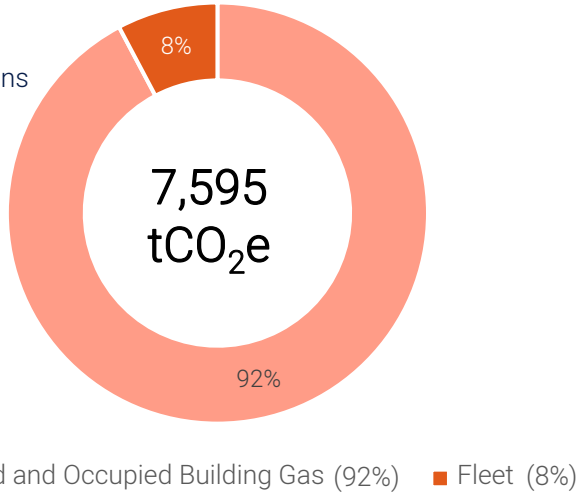
3. Current Emissions Profile – Birmingham City Council's Own Emissions

Direct Emissions (Scope 1) and Indirect Emissions (Scope 2)

Scope 1 – Further analysis

- The analysis of Birmingham City Council's Scope 1 emissions focused on two key emissions sources: Buildings and Fleet.
- Scope 1 emissions account for 7,595 tCO_2e (92% Building Gas, 8% Fleet) which corresponds to approximately 2% of the Council's total footprint.
- The top 10 buildings for gas consumption account for 31% of the total emissions from gas. This consists of a variety of building types including Leisure and wellbeing centres, crematoriums, Alexander Stadium, depots and care centres.

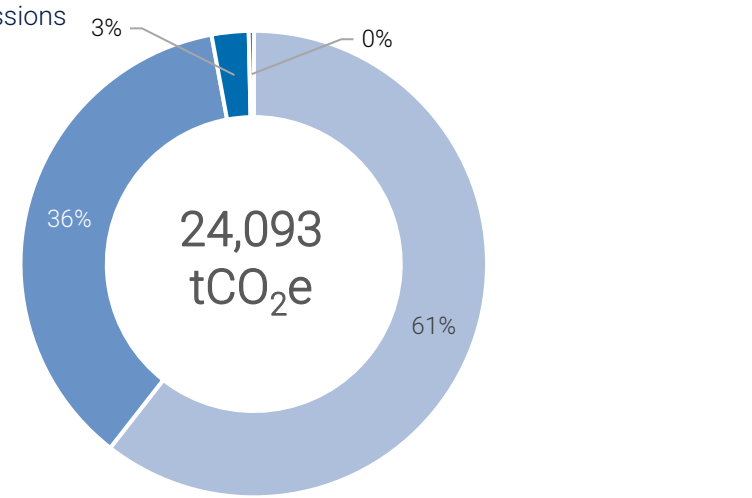
Figure 5: BCC Scope 1 emissions (tCO_2e)



Scope 2 – Further analysis

- The analysis of Birmingham City Council's Scope 2 emissions focused on two key emissions sources: Buildings and Mobile Supplies.
- Scope 2 emissions account for 24,093 tCO_2e which corresponds to approximately 6% of the Council's total footprint.
- The biggest source of indirect emissions were electricity used in mobile supplies accounting for 61% of indirect emissions. 95% of emissions from mobile supplies come from street lighting.
- The remaining Scope 2 emissions (39%) come from electricity used in buildings, including highways, leased and council-owned buildings. Of this, the top 10 buildings account for 29% of all building electricity emissions.

Figure 6: BCC Scope 2 emissions (tCO_2e)



3. Current Emissions Profile – Birmingham City Council's Own Emissions

Other Emissions (Scope 3)

Scope 3 – Further analysis

- The analysis of Birmingham City Council's own Scope 3 emissions focused on five key emissions sources: Social Housing, Schools, Commercial Properties, Procurement and travel.
- Scope 3 emissions account for 386,084 tCO_2e which corresponds to approximately 92% of the Council's total footprint.

The Council's other emissions are largely associated with procurement spend, accounting 87% of Scope 3 GHG emissions.

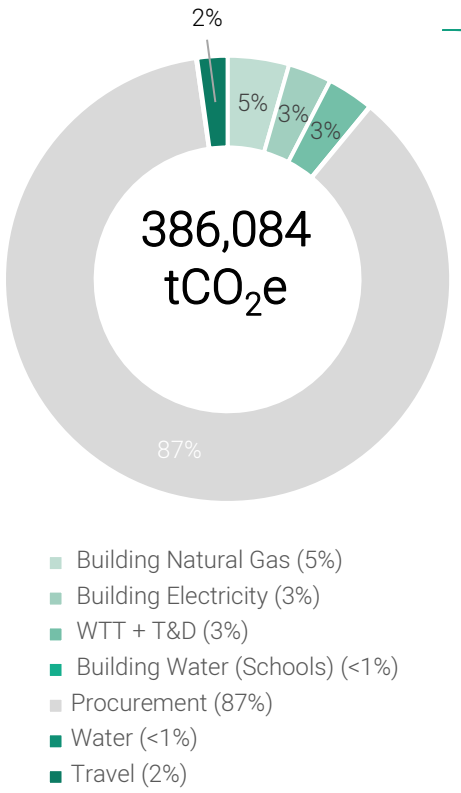
Schools account for 7% of the Council's Scope 3 emissions (25,451 tCO_2e), followed by

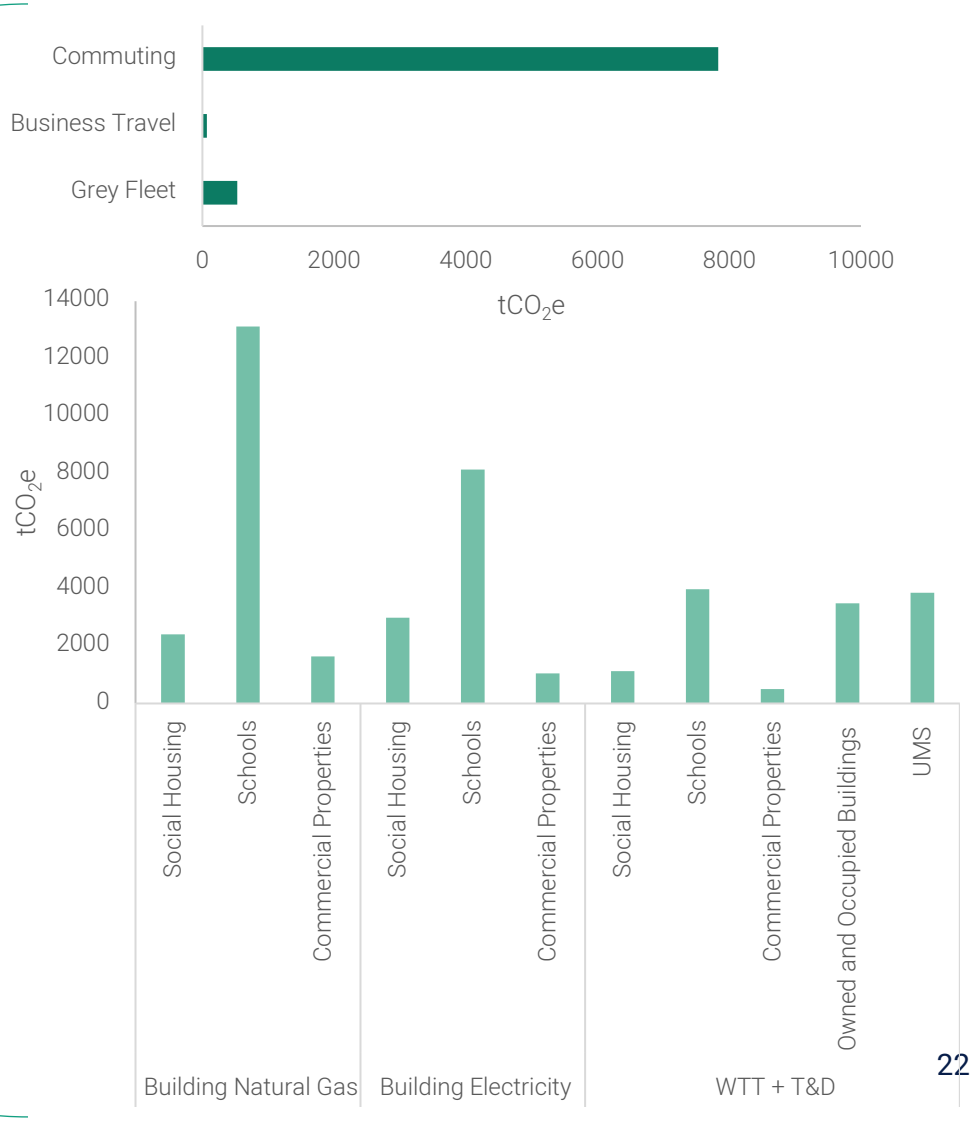
Social Housing which accounts for 2% (6,512 tCO_2e).

Commercial Properties are responsible for <1% of emissions (3,197 tCO_2e).

Travel which comprises business travel, grey fleet and staff commuting also contributes 8,434 tCO_2e which is 2% of Scope 3 emissions

Figure 7: BCC Scope 3 emissions (tCO_2e)



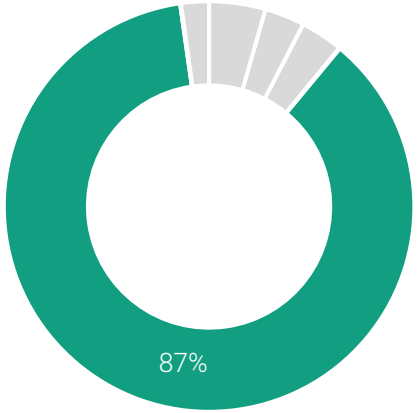


3. Current Emissions Profile – Birmingham City Council's Own Emissions

Other Emissions (Scope 3) - Procurement

Procurement Spend - Further analysis

- The largest emissions source for both the Council's Scope 3 and the total council footprint is produced through procurement spend.
- Construction and Mains Power make up over 50% of emissions from procurement activities, their total is greater than the combined Scope 1 and 2 emissions from BCC.



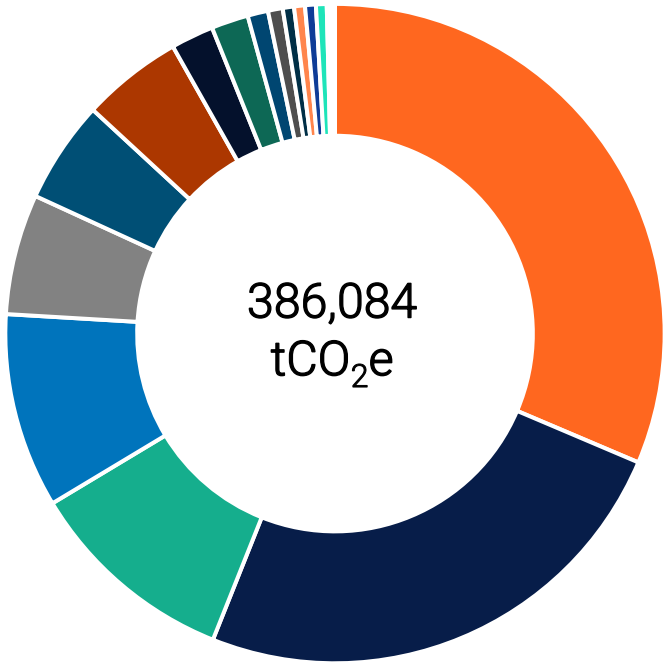
This analysis was based on the data that was available at the time of writing. Some notes on data gaps have been provided in Section 6: Monitoring and Reporting.

Method

Emissions have been calculated using DEFRA input/output emissions factors matched to broad procurement spend categories. For a more concise analysis of consumption-based emissions from supplier activities more granular data would be required to establish precise emission sources.

The 'Unmapped' category relates to spend that was not possible to map to a DEFRA category so alternative weighted method was applied.

Figure 8: Spend Categories by Impact (tCO_2e)



- Construction (31%)
- Mains Power (25%)
- Sewage And Refuse Services (10%)
- Health And Social Work (10%)
- Other Service Activities (6%)
- Unmapped (5%)
- Legal, Consultancy and other business activities (5%)
- Education (2%)
- Furniture and Other Manufactured Goods (2%)
- Wholesale Distribution (1%)
- Electrical Machinery (1%)
- Ancillary Transport Services (1%)
- Hotels, catering and pubs (1%)
- Road Transport (1%)
- Recreational Services (1%)

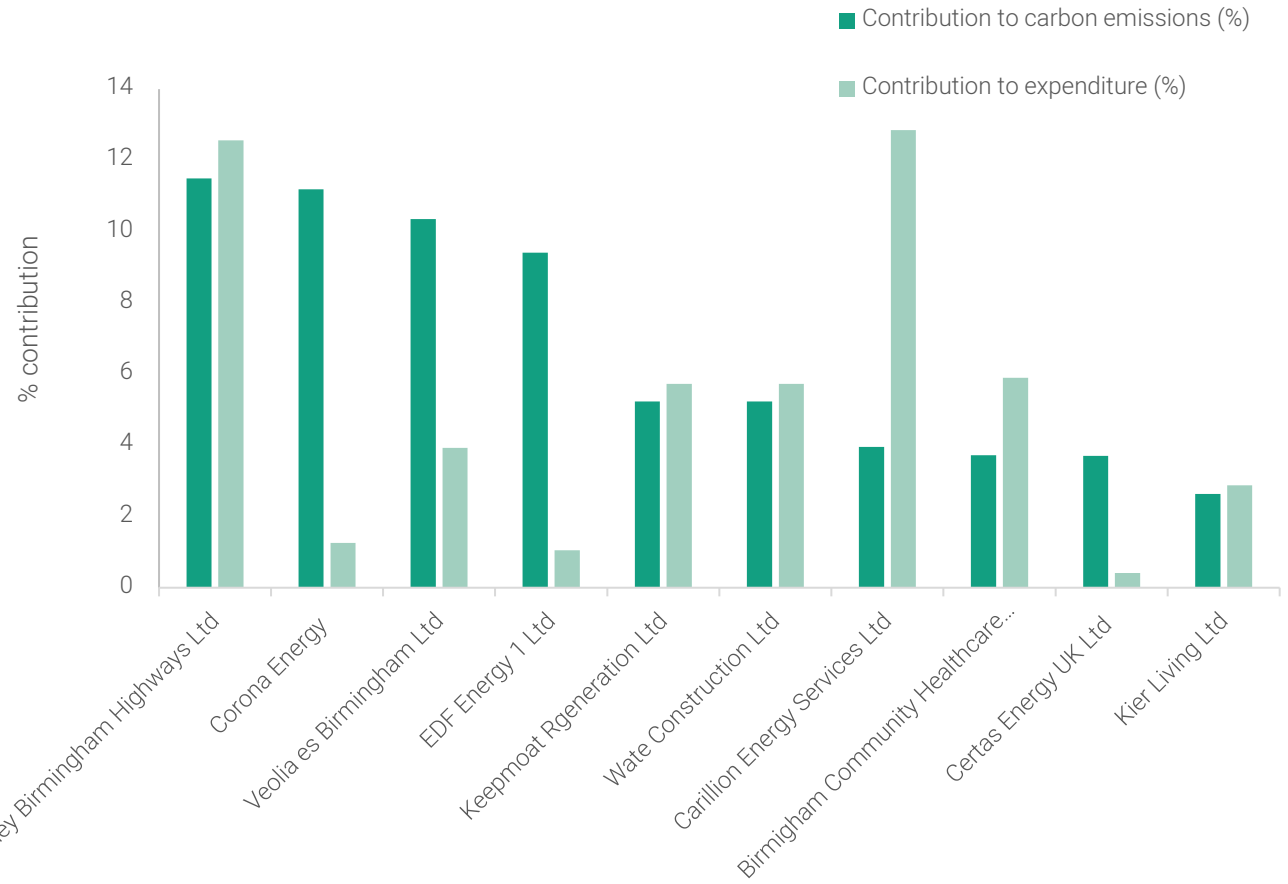
3. Current Emissions Profile – Birmingham City Council's Own Emissions

Other Emissions (Scope 3) - Procurement

Procurement Spend – Top 10 emitters

- Analysis of the contribution of the top 10 suppliers shows that they account for 67% of carbon emissions and 52% of procurement spend.
- Please note this assigns the top 10 highest emitters based on the council's Scope 3 consumption based emissions rather the city-wide territorial-based emissions.
- All suppliers with a procurement spend over £10 million are in the top 25 for associated carbon emissions.

Figure 9: Contribution of Top 10 suppliers

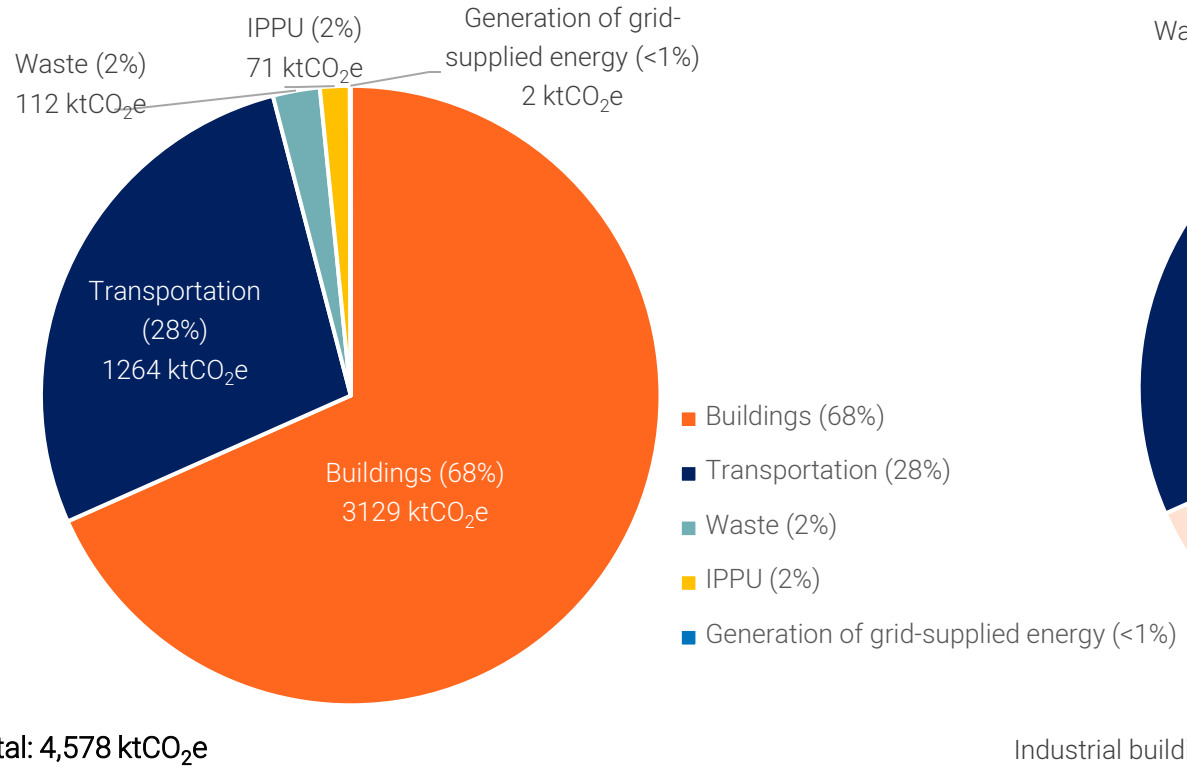


3. Current Emissions Profile – Birmingham City Region's Emissions

Direct and Indirect Emissions

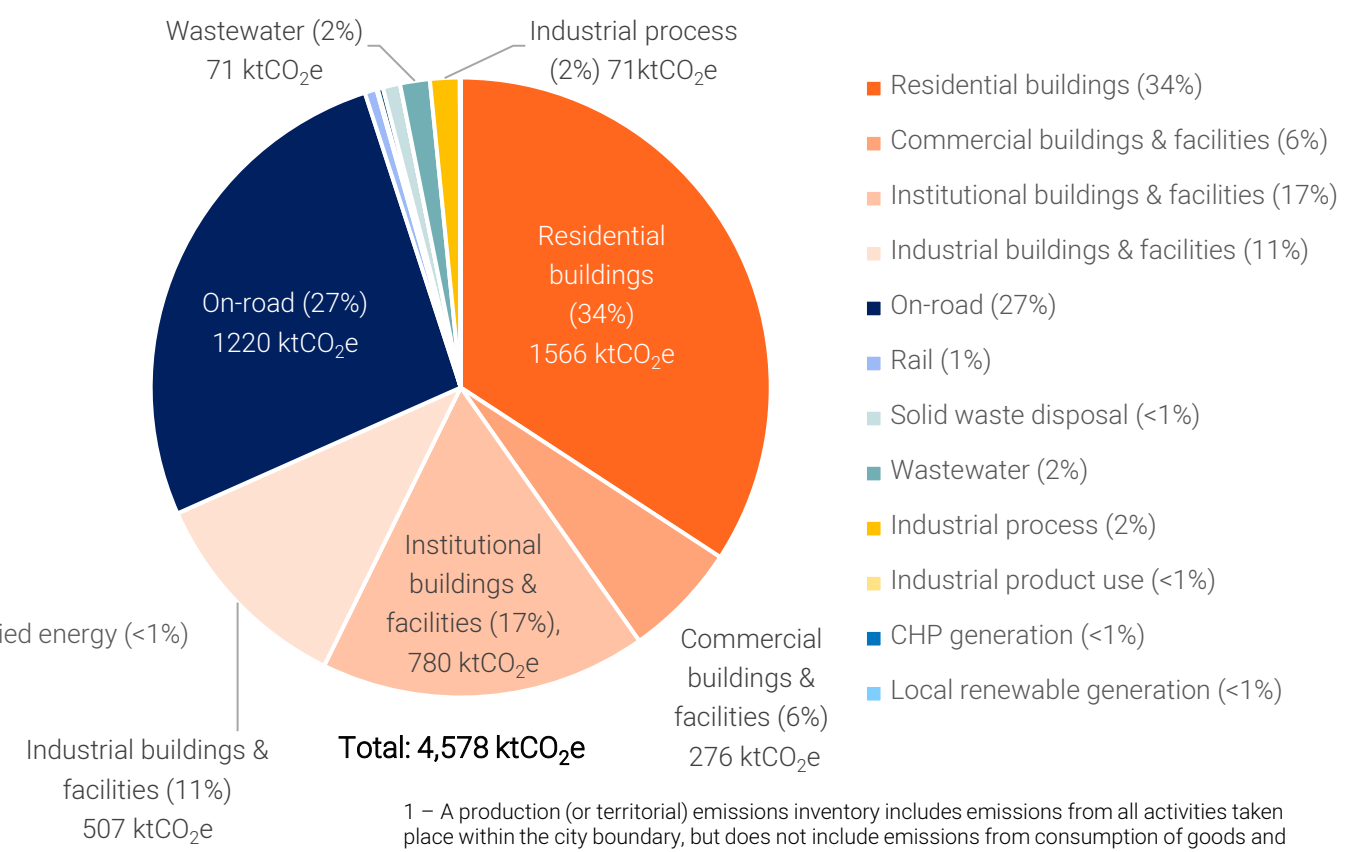
The figures and charts presented below summarise the production[1] (or territorial) emissions relating to area administered by Birmingham City Council, using Anthesis' SCATTER Greenhouse Gas Inventory tool. BEIS also provides Local Authority CO_2 Emissions data publicly, however the SCATTER tool inventory provides a more complete picture of current emissions and has therefore been prioritised. The BEIS dataset for Birmingham and the differences between the two inventories are explored in Appendix 2

Figure 10: SCATTER sector inventory for direct and indirect emissions within Birmingham, 2017



Total: 4,578 $ktCO_2e$

Figure 11: SCATTER sub-sector inventory for direct and indirect emissions within Birmingham, 2017



Total: 4,578 $ktCO_2e$

1 – A production (or territorial) emissions inventory includes emissions from all activities taken place within the city boundary, but does not include emissions from consumption of goods and services within the city that were produced outside of the city boundary.

3. Current Emissions Profile – Birmingham City Region's Emissions

Tyndall Centre Research

Introduction

The Tyndall Centre for Climate Change Research is a research organisation based at the University of Manchester, whose research aims to translate the Paris Agreement targets of limiting temperature change below 1.5°C into a finite carbon 'budget' for each local authority. A temperature increase of 1.5°C is the result of a given concentration of atmospheric greenhouse gases.

- The carbon budget for the Birmingham City region[1] between 2020-2100 is 27.5 $MtCO_2$
- A **consistent annual emissions reduction rate of -12.8%** is needed to adhere to this budget
- If Birmingham's emissions were to remain at today's levels, the finite carbon budget would **run out in 7 years.**

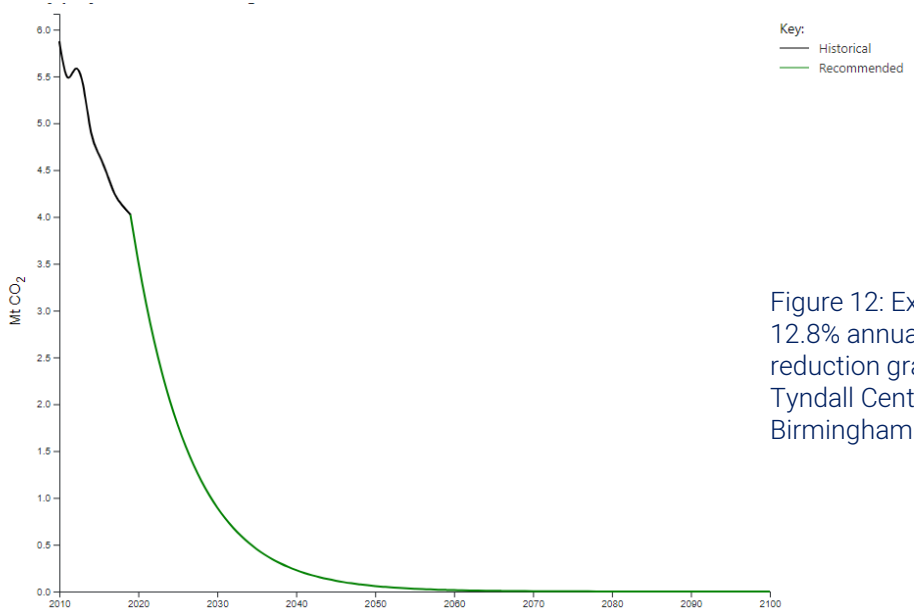


Figure 12: Excerpt of the 12.8% annual emissions reduction graph from the Tyndall Centre Report for Birmingham City region.

The budget is finite: A global carbon budget represents the finite emissions that can be emitted before the 1.5°C threshold for greenhouse gas concentration is crossed. This global budget can subsequently be scaled down to a national level, and finally, a regional level. A more complete description of this approach can be found in Appendix 4.

The impact is cumulative: Once emitted, carbon dioxide remains in the atmosphere for many years, contributing to increasing the average global temperature. The carbon budget does not reset each year; it represents a finite limit to emissions. **If the carbon budget were a monthly payday check paid on Friday, it would be spent before lunchtime the following Monday.**

A key omission from this budgeting analysis is emissions from aviation and shipping and the budget considers only the region's energy system. This type of budget is termed 'energy-only' and also excludes emissions from land use, land change and forestry, as well as cement manufacturing. Further explanation of the treatment of these sources in the research is provided in Appendix 4.

1 - https://carbonbudget.manchester.ac.uk/reports/E08000025/

3. Current Emissions Profile – Birmingham City Region's Emissions

Deriving the Birmingham Carbon Budget

Birmingham's budget

The carbon budget (25.7 $MtCO_2$ for the period 2020-2100) sets out a finite emissions limit that the should not be exceeded in order that Birmingham remains in line with the Paris Agreement. The budget itself is derived from a 'scaling-down' approach – a full methodology is available to view in the full print version of the Tyndall Centre's research.

The Tyndall Centre for Climate Change Research have based this budget on a 2°C global average temperature rise, on the basis that:

1. The Paris Agreement commits us to limiting warming to this level.
2. Global modelling for both 1.5°C and 2°C assume planetary scale negative emissions.

Negative Emissions Technologies (NETs)

NETs remain a highly speculative and uncertain development and are leaned upon heavily in IPCC models. Large-scale NETs are not likely to be viable within the boundary of Birmingham due to the profile of emissions.

If research, development and demonstration of NETs shows that they may work at scale, and then they are rolled out globally at unprecedented rates, 1.5°C may theoretically be achievable. However this is only made possible if rapid, deep 2°C mitigation begins now and additional feedbacks do not occur.

Table 4: Birmingham City Carbon Budget, Tyndall Centre analysis[1]

Carbon Budget Period	Recommended Carbon Budget ($MtCO_2$)
2018 - 2022	17.4
2023 - 2027	9.0
2028 - 2032	4.6
2033 - 2037	2.3
2038 - 2042	1.2
2043 - 2047	0.6
2048 - 2100	0.6

Aviation and shipping

Aviation and shipping emissions are deducted at the UK level, **not** at the Birmingham City level.

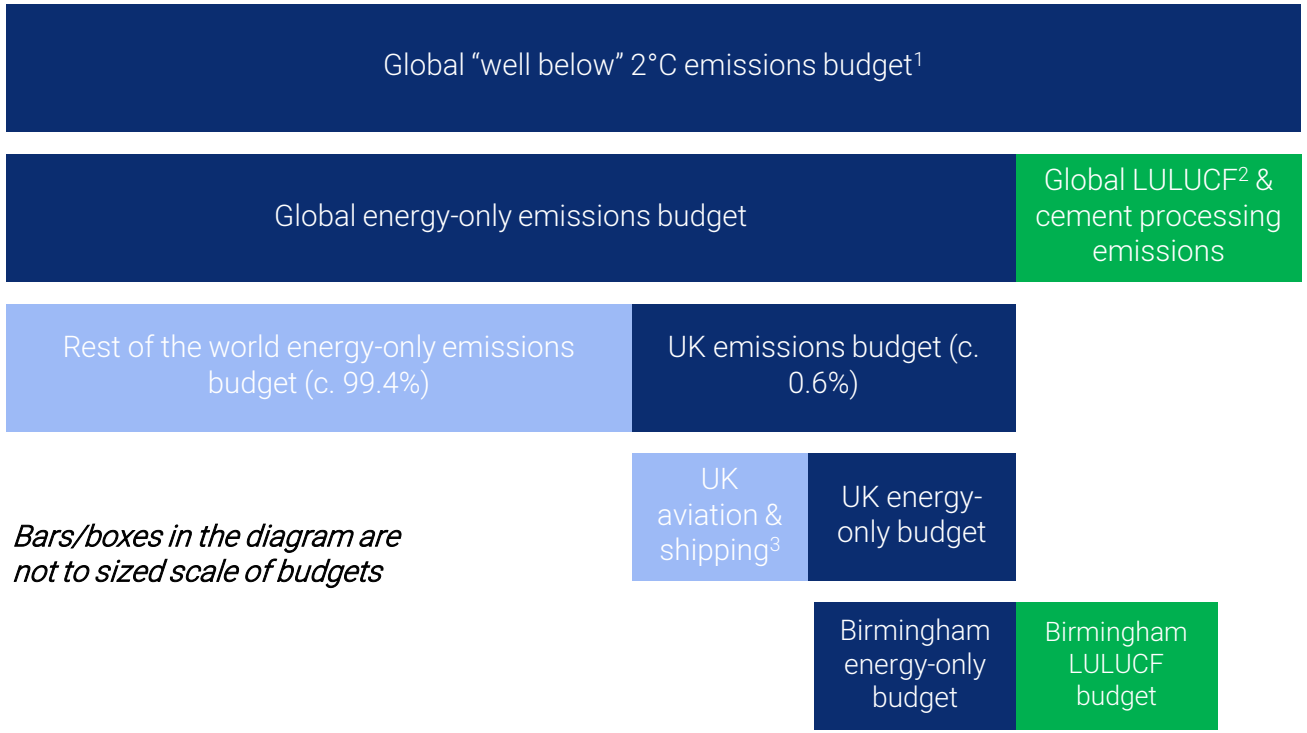
Future changes in the growth of aviation emissions are forecasted from government projections.

Within SCATTER, the emissions from aviation are modelled as being fixed up until 2030, followed by a linear reduction to full decarbonisation in the sector until 2075.

1 - https://carbonbudget.manchester.ac.uk/reports/E06000032/

3. Current Emissions Profile – Birmingham City Region's Emissions

Deriving the Birmingham Carbon Budget



Bars/boxes in the diagram are not to sized scale of budgets

The chart to the left is a visualisation of the process of arriving at the carbon budget for Birmingham under the Tyndall Centre's analysis and demonstrates the level of exclusions form the energy-only carbon budget.

1 - Budget derived from IPCC AR5 synthesis report and represents a 66-100% probability of global warming not exceeding 2°C ("well below"). Due to the inertia in our energy systems and the amount of carbon we have already emitted, the Paris 1.5°C commitment is now only likely to be viable if negative emissions technologies (NETs) prove to be successful at a global scale. If the 15% emissions reduction rates for Birmingham are achieved and NETs are deployed at the scales assumed in the global models, then the targets adopted may be considered as a 1.5°C compatible. This also expressly assumes that other carbon cycle feedbacks, such as methane released due to melting permafrost etc., do not occur, and that an overshoot of 1.5°C does not result in increased feedbacks that further accelerate warming at lower budgets than the IPCC budgets currently estimate.

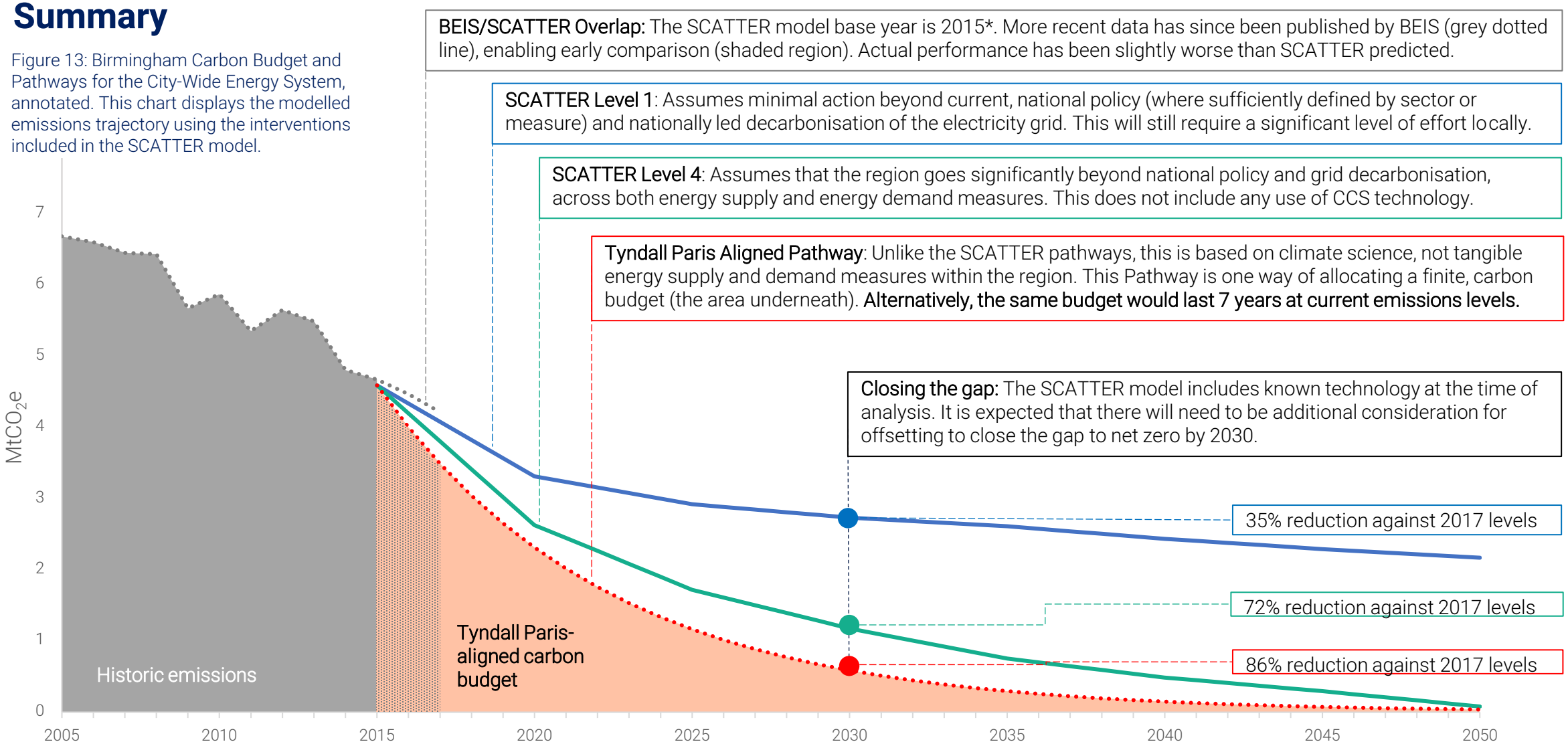
2 - Land Use, Land Use Change & Forestry

3 - UK Aviation & Shipping is accounted for at the national level. If emissions due to aviation and shipping increases, then a smaller proportion of the UK-wide budget is available for the energy-only budget and vice versa.

3. Current Emissions Profile – Birmingham City Region's Emission Pathways

Summary

Figure 13: Birmingham Carbon Budget and Pathways for the City-Wide Energy System, annotated. This chart displays the modelled emissions trajectory using the interventions included in the SCATTER model.



4. Sectoral Analysis: Introduction

4. Sectoral Analysis

Structure

The following information and analysis will be used by Birmingham City Council to inform a SMART Action Plan in response to their climate emergency declaration.

The following chapters are split by the major sectors in the city with the addition of council influencing and strategy components. Key sectors are identified based on the large emissions sources for city and potential areas for opportunity. Each sector explores carbon reduction interventions that have the greatest opportunity for impact, along with their feasibility and wider co-benefits of their implementation. Sectors and actions should not be viewed in isolation and there is a need to co-ordinate and co-operate across sectors to achieve the necessary reductions. There are significant interlinkages between the recommended interventions which can have both negative and positive impacts on other interventions.

Key elements to each Sector

- Background - Provides the current context and recognises the actions that have already been undertaken.
- Relevant Plans and Policies - An at a glance summary of some of the key plans, policies and strategies in place at national, regional and local level. This should be used to identify key policy gaps.
- Measures and Interventions - Based on SCATTER pathways tool to provide an indication of the scale of change required. The following tables provide proxies for the nature and extent of Birmingham specific measures. These are all assumed in order to track the green SCATTER Level 4 (L4) pathway Interventions as shown on page 29 unless stated otherwise. Where relevant, these have been linked to key recommended next steps for action.
- Governance Structure - Reflection on governance structure to deliver changes in this sector.
- Co-benefits - The co-benefits are reducing emissions from this sectors are presented here to help strengthen the case for action beyond just climate change.
- Stakeholder Analysis - Actions are grouped by stakeholders including the council, businesses, key partners and residents. This demonstrates that action is required at all levels of governance. The council also has role to facilitate and encourage the actions of all other stakeholders.
- Key Recommended Next Steps – Includes some suggestions of what can be done now to work towards the SCATTER targets, plus an idea of resourcing and examples of best practice. These are not intended to be an exhaustive list. This is separated into actions specifically for the council and actions for the council to carry out in the wider city. Indicative potential costs of each measure have been provided where possible. Due to limitations of budget and scope, this is not comprehensive cost analysis but provides an indication of relevant financial costs based on publicly available data. As such, we advise:
    - Associated assumptions are reviewed and fully understood by the Council
    - No reliance by the council (or any other party) should be placed on these figures due to the inherent limitations in assumptions – these are simply intended to help inform relative priority of actions and how more robust estimates could be performed.
- References – A full list of references and sources of information are provided in the appendices.

4. Sectoral Analysis
Carbon Equivalents

Visualising Carbon Dioxide

Throughout our analysis we have provided metrics in tonnes of Carbon Dioxide (CO_2) or Carbon Dioxide Equivalent (CO_2e).

To help paint the picture of the scale, below are some examples of the equivalent impact of 1 tonne of CO_2 :

250 return trips by car from Birmingham to Nottingham

1 passenger flying from Birmingham to New York in Economy Class

Burning 1-2 bath tubs' worth of crude oil

CO_2e: This allows the comparison and inclusion of other GHGs (e.g. nitrous oxide and methane) as well as carbon dioxide. It represents the corresponding amount of carbon dioxide that would be required to produce the same level of radiative forcing and thus warming as these other GHGs.

4. Sectoral Analysis: Internal Council Behaviour Change

Internal Council Behaviour Change
Background

This section explores the action the Council can take in facilitating internal behaviour change.

Progress to date:

- Declared a Climate Emergency and established a Climate Emergency Task Force in June 2019.
- Internal communications encouraging response to the climate emergency citizen survey.
- Posters in meeting rooms encouraging turning off lights (not universally applied).
- Transport team have shared information to encourage uptake of more sustainable modes of transport (e.g. celebrating cycle to work day) through Birmingham Connected bulletins, Yammer and other social media.
- Technology investment has begun to migrate to Microsoft Online and use Microsoft Teams to support remote working.
- Staff travel survey conducted in 2019.

Local Plans

- Council Plan 2019 Update – Describes actions taken and plans for the future to tackle climate change. Includes details of the climate emergency task force which will support the council to move to a low carbon future.
- Route to Zero (R20) - The Route to Zero (R20) Task Force was created in autumn 2019 and brings together Members and officers from the Council and key partners and stakeholders from across the region.
- **Staff Handbook** – opportunity to incorporate climate change targets and expected behaviours into handbook.
- **Sustainable travel guidance** – opportunity to add in carbon considerations around travel mode, necessity and accommodation.
- **Onboarding and professional development process** – Potential to incorporate carbon targets and training into these processes.

National Resources

Guidance for individuals has been published by various Organisations. Please find a selection of recommendations, more focused on individual behaviours, that could inform council staff behaviours:

- Friends of the Earth – *What can I do to stop climate change* link.
- BBC – *10 simple ways to act on climate change* link.
- The Grantham Institute, Imperial College London – *9 things you can do about climate change* link.

Internal Council Behaviour Change

What is needed from Stakeholders?

Birmingham City Council:

- Develop a strategy for council behaviour change outlining a long term vision, key priorities, actions and delivery.
- Deliver a council-wide education plan including formalised training in order to raise awareness.
- Data collection and monitoring of current demand e.g. energy usage, travel and productions and waste in order to establish a baseline, monitor programme and allow feedback to staff members.
- Develop incentivisation schemes for green champions or departments that lead the way in reducing emissions.
- Ensure progress and example of success are effectively communicated amongst the council and with the wider public.

Council Staff:

- Engage with policies and initiatives developed by the Climate Emergency Task Force.
- Calculate your own carbon footprint and consider your role in carbon reduction delivery.
- Participate in training and develop individual goals for carbon reduction.
- Integrate learnings from training and engagement within your decision making.
- Communicate and share what you have learnt with peers, both internally and externally.

Local Media Channels:

- Report the success and progress of the council to local residents.

Other Partners:

- Local Environmental Groups – Continue to challenge the council and members to act.
- R20 Task Force –Use their networks to widen engagement and action, share learnings and leverage collective lobbying influence..
- Commonwealth Games Organising Committee – Draw investment for sustainable travel options, waste infrastructure and to inspire and educate Council staff.
- Unions, e.g. Birmingham UNISON – Consider developing a Climate Change agreement with Birmingham council and support staff in delivering ambitious carbon reduction.

Birmingham Friends of the Earth

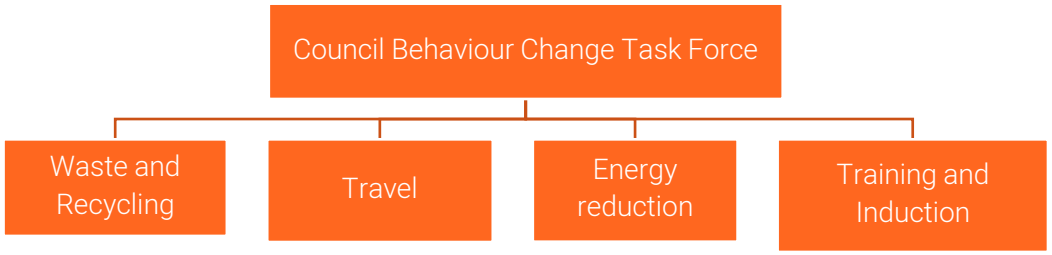
extinction rebellion BIRMINGHAM

eco birmingham Inspiring Positive Action

Internal Council Behaviour Change

Delivery

Proposed sub-task groups:



Co-benefits:

- **Knowledge sharing** - Staff can take what they have learnt into their communities and spread the message beyond the Council.
- **Increased climate action** - Education may increase the buy-in of council staff to more ambitious policies and strategies.
- **Talent acquisition** - Having progressive sustainability policies can help to attract and hire the best talent.[1]
- **Personnel management** - Encouraging staff to use active travel modes can reduce absenteeism.[2]
- **Health and wellbeing** - More flexible working has been associated with a better work-life balance which supports improved heath and wellbeing.[3]
- **Financial benefits** – Behaviour change can result in increased efficiency of energy use and waste management within the council which can provide cost savings.

Internal Council Behaviour Change

Key Recommended Next Steps

Source	Carbon Reduction Measure	Costs and Resources
Council behaviour changes	Develop a strategy for reducing staff and council's own emissions alongside ambitions for the city.	Additional staff resources.
	Facilitate competitions between departments in low carbon behaviours or provide each department with a carbon budget.	Additional staff resources
	Develop a monitoring and communication campaign to reduce energy use.	Carbon Trust estimates that the cost of a campaign is 1-2% of an annual energy bill.[1]
	Develop a monitoring and communication campaign to reduce waste and increase recycling.	Additional staff resources
	Deliver education programme such as Carbon Literacy Training to all staff and members and incorporate training into new starter process	£10 per applicant certification.[2] Volunteers to deliver training. Carbon Literacy Project are developing a Local Authorities toolkit to provide guidance on designing of training.[2]
	Continue to review departments suitable for home working and update HR policy to enable flexible working. This has been accelerated due to the COVID-19 lockdown measures.	Within existing staff resources.
	Ensure staff have continued access, training and support for using remote technology and develop a plan for sustained remote working coming out of lockdown.	Within existing staff resources.
	Conduct a updated staff commuting survey and regularly review business travel to target actions and develop guidance on sustainable travel	Within existing staff resources.

Examples of good practice:

HOME Manchester is recognised as a platinum carbon literate organisation. 100% of staff are trained in carbon literacy and all new starters are trained within 6 months of joining.

Islington city Council raising awareness amongst staff of energy efficiency measures will save £43,000 and 196 tCO_2 per year.

Stockport Council and Stockport UNISON have signed a Joint Environment and Climate Change Agreement to support a just transition to a low carbon economy.

4. Sectoral Analysis: Council Strategy and Engagement

Council Strategy and Engagement
Background

This section represents the council's role in facilitating change with external organisations such as businesses and the public

Progress to date:

- Declared an aspiration for the city to be net zero carbon by 2030 or soon after as a just transition allows; ensuring communities are engaged in the process; protecting employment; ensuring a just transition and reducing existing inequalities in the city.
- A pledge to seek, with the WMCA, powers and resources from the UK Government to help Birmingham deliver the 2030 net zero carbon ambition.
- Declared a Climate Emergency and established a Climate Emergency Task Force in June 2019.
- Policies and projects including the Birmingham Development Plan and Birmingham Connected supporting the reduction of carbon emissions to mitigate against climate change in planning and development, sustainable transport, heating and powering the city, research and partnerships.
- All new procured buses in the city centre from 2025 to be zero emission, as well as identifying key city areas to be zero-emission.
- £33 million EU funded Business Growth Programme successfully delivering since July 2016, with £36 million of private sector investment generated and 1,461 new jobs.
- Birmingham Youth Strike 4 Climate – There have been several climate strikes and lobbying from young people in Birmingham seeking climate justice.

Regional Plans

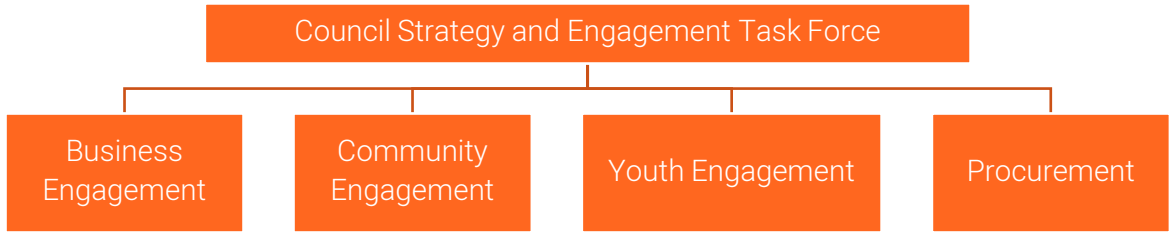
- West Midlands Industrial Strategy – Includes commitments to use innovative solutions to address urban challenges like air quality, flood water management, overheating in urban areas and climate change adaptation, and; continue to reduce carbon emissions while driving productivity to meet the current targets, through the actions in this strategy.

Local Plans

- Route to Zero (R20) - The Route to Zero (R20) Task Force was created in autumn 2019 and brings together Members and officers from the Council and representatives from the West Midlands Combined Authority, the NHS, higher education, business, faith communities, the third sector, young climate strikers, climate campaigners, and other key partners and stakeholders.
- The Council Plan 2019 Update - States that Birmingham will be a city that takes a leading role in tackling climate change. This commitment will embed climate action in the council's decision-making process to make sure that all service areas contribute to the R20 journey.
- Council Plan 2019 Update – Describes actions taken and plans for the future to engage with the community and other stakeholders. Key aspirations include:
    - Working with businesses in the city to help them grow and ensure sustainability.
    - Attracting international investment to the city.
- Birmingham Business Charter for Social Responsibility – Sets out social, environmental and economic guidelines for procurement that BCC will uphold and suggests for all businesses and third party organisations to uptake.
- Working Together in Birmingham's Neighbourhoods - policy statement (White Paper) sets out a number of commitments with the aim of improving neighbourhood working.
- Community Cohesion Strategy (2018) – Outlines the council's goals for Birmingham to build inclusive and resilient communities. The guiding principles include strategic partnerships across the city to empower neighbourhoods and support the ambitions of young people

Council Strategy and Engagement
Delivery

Proposed sub-task groups:



Co-benefits:[1]

- **Relationship building:** Strengthens the relationship and ties between the council and communities, schools and businesses.
- **Resilience:** Facilitating the development of skills for local people can help reduce unemployment and protect against it as the economy shifts to a low carbon economy. It can also help to protect businesses as the market changes.
- **Community empowerment-** Encouraging projects such as community renewables can increase community autonomy, empowerment and resilience by providing local control over finances. Community action can also deliver a strengthened connection to place and the community.
- **Greater buy-in to climate policies**- Engagement helps to build consensus, which may enable the council to deliver more ambitious low carbon policies.
- **Just transition** – There is an opportunity as the economy decarbonises to deliver a sustainable and inclusive job market, which could ultimately help to tackle inequality.
- **Supply chain benefits** – Businesses encouraged to adopt stricter sustainability standards as a result of procurement requirements will benefit from increased efficiency, resilience and cost savings.

Council Strategy and Engagement
What is needed from Stakeholders?

Birmingham City Council:
- Develop a Climate Change Strategy and Action Plan and ensure that climate change is consider in every policy, plan and strategy document.
- Improve communication of information on climate change e.g. through branding and website development.
- Use procurement to influence businesses and suppliers to minimise their carbon footprint.
- Develop partnership with businesses, sharing experiences and providing guidance.
- Increase engagement with communities and residents by providing guidance and resources the need to act and what they can do. Provide funding to community groups involved in green initiatives.
- Work closely with schools to minimise their footprint and provide workshops and education channels for students.

Businesses:
- Partner with the Council and commit to reducing carbon emissions.
- Develop own climate change strategies, science-based targets and action plans.
- Work with staff members to at all levels of the business to encourage behaviour change. Consider carbon literacy training for all staff.
- Attend training sessions and networks run by the Council
- Consider the opportunities of a low-carbon economy and areas to upskill workforce.
- Support local communities to deliver carbon reduction measures

National Government:
- Provide funding for apprenticeship and training in the low carbon industry
- Provide incentives and guidance for businesses to reduce carbon footprints
- Provide greater funding to local councils to implement climate change strategies
- Support schools to decarbonise

West Midlands Combined Authority:
- Work with Birmingham City Council to localise campaigns
- Facilitate knowledge sharing between 10 district local authorities.
- Continue to develop regional campaigns.
- Provide funding for further carbon reduction projects.

Local residents:
- Attend engagement sessions run by the council
- Find out what your role is and actions to take as an individual
- Get involved in local community groups that raise awareness about climate change.
- Lobby MPs, Councillors and Business to act.

Other Partners:
- Local Community Groups – continue educating and raising awareness amongst communities and campaigning for action from organisations in the city.
- Commonwealth Games Committee – work with to promote green travel, recycling and community engagement.
- Universities: Birmingham, Aston, City – Provide thought leadership and research

Council Strategy and Engagement

Key Recommended Next Steps

Source	Carbon Reduction Measure	Capital Costs and Resources
Council Strategy	Explore divesting from fossil fuel investments in the council pension fund.	Potential to carry out in house or £5,000 consultancy costs.[1]
	Embed carbon reduction into every decision and policy, particularly core strategies such as the Local Plan.	Within existing staff resources. Currently developing an Investment Appraisal Criteria (see Chapter 5)
	Develop a SMART Action Plan and monitoring system and share experiences with other businesses and other organisations	Additional staff resources.
	Update planning policy and investigate opportunities planning function to drive carbon reduction. Impacts would span various sectors (transport, buildings, natural environment).	Additional staff resources.
Council Procurement and Commissioning	Change Procurement Policy to incorporate carbon neutral consideration including through social value and more rigorous carbon criteria.	Within existing staff resources.[2]
	Work with all commissioned services and major procurements to ensure they have carbon reduction policies in place.	Additional staff resources.[2]
	Establish monitoring systems commissioned suppliers to account on their carbon performance.	Additional staff resources

Examples of good practice:

Cheshire East Council have developed a Climate Action Plan in response to their climate emergency declaration to reduce both Council 's own and city-wide emissions.

Cornwall Council developed a Responsible Procurement Policy which includes its commitment to environmental sustainability. They also have a Supply Chain Development Programme in order to inform suppliers about the tender process and are improving communication between the council and the market.

Waltham Forest Council are the first Local Authority in the UK to pledge to divest its pension funds away from oil, gas and coal.

Lambeth Council have introduced mandatory carbon reporting[1] as part of their procurement process and have written to engage all current suppliers with the net zero challenge.

Council Strategy and Engagement

Key Recommended Next Steps

Source	Carbon Reduction Measure	Capital Costs and Resources
Council External Engagement	Work with WMCA localise campaigns and policies	Within existing staff resources.
	Develop a brand and communications around the climate change programme.	<£5,000[1] development and additional staff resources
	For major planning applications and development, include a requirements on carbon reduction and management measures	Additional staff resources.
	Prepare a strategy for community engagement over climate change issues and work with community champions	Additional staff resources.
	Host a citizens assembly to engage local people.	Dependent on venue but minimum staff time plus set up costs.
	Form partnerships with businesses to report and reduce emissions and support them to access funding	Additional staff resources.[2]
	Encourage businesses to run training in low carbon industries.	Within existing staff resources.
	Work with schools to deliver engagement activities and LESS CO2 schools.	Additional staff resources.[2]
	Develop website content and materials to be a hub of information for businesses and communities on city climate action.	Within existing staff resources and budgets.

Examples of good practice:

West Sussex County Council have developed a campaign called Make the West Sussex Climate Pledge. They have a had 1,164 pledges so far.

London Climate Business Leader's Initiative – the city-business alliance defines new means of collaborative action between business and government. This encourages those organisations defining emissions reductions targets to disclose progress publicly

Leeds Climate Commission brings together key organisations and actors from the region's public, private and third sector. The aim is to provide advice, monitor progress, foster collaboration and share best practice.

Oxford Citizen's Assembly facilitated a public response to Climate Emergency Declarations which encouraged local engagement with the agenda.

4. Sectoral Analysis: Buildings

Buildings

Interventions Summary

Decreasing building energy demand and electrifying our heating systems

The following measures describe the modelling around reducing the energy demand for heating within domestic and non-domestic buildings:

- Improved insulation: The rollout of deep retrofit measures which drive down the demand for heating in our homes. Measures include: loft insulation, wall insulation (for both cavity and solid walls), superglazing and draughtproofing.
- Commercial space heating and cooling: Improvements to commercial practices which reduce energy demands for heating and cooling, including but not limited to improvements to building fabric.
- Decarbonisation of heating: Considering the uptake of non-fossil fuel sources for heating within homes and commercial properties, including heat pumps, district heating and combined heat and power networks (CHP).
- Appliance and lighting efficiency: Considers the reduction in energy demand from more efficient lighting and appliances, including white goods, electrical devices and all forms of lighting.
- Average temperature of the home: Considers the reduction in energy demand corresponding to the reduction in average temperature of the home. 'Average' denotes the annual average across all homes and implies the use of smart control technologies rather than changes to comfort levels and/or healthy temperatures.
- Electrification of cooking: Models the uptake of electrical cooking systems and discontinuation of gas cookers

The total estimated savings potential of buildings by 2050 is 48 million tCO_2e, with 75% of these savings deliverable in the domestic sector.

Buildings

Background

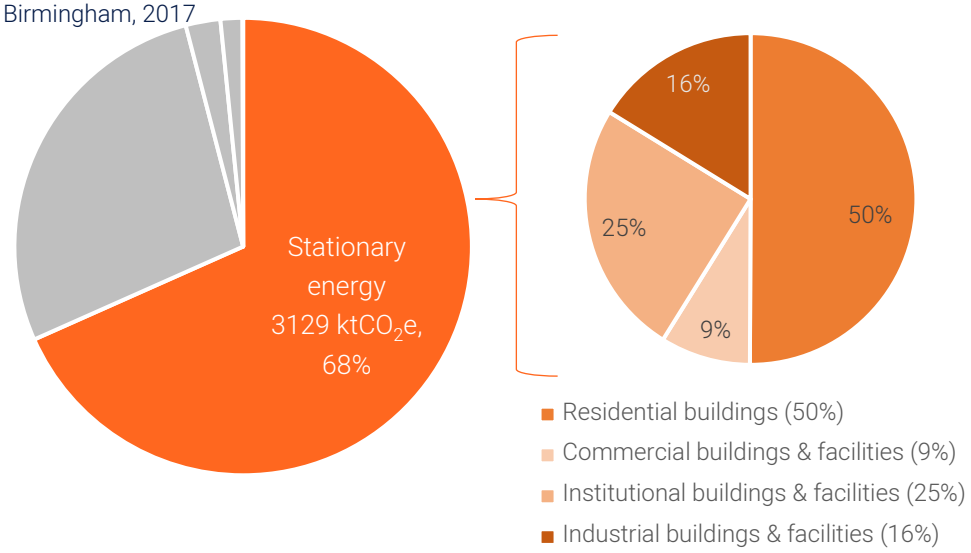
Progress to date:

- Over 3,100 new homes have been built by Birmingham Municipal Housing Trust (BMHT) since 2009 to high design specifications, at least EPC band B [1]
- 60,213 households (c14.7%) had ECO measures installed between 2013 and November 2019 [2]
- £40m has been invested in Leisure Centres managed by Birmingham Community Leisure Trust [3]
- The Birmingham District Heating network, first launched in 2007, has been expanded to comprise three schemes serving a range of building types in the City Centre such as John Lewis, Aston Uni, Birmingham Children's hospital plus council offices and homes [4]
- BCC invested £9.4m under the Birmingham Energy Savers scheme, delivering solar PV installations on 1,700 homes, schools and commercial buildings [5]
- Connected for Warmth is tackling the estimated 8000 homes in the city without central heating, bringing free gas central heating to vulnerable and fuel poor private tenure residents. [6]
- 25 "ECO Pods" (smart energy centres) installed in 25 tower blocks, 90ktCO_2 lifetime savings[7]
- Delivery of cavity wall and loft insulation to council homes on a referral basis [7]

Significant future developments:

- To meet projected population growth, 51,000 new homes will be built in Birmingham by 2031, plus supporting infrastructure including: 2 Regional Investment sites, an Employment site, 350ksqm retail space by 2026, 745k sqm office floorspace and new waste facilities ref [8]
- Plans have been approved for a 10 year council house building programme to 2029 [9]
- HS2 will bring new Curzon station and regeneration plan for Eastside, Digbeth and city centre. £724m Curzon investment programme. Regeneration, delivery of 4000 homes, 600k sqm employment space [10]
- Construction of a Games Village for the Commonwealth Games 2022, with legacy of 1,400 homes

Figure 13: SCATTER sector inventory for direct and indirect emissions from buildings within Birmingham, 2017



68% of EPC-rated homes have a rating of D or below.[11] This is fewer than the national level of 69%.[12]

63% of EPC-rated commercial properties are rated D or lower. This the same as the national level.[12]

Buildings

Relevant Plans and Policies

National

- Building Regulations specify minimum levels of energy efficiency and carbon emissions rates required for new buildings. EPCs are used to compare energy efficiency of homes.
- The government recently consulted on interim building standards for new homes effective in 2020, ahead of a Future Homes standard in 2025. Changes could remove local authority powers to impose higher energy efficiency standards than those in Building Regs[1] The proposals are to cut energy use in new homes by either 20% or 31%, compared to the 50% reduction recommended by some industry experts [2]
- BEIS Heat Decarbonisation Study seeks to provide an overview of the different options for heat decarbonisation and identify issues.
- Minimum energy efficiency standards in the Private Rented Sector prohibit landlords from letting properties if they are rated below EPC Band E [3]
- The Energy Company Obligation (ECO) drives the delivery of energy efficiency improvements in fuel poor households. Funded by energy suppliers, the current programme, ECO3, can support a range of measures depending upon the household tenure [4]:
- Owner Occupied – insulation (solid wall, cavity wall, roof, floor, draught proofing) glazing, efficient heating systems, first time central heating, district heating
- Private Rented Sector (EPC rating A-D) insulation (solid wall, cavity wall, roof, floor, draught proofing), first time central heating, district heating
- Private Rented Sector (EPC rating E,F,G) – solid wall insulation, first time central heating, district heating, renewable heating
- Social Housing – insulation (solid wall, cavity wall, roof, floor, draught proofing) glazing, first time central heating, district heating

Regional

West Midlands 2041 - West Midlands Combined Authority is consulting on five high level actions, including more low carbon 'eco' housing across the region. Planning powers are held locally, but ambition could be constrained without regional agreement on new build standards that exceed national policy.
West Midlands Industrial Strategy – A vision to maximise the clean growth opportunities presented by the region's skills, infrastructure and history of innovation. Whilst not detailed in the strategy there is scope to support the skills and infrastructure needed to overcome barriers and deliver retrofit at scale [5]

Local

Birmingham Development Plan 2031 - Includes a range of relevant policies:

- TP3 New developments will be required to reduce CO2 emissions and water consumption
- TP3 Future requirement for all new non-residential built developments in excess of 1,000 sq. m. gross permitted floorspace or being developed on a site having an area of 0.5 ha or more to meet BREEAM standard excellent, unless commercially unviable
- TP4 The use of low and zero carbon energy sources and technology will be promoted and supported
- TP4 The use of CHP and district heating will be promoted

Route to Zero (R20) - On 11 June 2019 the Council declared a climate emergency. The ambition was set for the Council and city to become net zero carbon by 2030, or as soon as possible thereafter as a 'just transition' allows.
The Council Plan 2019 states that Birmingham will be a city that takes a leading role in tackling climate change. This commitment will embed climate action in the council's decision-making process to make sure that all service areas contribute to the R20 journey.
Property Strategy 2018/19– 2023/24 (BCC) – Strategy for management of non-domestic property assets, excluding schools and transport. States that the full portfolio should "Have a low environmental impact and follow good practice in sustainability"
Extending your home: Home extensions design guide: Supplementary planning document – encourages residents to improve energy efficiency as part of home improvements
Fuel Poverty Action Plan – in development under the Financial Inclusion Strategy and the Health and Wellbeing Board's sub-forum on health inequalities.
The Birmingham Big City Plan is a 20-year City Centre Masterplan is a framework for the future development and regeneration of the city centre.

Buildings

SCATTER Interventions: Domestic Buildings

Measure	Selected Current Context Indicators	SCATTER L4 Pathway		
		2025	2030	2050
a) Improved insulation	16.2% fuel poor households in Birmingham in 2017 (c. 69,692)[1] 68% of EPC-rated homes have a rating of D or below. [2] 233 Watts/°C average heat loss per house (Referred to in the legacy 2050 Pathways tool as thermal leakiness. See definition opposite)	Solid wall insulation retrofits at a rate of 3,708 households per year Loft insulation at a rate of 9,228 households per year Superglazing at a rate of 8,412 households per year.[3] New builds to PassivHaus or equivalent standard 183 Watts/°C average heat loss per house (21% reduction in thermal leakiness)	Solid wall insulation retrofits at a rate of 3,805 households per year Loft insulation at a rate of 9,491 households per year Superglazing at a rate of 8,633 households per year New builds to PassivHaus or equivalent standard 158 Watts/°C average heat loss per house (32% reduction)	The vast majority of households eligible for retrofit have been treated, but continued superglazing at a rate of 8,895 households per year. New builds to PassivHaus or equivalent standard 58 Watts/°C average heat loss per house (75% reduction)
b) Reduction of average temperature[3]	Current annual average temperatures across the whole house are approximately 17.3°C[4]	16.8°C	16.7°C	16.0°C

What is 'thermal leakiness'?

Thermal leakiness is a measure of how well a house **retains heat**. A house with high thermal leakiness will not retain heat very easily and will be more expensive to keep warm. Thermal leakiness varies across the ambition thresholds within SCATTER and depends on three variables, all of which will impact the Watts/°C metric:

1) Thermal conductivity of the building fabric (i.e. .'U-values' of ceilings, floors, walls and windows).
2) Ventilation (i.e. effectiveness of draught-proofing).
3) Temperature difference with the outside (i.e. the average temperature of the home based on the occupant's preference or use of thermostat).

For a full list of retrofit measures see Appendix 8, for a list of EPC ratings see Appendix 9

Buildings

SCATTER Interventions: Domestic Buildings

See Appendix 10 for further detail on the type of heating technologies assumed within SCATTER

Measure	Selected Current Context Indicators	SCATTER L4 Pathway		
		2025	2030	2050
c) Decarbonisation of heat	389,796 domestic gas meters installed (c. 88% of properties)[1] Gas boilers will be banned in new homes from 2025.	33% of household stock have a new heating system Majority of heating systems are gas boilers (both old and new), with some heat pumps[2] (14%)	48% of household stock have a new heating system Majority of heating systems are gas boilers (both old and new), with an increased share of heat pumps (26%).	94% of household stock have a new heating system Majority of heating demand is delivered by heat pumps (77%) with gas boilers only responsible for 12% of total demand.
Estimated carbon saving (from the above space heating & water measures -insulation, heat demand & heat electrification)		**2,369,726 tCO_2e**	**5,043,170 tCO_2e**	**20,933,320 tCO_2e**
d) Appliance & lighting efficiency	Consumption by domestic lighting decreased 7% between 2015 and 2018[3]	Average demand per household is 2.42 MWh (20% reduction relative to 2015)	Average demand per household is 2.12 MWh (30% reduction relative to 2015)	Average demand per household is 0.93 MWh (69% reduction relative to 2015)
e) Electrification of cooking	47% electrified[4]	69% electrified	76% electrified	100% electrified
Estimated carbon saving (from the above domestic lighting, appliances, and cooking).		**2,941,595 tCO_2e**	**5,279,085 tCO_2e**	**15,314,525 tCO_2e**

Estimated carbon savings:

- All savings are cumulative and estimated in relation to 2017 emissions levels.
- The base year of SCATTER is 2015 and so the trend in BEIS data from 2015- 2017 has been applied to the SCATTER data in order to predict the 2017 emissions level.

Buildings

SCATTER Interventions: Non-Domestic Buildings

Measure	Selected Current Context Indicators	SCATTER L4 Pathway		
		2025	2030	2050
f) Commercial space heating & cooling	62% of EPC-rated commercial 'lodgements' are rated D or lower[1]	16% reduction in commercial heating and cooling demand against 2015 levels	24% reduction in commercial heating and cooling demand against 2015 levels	45% reduction in commercial heating and cooling demands against 2015 levels
g) Electrification of heat	89% gas and oil-fired boilers (2015)[2]	58% gas and oil-fired boiler	47% gas and oil-fired boiler	Demand met entirely by heat pumps, resistive heaters and district heating.
Estimated carbon saving (from the above space heating & hot water & cooling measures)		**1,039,858 tCO_2e**	**2,168,304 tCO_2e**	**9,002,845 tCO_2e**
h) Appliances & lighting	National consumption by non-domestic lighting, computers and commercial motors fell 1.7% between 2015 and 2018[3]	7% reduction Non-domestic demand is 287 GWh	10% reduction Non-domestic demand is 277 GWh	24% reduction Non-domestic demand is 235 GWh
i) Energy used for cooking	24% electrified[2]	46% electrified	57% electrified	100% electrified
Estimated carbon saving (from the above commercial lighting, appliances, and cooking)		**474,293 tCO_2e**	**864,863 tCO_2e**	**2,613,094 tCO_2e**

See Appendix 10 for further detail on the type of heating technologies assumed.

Buildings

Delivery

Proposed sub-task groups:

- Housing, Property and Planning Task Force
  - Council Buildings and Estate
  - Domestic Properties
  - Commercial and Industrial Properties

Fuel Poverty

Birmingham contains four of the five LSOAs with the highest levels of fuel poverty, anywhere in the country, with as much as 55% of homes considered to be in fuel poverty 1

The latest Marmot review found that in the West and East Midlands, over 20% of homes fail to meet the Decent Homes Standard, compared to 16% in the South East and 11% in the North East. 2

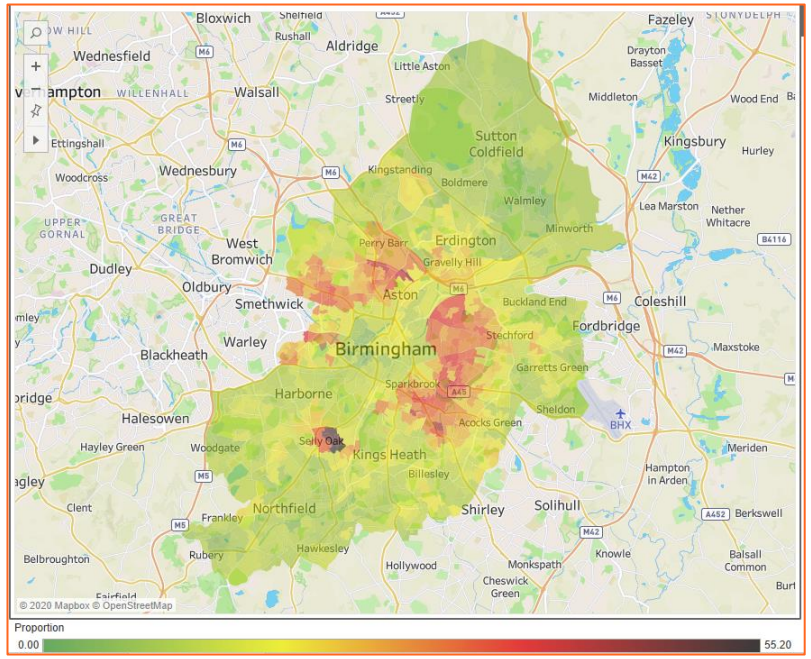


Figure 14 - Fuel poverty by LSOA (Map: Anthesis)

Co-benefits:

- **Health benefits**: Improving the energy efficiency of homes can reduce ill-health:
  - Nearly half of households living in the most energy inefficient homes are in fuel poverty.[3]
  - 10% of excess winter deaths are directly attributable to fuel poverty [4]
  - The BRE estimate that the cost to the NHS of ill-health due to poor housing is £2.5 billion/year, with excess cold the dominant hazard.[5]
  - Children living in inadequately heated households are also more than twice as likely to suffer from conditions such as asthma and bronchitis than those living in warm homes.[6]
  - Those living in homes with lower temperatures (15°C versus 21°C) are also more likely to suffer from mental health problems. [6]
- **Financial savings-** Improving the energy efficiency of buildings can reduce energy bills for organisations and individuals.
  - In a single street of 100 'average' homes, the combined spend on energy will be around £140,000 a year. Cost effective energy efficiency measures could save each household on average £280 per year, money that could then potentially be spent in the local economy. [7]
  - Similarly, a secondary school or college spending £100,000 a year on energy could save around £20,000 a year through implementing low cost energy efficiency measures.[7]
- **Resilience:** Households will be greater protected against future energy price rises as well as being more physically resilient during heatwaves.[7]
- **Job creation**: Creation of jobs and upskilling of local people. Two-thirds of jobs in the low carbon and renewable energy economy are in energy efficiency products sector.[7]

Buildings

What is needed from Stakeholders?

Birmingham City Council:

- **Direct Control-** Ensure all council-owned buildings, including housing stock improve energy efficiency standards and consider opportunities to carry out deeper retrofits alongside upgrades of buildings.
- **Stronger Influence** – Work in partnership with other council buildings such as leisure centres and schools to improve their energy efficiency.
- **Medium Influence** – Utilise the R20 Task Force to encourage and support all other stakeholders to improve energy efficiency of their properties and explore ways to facilitate action.

West Midlands Combined Authority:

- Continue to set high levels of ambition and policies for carbon reduction in homes through the WMCA 2041 Action Plan.
- Continue to work in partnership with each of the seven local authorities in the region to deliver mass retrofit programmes and facilitate the deployment of low carbon energy and heat networks.
- Lobbying of national government to provide funding for retrofitting in the region and to develop high standards for building regulations and planning policies.

National Government:

- Develop progressive planning policies and more stringent building regulations which ensure new developments will be built to the highest energy efficiency standards and take into account the whole life running costs.
- Provide regulatory commitment to 'deep retrofit' as part of the route to net zero.
- Provide funding and incentives to support councils, businesses and individuals to retrofit buildings.
- Address contradictions that dis-incentivise improvements e.g. business rates increases that penalises investment in renewable energy technology.

Businesses:

- Measure and report on energy usage and efficiency of buildings.
- Retrofit offices and commercial buildings to higher energy efficiency standards.
- Procure more energy efficient appliances.
- SMEs to access support on energy efficiency and working in low carbon via University programmes such as EBRI, ATETA and ARLI and at STEAMhouse.

Other Partners:

- **Sustainable Homes Action Partnership (SHAP)** – Implement proposed 3 year £150m fuel poverty programme for the region [1]
- **RSLs** – Ensure all social housing is a pathway to zero carbon
- **R20 Task Force** –Use their networks to widen engagement and action, share learnings and leverage collective lobbying influence
- **Energy Capital –** provide clear framework for delivery of regional energy networks
- **Universities: Birmingham, Aston, City** – Provide thought leadership and research
- **Birmingham Community Healthcare NHS Trust** – investigate budget pooling to achieve shared objectives and deliver preventative actions. Decarbonise assets
- **•Greater Birmingham and Solihull LEP** – Develop strategy to promote "mass customisation" and support low cost retrofit in the region [2]

Community groups:

- Promote the use of smart technology amongst the community
- Consider collective retrofit of whole streets to take advantage or economies of scale

Local Residents:

- Purchase energy efficient appliances and lighting e.g. LED bulbs.
- Upgrade home insulation e.g. draught-proofing, wall/ loft insulation, double glazing
- Sign up for a smart meter to monitor energy usage
- Consider deeper retrofit when doing renovations or an extending
- For those in rental properties, seek properties with higher EPC ratings and question landlords on energy efficiency.

Buildings

Key Recommended Next Steps

Source	Carbon Reduction Measure	Costs and Resources
Domestic Properties - Council	a&b) Review investment plans for stock with EPC rating E,F or G (15% of social housing[1]) to maximise ECO3 funding available for wall, roof, floor insulation, glazing and first time central heating installed by April 2022. These present 'quick win' opportunities that should be taken as a priority. See further info on ECO on page 56)	Within existing resources. Officer time.
	a-e) Engage with social housing providers as they will have influence over a significant proportion of properties and can independently help to support the city's goal. See MHPP Case Study as an example	Within existing resources. Officer time
	a-f) Introduce total cost of occupation approaches to procurement evaluation of new build projects to include not only the initial costs of investment but also the ongoing maintenance and the day to day running costs. These models support investing more up front to secure long-term cost savings and quality outcomes	Within existing resources. Officer time.
	c) Contact ECO obligated utilities direct to secure a strategic funding partner	Within existing resources. Officer time
	g) Investigate feasibility of decarbonising heat supply to Cambridge and Crescent Towers by connecting BDEC network to the Tyseley Energy Park and Tyseley Energy from Waste plant	Resources would be needed to manage contractual considerations between parties (BCC, Engie, Veolia, Cogent) Pipeline would need to be constructed. Commercial arrangements would determine who would build own and operate it, recovering investment costs through operation [2]

Examples of good practice:

Copenhagen City Region - One of the world's largest heat networks, supplying reliable and affordable low carbon hear to 1million residents. The 160km long pipe network captures heat from across the city region from a combination of biomass CHP (70%), energy from waste (25%) and back up boilers (5%). It is linked to the local municipal networks via heat exchangers

NEA trialled 9 different home battery storage systems. The findings address key considerations across battery systems, user considerations and product evolution. Savings ranged from 20p to £1.20 per day.

MHPP – Manchester Housing Providers Partnership are a collective of over a dozen social landlords that have pledged to support the City's net zero target. Various members have embarked on the development of zero carbon strategies and asset management plans as a result (with further actions planned).

Buildings
Key Recommended Next Steps

Source	Carbon Reduction Measure	Costs and Resources
Domestic Properties - Council	a-e) Review asset management plans and align with zero carbon. This may involve shifting the timing of planned maintenance and calculating the just the additional cost of replacing assets with alternative technologies or performing other efficiency work (relative to what was planned to be incurred already). Stock modelling platforms may support the quantification of costs for technologies required.	Zero carbon stock modelling platforms require separate commission; varying degrees of sophistication available (see case studies overleaf). Asset management plan review could be performed by existing officers or commissioned for between £10-20,000.
	a-e) Re-evaluate the case for solar PV given the introduction of the smart export guarantee and technological advances in home battery storage	Existing CSE reports on solar PV potential

Examples of good practice:

IRT DREam – Stock modelling platform that is helping registered providers to better understand their emissions from existing stock and run scenarios as to how certain measures may save in the future.

Buildings

Key Recommended Next Steps

Source	Carbon Reduction Measure	Costs and Resources
Domestic properties – non Council.	a&b) Utilise powers under ECO3 Local Authority Flexible Eligibility to enable the Council to qualify private sector residents as eligible for funding and increase homes able to access funded energy efficiency improvements, working with energy companies.	Within existing resources. Officer time to draft Statement of Intent and sign off referrals. Lead generation and management could be provided by a third party partner
	a&b) Utilise existing EPC and fuel poverty data to develop a segmented approach to improvement, initially targeting areas of high need and high opportunity	Haringey (population 271,000) is funding a team of 15 staff, at a cost of £525,000 a year, to achieve improvements to C or better in 86,000 non-council owned homes over next 15 years, or 5,700 a year.[1]
	a&b) Be a trusted source of advice for deep retrofit and low carbon technologies through exemplar projects, supporting investment from home owners.	Budget allocated for exemplar projects. May require additional funding for communication strategy and support
	a&b) Revisit 2007 "Extending your home" SPD through the Birmingham Design Guide to improve recommendations on insulation and energy efficiency.	Within existing resources Officer time.
	a&b) Subject to government consultation outcomes, require new homes to meet net zero emissions and be future-proofed against climate impacts (e.g. over-heating, floods)	Within existing resources Officer time.
	a-e) Better communicate energy efficiency standards, behaviours and activities in the private rental sector by: - Offering advice and financial support to those looking to improve property energy efficiency - Effectively enforce Minimum Energy Efficiency Standards	Proposed minimum of one officer to lead in coordinating efforts including lobbying central government, sourcing additional funding, referring cases for enforcement (c.£50,000 per annum)
	a-e) Explore opportunities for private rental sector policies as a high priority sector for energy efficiency improvement.	Within existing resources. Officer time.
	a-e) Develop a Sustainable Design and Construction SPD to dispel cost misconceptions (see Passivhaus Trust case study), promote whole life cost models and support higher development standards	Within existing resources. Officer time.

Examples of good practice:

Torridge District Council's Heat Devon scheme, launched 2018, has seen 1,500 homes receive ECO funded improvements. Of these 83% have been eligible via Local Authority Flexible Eligibility. The scheme, lead by Happy Energy, has delivered over £30million of customer lifetime bill savings [3]

Cornwall Council undertook an education campaign to help landlords understand relevant housing standards regulations. They have also developed a responsible landlord scheme to alongside this, as well as a 'Cornwall Rental Standard' that details all key regulations.

Exeter City Council has developed over 103 certified Passivhaus* homes and have multiple other low energy projects in the pipeline including a leisure centre, swimming pools, offices and care homes.

Passivhaus Trust offer a range of resources on cost-benefit. One source suggests a Passivhaus only costs 8%-4% more to build, and is cheaper overall when comparing overall build and operational costs over lifetimes.

Buildings
Domestic Sector Funding Opportunities

EPC data indicates that there is still considerable opportunity for simple insulation measures across the housing stock (all tenures). Where households are on a low income or vulnerable to the effects fuel poverty, ECO funding may be available. Realising all potential energy saving opportunities recorded in the EPCs could reduce domestic CO_2 emissions by over 95% [1]

Improvement opportunity	Homes
Solid wall insulation	38%
Underfloor insulation	37%
Pitched roof insulation (<100mm existing)	26%
Cavity wall insulation	15%

Table 5: Improvement opportunity of homes in Birmingham

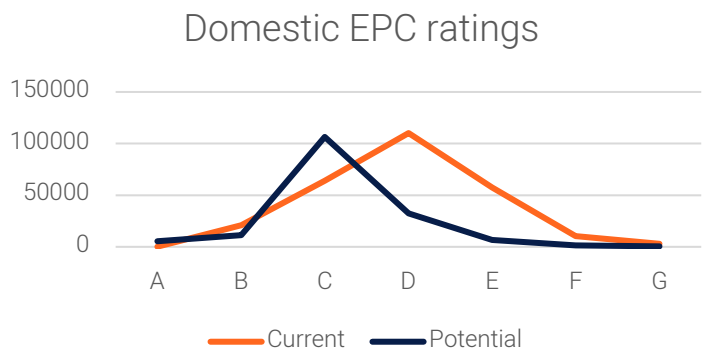
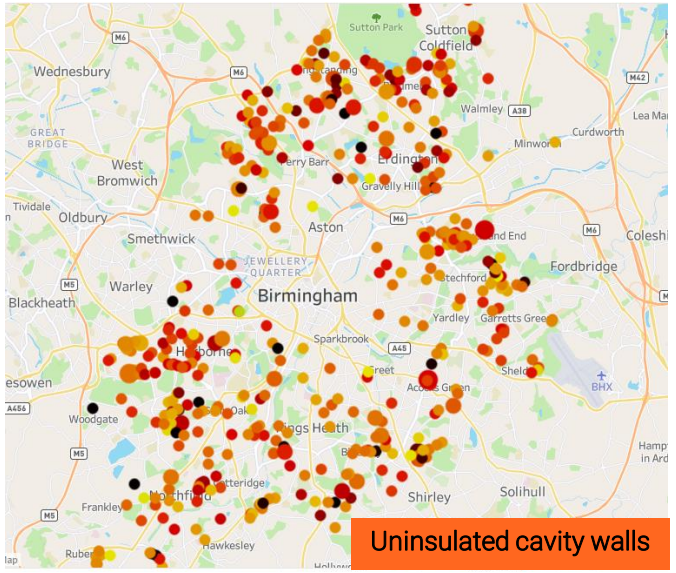
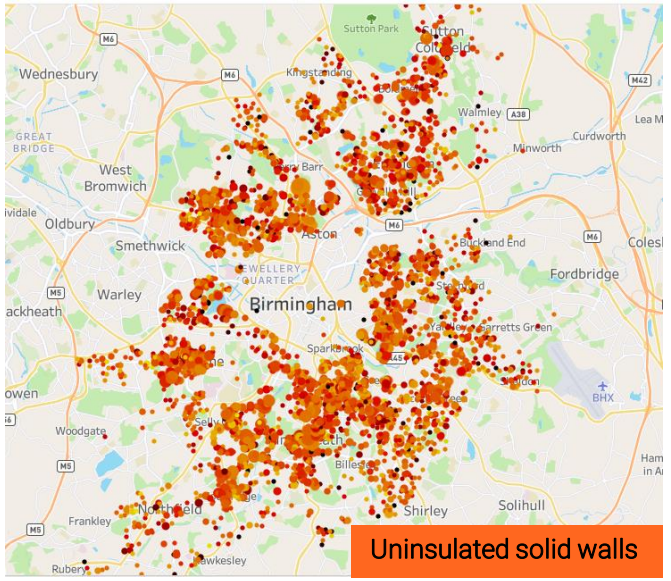


Figure 15: EPC ratings of domestic properties in Birmingham

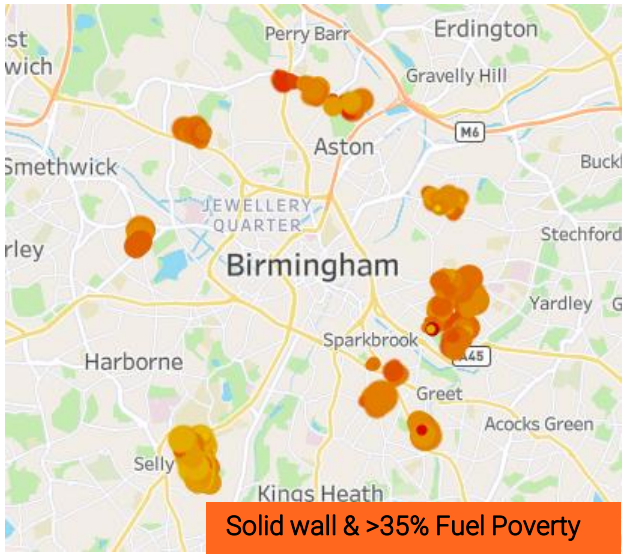




Datasets can be mapped and overlaid to prioritise and identify clusters (Source: Anthesis).

The maps clearly show the scale of challenge for treating uninsulated solid walls relative to uninsulated cavity walls.

Targeting areas with high rates of fuel poverty and occurrence of uninsulated solid walls produces clear clusters that could be targeted for area based schemes



1. https://epc.opendatacommunities.org/

Buildings

Key Recommended Next Steps

Source	Carbon Reduction Measure	Costs and Resources
Council buildings and estate	f) Implement standardised monitoring plus annual reporting of energy use and results of Display Energy Certificates (as applicable) at all council sites, including those not covered by centrally procured energy contracts.	Proposed one officer to lead in coordinating efforts (c.£50,000 per annum)
	f-i) 3-year portfolio plans to detail achievement of reduction in line with budget and include a way of assessing and monitoring the carbon impact of actions.	Dependent on the size, complexity, age, operations, conditions of each portfolio Investment grade audits can be commissioned per building ranging £2,000-£5,000. [1]
	g) Investigate the potential to decarbonise the heat supply to council offices, for example by connecting BDEC network to the Tyseley Energy Park and Tyseley Energy from Waste plant.	Within existing resources. Officer time for investigation of potential sites. Pipeline would need to be constructed. Commercial arrangements would determine who would build own and operate it, recovering investment costs through operation [2]
	g) Investigate the potential of implementing combined heat and power networks across the city, and identify opportunities where the Council can work with both public and private sector bodies regionally to maximise CHP systems.	Officer time.
	f-i) Build climate change targets into the Property Strategy 2018/19 – 2023/24. Allocate a carbon reduction target to each portfolio matching the city's carbon budget.	Within existing resources. Officer time.
	f-i) Provide clearer detail on how property portfolios will demonstrate low environmental impact and follow good practice in sustainability.	Within existing resources. Officer time.

Examples of good practice:

Cambridgeshire County Council adopted the Re:fit framework to increase energy efficiency, reduce CO2 emissions and improve the condition of its buildings. The estimated potential of this scheme is to deliver 1.2MtCO2 savings over the lifetime of the project. The project is available to schools and public sector buildings across the county.

Welsh Government Planning Policy requires projects with a floor area greater than 1000m^2 to achieve a BREEAM Very Good rating and those receiving core funding from the Welsh Government to achieve an Excellent rating.

Buildings

Key Recommended Next Steps

Source	Carbon Reduction Measure	Costs and Resources
Commercial and industrial	f) Develop and implement a pathway for increased measurement and reporting of i) energy demand and ii) improved energy efficiency in privately owned commercial buildings.	Team of three officers to provide outreach to business and manage project (£150,000 per annum) [1] The Carbon Trust has a free carbon footprint tool for SMEs.
	f) Use energy monitoring and EPC data to drive a segmented approach, tackling those with largest impact and biggest opportunity.	Officer time to complete analysis / outsource
	f) Explore the potential for introducing requirements for new commercial developments to report on operational energy performance, and as part of that, on space heating demand	Officer time.
	f-i) Showcase leading examples of decarbonisation from key commercial players to spread knowledge and promote ambition and joint working.	Utilise connections within the R20 Task Force
	f-i)Engage with businesses and embed energy efficiency into business support programme – link to University business support programmes.	Officer time.
	h) Explore options for mass roll out of energy efficient lighting, the most frequent improvement recommendation in non-domestic EPCs in the city (21%).	Officer time.

Examples of good practice:

Greater Manchester – Decarbonising Greater Manchester's Existing Buildings sets out a plan for addressing the contribution of existing buildings to the city region's carbon footprint. This is in the context of the 5 Year Environment Plan, setting am ambition to be carbon neutral by 2038. The plan includes recommendations for taking action, including decarbonising commercial buildings.

Carbon Trust Green Business Fund – Since 2016 hundreds of small businesses have been helped to identify an average potential £8,230 saving on their energy spend.

Welsh Government Planning Policy requires projects with a floor area greater than 1000m^2 to achieve a BREEAM Very Good rating and those receiving core funding from the Welsh Government to achieve an Excellent rating.

4. Sectoral Analysis: Transport

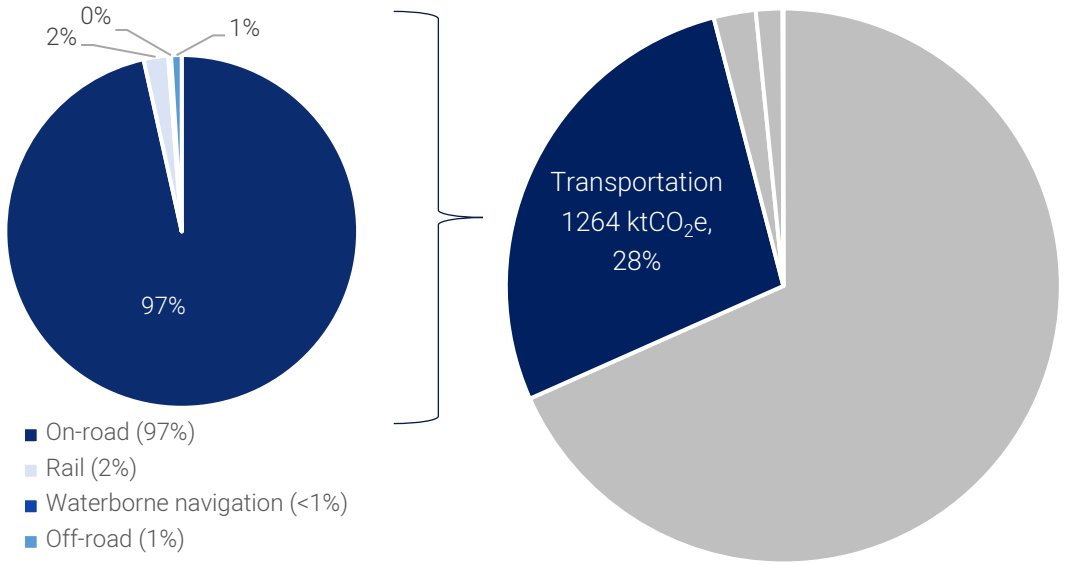
Transport
Background

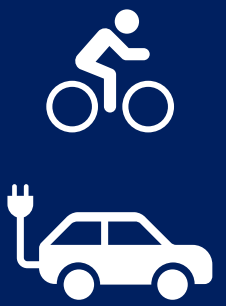
Progress to date:

Draft Birmingham Transport Plan (2020) is about providing a sustainable, green, inclusive, go-anywhere network. Under the plan:

- Metro network is being extended, connecting the city centre with Edgbaston and Digbeth including HS2 at Curzon Station.
- Various new rail stations opening 2020/21, including rebuild of University Station, increasing capacity from 500,000 to several million; Midlands Rail Hub by 2028, linking two halves of the Birmingham Rail network – Birmingham New Street and Snow Hill
- Clean Air Zone 'Brum Breathes' within the ring-road being implemented Summer 2020.
- Currently tendering for update of electric vehicle charging network.
- Sprint routes will include a cross-city bus concept is being explored, sending buses all the way through the city and onwards, rather than stopping and turning.
- Cycling and walking investment plan for active travel in place, including widening pedestrian walkways and resurfacing towpaths; Cycle hire scheme across the West Midlands is currently being procured. £15m has been spent on the Birmingham Cycle Revolution (BCR) up-grading cycle paths, including two-way cycle paths on the main commuter routes such as Selly Oak to the city centre).
- Public transport use increased in 2015
- Transport for West Midlands (TfWM) are currently looking at the use of demand responsive transport (such as shared dial-a-ride and door-to-door services) at developments including Langley and Peddimore.
- Consolidation sites for freight have been considered but are not yet commercially attractive. BCC is currently applying for funding for cargo bikes to give to businesses on an indefinite basis to encourage them to move away from cars and trucks.
- Council-owned fleet is currently under review to get rid of old pool cars and remove staff parking under main office building.
- The intention is to replace 70 of 169 BCC-owned diesel Refuse Collection Vehicles (RCVs) - £12m budget - looking to award a contract to a company developing EVs.
- Currently tendering for an update of the city-wide electric vehicle charging network.

Figure 16: SCATTER sector inventory for direct and indirect emissions from Transport within Birmingham, 2017





3% of Birmingham residents usually cycle to and from work and 3% of all trips are made by bike.[3]

Currently 50 Public EV Charging points in Birmingham.[4]

Transport
Relevant Plans and Policies

National

The Government's Transport Decarbonisation Plan (to be published in 2020) will take a coordinated, cross-modal approach to deliver the transport sector's contribution to our decarbonisation targets.

The Department for Transport has recently published strategies to reduce carbon emissions across transport, including the £1.5 billion Road to Zero, Maritime 2050 and the Clean Maritime Plan as well as the Aviation 2050 green paper, and upcoming aviation strategy which will be published early next year.

The government announced (early 2020) its intention that the ban on selling new petrol, diesel or hybrid cars in the UK will be brought forward from 2040 to 2035 at the latest.

Regional

TfWM Movement for Growth (accessed 2020) is a set of policies and plans for the WM transport system designed to complement the WMCA Strategic Economic Plan

TfWM Park and Ride work (accessed 2020) Information on the park and ride expansion and development programme

TfWM Zero Carbon 2041 (2020) details 74 measures aimed at increasing the rate of greenhouse gas reduction each year to achieve the target of net zero greenhouse gas emissions by 2041

TfWM future mobility (accessed 2020) promotes strategic actions to deliver a mobility eco-system befitting of a rapidly evolving world

HS2 Connectivity Programme (2015) to ensure the benefits from the Birmingham HS2 high speed rail link hub are spread as far as possible across the region

WM Congestion Management Plan (2018) aims to address and mitigate issues around increase road usage through improving capacity, improving efficiency and managing demand

TfWM Cycling Charter (2014) outlines the key principles for regional partners to deliver the full potential of the region's active transport

Birmingham Airport Masterplan (2018) for developing the airport as an international hub for the Midlands and one of Europe's leading regional airports

Transport

Relevant Plans and Policies

Local

The Sprint network is a scheme comprised of seven routes improving connectivity across the region with rapid, enhanced bus routes on their own segregated lanes, linking key residential and employment areas whilst improving connectivity (accessed 2020)

Expansion plan and investment programme portal for the tripling in size of the tram network (accessed 2020)

Birmingham Development Plan (2017) has clear policies on sustainable transport

Birmingham Walking and Cycling Strategy and Infrastructure Plan (2020) sets out plans for active transport initiatives

The Birmingham Transport Plan 2031 (2020) describes what the city needs to do differently to meet the demands of the future

The Birmingham Big City Plan is a 20-year City Centre Masterplan. Not a statutory planning document, but has been endorsed as a framework for the future development and regeneration of the city centre.

Birmingham Clean Air Zone – details on the zone and the targeted action being taken to improve air quality (accessed 2020)

Details on short-term exemptions from the clean air zone charges, and additional support and incentives (accessed 2020)

Details on EV charging plans for Taxis, PHVs, and public use (accessed 2020)

Mayor Andy Street's vision for 2040 to expand rail and tram networks (accessed 2020)

The Draft Parking Supplementary Planning Document (SPD) includes revised parking standards for new developments which reflect new national planning guidance and support the delivery of the Birmingham Development plan, the city's Clean Air Strategy and the forthcoming Birmingham Transport Plan (2020)

The introduction of a Workplace Parking Levy is being scoped as part of a Full Business Case analysis

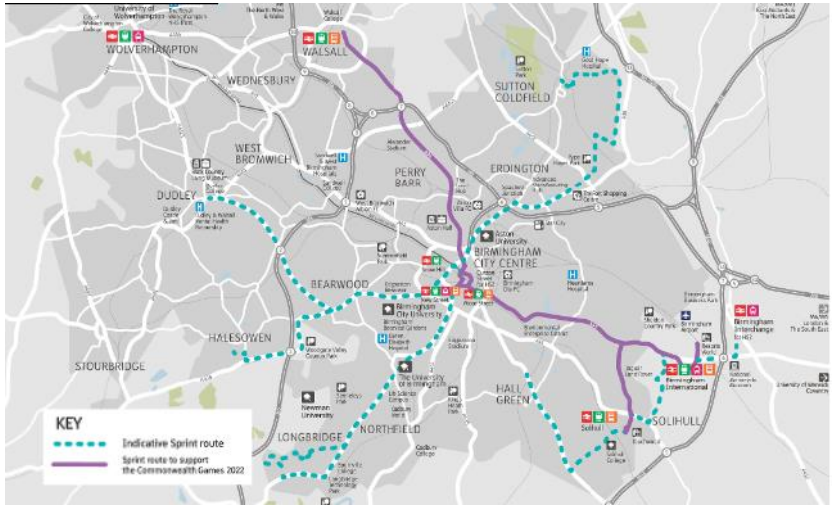


Figure 17: Map of the Sprint Network 2020

Transport

SCATTER Interventions: Modal Shifts

Measure	Selected Current Context Indicators	SCATTER L4 Pathway		
		2025	2030	2050
a) Distance reduction	85% of trips within West Midlands are not to city centre. 6% are to Birmingham city centre. Access to the city centre for private cars to be limited with no through trips.1 Increasing numbers of residential units (estimated 12,800 new homes) in the city centre.[2]	Overall travel demand drops 17% relative to 2015 levels	Overall travel demand drops 25% relative to 2015 levels	Overall travel demand drops 25% relative to 2015 levels
b) Significant modal shifts	Growth by 2031 is also expected to generate an estimated 1.2 million additional journeys on Birmingham's transport network every day A quarter of all car journeys undertaken by Birmingham residents are for less than a mile.[2]	6% reduction in car transport share against 2015 levels Modal share of public transport (rail & bus) is 18% Modal share of active transport (walking & cycling) is 6%	10% reduction in car transport against 2015 levels Modal share of public transport (rail & bus) is 20% Modal share of active transport (walking & cycling) is 6%	22% reduction in car transport against 2015 levels Modal share of public transport (rail & bus) is 29% Modal share of active transport (walking & cycling) is 9%
Estimated carbon savings are incorporated overleaf as they are interlinked with the passenger vehicles remaining on the road.				
c) Modal shift of freight and increase in efficiency	Data from vehicle licensing suggests there are 4,260,000 LGVs and 528,300 HGVs on the road.[3] 71% of freight emissions in the UK are from road.[4]	Road freight is 99% diesel[5]	Road freight is 98% diesel	Road freight is 96% diesel
Estimated carbon savings (from changes to road freight)		755,293 tCO_2e	1,730,404 tCO_2e	6,434,667 tCO_2e

Refer to Appendix 11 for further information on assumptions on other modes of transport.

Transport

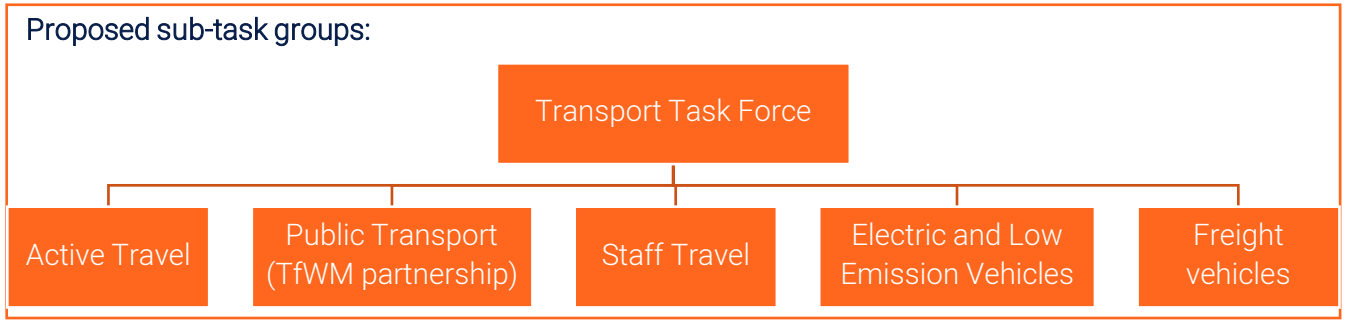
SCATTER Interventions: Decarbonising Transport

Transport Glossary
EV – Electric Vehicle
PHEV – Plug-in Hybrid Electric Vehicle
HEV – Hybrid Electric Vehicle
ULEV – Ultra Low Emission Vehicle

Measure	Selected Current Context Indicators	SCATTER L4 Pathway		
		2025	2030	2050
d) Phase out of fossil fuel cars and shift to zero carbon cars	Ongoing issues with electrification of black cabs: driver-ownership, cost to replace, etc. There are currently 50 public EV charging points in Birmigham.[1]	51% EV, 13% PHEV/HEV, 36% petrol/diesel	75% EV, 14% PHEV/HEV, 11% petrol/diesel	100% of cars are EV.
e) Phase out of fossil fuel buses and shift to zero carbon buses	There are over 4,000 buses and coaches licensed in Birmingham, and around 2,300 buses operating in the West Midlands [2] Transition to Euro VI engines. Further vehicles with Euro IV and V engines could be retrofitted with clean technology to reduce emissions. H_2 bus orders approved by city council for 22 new zero-emission buses (~£500k each) to run on key routes [3]	48% EV, 40% PHEV/HEV, 12% petrol/diesel	76% EV, 24% PHEV/HEV	100% of buses are electric
Estimated carbon savings (from above road transport changes)		3,727,711 tCO_2e	7,848,932 tCO_2e	27,068,375 tCO_2e
f) Rail electrification, with a view to clean electricity use g) Hydrogen powered rail	Some electrification of lines. Seen as more long term. Birmingham to Trent Valley recently completed. Snow Hill Line – no current proposals but is a want. Investigating hybrid trains e.g. Sutton Park Line. UK's first hydrogen train, HydroFLEX, will be tested on the mainline railway following a successful proof-of-concept [4]	Rail is 100% electrified	Rail is 100% electrified	Rail is 100% electrified
Estimated carbon savings (from above rail transport changes).		454,938 tCO_2e	864,863 tCO_2e	2,431,375 tCO_2e

Transport
Delivery

Proposed sub-task groups:



Co-benefits

- **Health benefits -** Sustainable transport has multiple health benefits through reducing air pollution and increasing physical activity:
  - Poor air quality has been linked to around 40,000 deaths a year in the UK.[1] Up to 900 people die annually in Birmingham as a result of air pollution.[2]
  - The cost to the economy of pre-mature deaths related to poor air quality is estimated to be £54bn a year.[1]
  - The main air quality issue in Birmingham is elevated levels of nitrogen dioxide (NO_2) and particulate matter, particularly within the City Centre area as a result of road traffic emissions. [2]
  - Improving air quality can also help to reduce health inequalities – air pollution levels have been found to have strong association with deprivation levels.[3]
  - Distance reduction will encourage more active travel as walking and cycling become a more viable choice. Increasing physical activity could save the NHS £17bn within 20 years by reducing the prevalence of conditions such as type 2 diabetes and heart disease.[4]
- **Reduced congestion** - Sustainable transport reduces the number of vehicles on the road, improving transport flows.
- **Financial benefit of electric vehicles -** Electric vehicles are often cheaper to run per mile and so can offer substantial fuel savings. For instance, electric cars typically cost £2-£4 to fully charge, for a range of 100 miles whereas a petrol or diesel car costs £12-£18 to drive 100 miles.[5]
  - There are also tax benefits for companies who chose electric vehicles. Under the plans, zero emission, 100% electric cars will pay no company car tax in 2020/21, 1% in 2021/22 and 2% in 2022/23.
  - Pure electric vehicles are usually cheaper to for individuals or companies to service and maintain compared to equivalent vehicles with internal combustion engines.

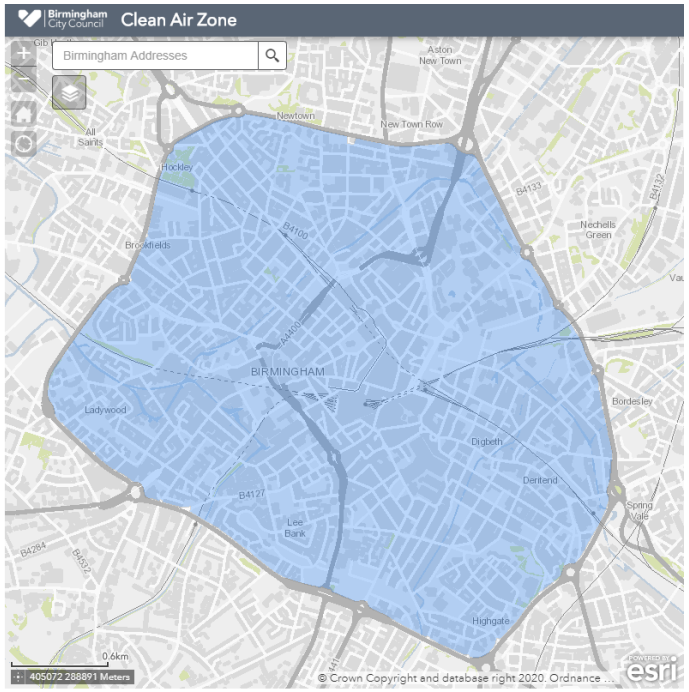


Figure 18: Birmingham Air Quality Management Zone[6]

Transport

What is needed from Stakeholders?

Birmingham City Council:

- Direct Control – Develop strategy and relevant policies to ensure council fleet, business travel and staff commuting are low or zero emissions. Provision of sustainable transport infrastructure including for walking and cycling.
- Stronger Influence – Work with strategic partners including schools, taxis and businesses to reduce emissions from their transport sector. Work with planning policy and develop guidance and standards to support transport infrastructure.
- Weaker Influence- Provide guidance to business and residents on reducing travel, low emission vehicles and modal shift. Ensure the infrastructure is in place to support this.
    - Connect activities with other travel to work areas, not just city areas
    - Facilitate clearer overall approach, and align charges and incentives to addressing freight deliveries and emissions, including delivery drivers.

Businesses:

- Business park responsive demand management e.g. route planning via booking systems for employees to maximise efficiency. E-share cars, car-pools.
- Use planning application approvals, and S106 requirements for buses, walking, cycling etc. Work more with big employers like JLR. Workplace parking levy to encourage modal shift in Clean Zone. Create a travel plan and hierarchy for methods of low-emission business travel and carry out staff commuting survey.
- Develop training for staff and business on travel and scale of its carbon impact.
- Provide facilities that enable staff members to cycle e.g. cycle parking, lockers and showers and consider developing a cycle to work scheme.
- Provide incentives and rewards for staff who opt for low-emission travel.
- Train drivers on green driving techniques and invest in telematics system to help optimise routes.
- Switch company cars to electric or low emission vehicles.
- Review HR policy to enable working from home.
- Airport and HS2. Work to eliminate need for UK domestic flights from Birmingham, and improve connections to London.

WMCA (Transport for West Midlands; West Midlands Rail Executive)

- Link-up strategy to address cross-city emissions and last-mile delivery with regional distribution centres, especially around Rugby and Daventry
- Develop strategy and incentives to shift more HGV based freight to rail and boat
- Coordinate efforts to reduce taxi emissions through joined-up approach to licensing from local authorities
- Midlands Connect – review freight links to Felixstowe and other ports, and strategy for reducing road and air freight from East Midlands and other airports.

National Government:

- Finance/subsidise the replacement of high-polluting buses and vehicles and introduce a scrappage scheme
- Provide funding for electric or zero emission buses
- Provide funding and incentives for EV charging point installation
- Support research and development into other low-carbon fuels e.g. hydrogen and greener aviation technologies
- Support Local Authorities and City regions to implement low emission zones.
- Provide funding for the development of walking and cycling infrastructure.
- Assess the use of smart technology on motorways to reduce emissions; Highways England to provide greater clarity
- Continue to deliver rail electrification and hydrogen power where feasible alternative

Other Partners

- Taxi-drivers – trade in diesel vehicles, consider switching to electric given the potential for a clean air zone. Communicate with the council over future transport plans.
- Schools – encourage children to walk or cycle to school as well as educate on road safety. Ensure facilities are available at schools for children to use active transport e.g. bike racks. Develop communication with parents over the benefits of active travel and anti-idling.

Community groups:

- Cycling and walking forums – continue to promote cycling and walking
- Create community walking buses to schools.
- Housing development responsive demand management

Local Residents:

- Opt to walk or cycle where possible and opt to use public transport for longer journeys.
- Invest in an electric or low-emission car and share car journeys where possible.
- Consider the carbon footprint of holidays and use a carbon calculator to plan journeys.

Transport

Key Recommended Next Steps

Source	Carbon Reduction Measure	Costs and Resources
Council's own transport	a) Equip all drivers of council vehicles with the necessary knowledge to more appropriately plan journeys in order to minimise disruption and maximise carbon saving.	The Energy Saving Trust currently offer subsidised driver training programmes. Investment in telematics may be required to monitor mileage. One telematics platform Appy Fleet estimates £48 per vehicle (based on £4 per driver, per month)[4]
	b) Work with Council Behaviour Change task force to reduce emissions from staff commute, including encouraging car-sharing, active travel and public transport.	Within existing resources.
	d) Review and update fleet management plan: Specify that for certain categories of vehicle, only Ultra-Low-Emission Vehicles (ULEV) are permitted	EV have a lower whole life costing for EVs e.g. Comparing an EV and ICE pool car over 5 years saves around £3,300. Comparing an EV and ICE van over 3 years saves around £3,100.[1]
	d) Implement strategic plan to introduce low emission vehicles into the HGV fleet (including waste and highways).	No accurate projected costs are available at this time.[3]
	d&e) Review opportunities for the installation of EV charging points on council premises.	50kW charging point: £17,000-£33,000.[2]

Examples of good practice:

Glasgow City Council are aiming for all of their fleet vehicles to be emission free by 2029. This includes the conversion of 23 gritters to dual fuel hydrogen.

Leeds City Council have electrified 16% of their total van fleet. It is estimated that these vehicles will travel 450,000 miles per year leading to fuel savings of £13,500 per year and savings of 52 tCO_2 to 2020.

Oxford City Council All registered drivers at the council were required to complete the EST smarter driving course. This achieved a 17% reduction in fuel use in the first year. This level of reduction could save the council an estimated £69,000 and 150tCO_2. per year.

Transport

Key Recommended Next Steps

Source	Carbon Reduction Measure	Costs and Resources
City-wide transport	a) Facilitate the setting-up of shared vehicle tracking, freight and distribution hubs for deliveries across the City and into the city using low-carbon vehicles. Provide clearer signage and restrictions on selected routes to reduce emissions	Officer time to facilitate with partners, and review opportunities.
	a) Review planning guidelines to support creation of high-density, mixed use communities that encourage public and active travel use. Review planning for car-club parking to encourage uptake	Within existing resources.
	a) Request developers through planning conditions (linked to policies in the BDP and Parking SPD) to include charge points and incorporate infrastructure for low-carbon travel e.g. segregated cycle lanes	Within existing resources.
	b) Further encourage cycling through accelerating strategic high-quality walking and cycle routes	Variable on type of cycle route; range from £0.1-2m per km.[2] Resurfacing existing cycle paths (such as those in green areas or along waterways) are c. £0.18m per km. Multi-lane signalized junctions can cost up to £2m per km.
	b) Further roll out of emissions-based parking permits & charges for most polluting vehicles	Set up costs will depend on the system chosen; a congestion charge could potentially generate income Officer time to review opportunities.
	b) Active campaign to limit short trips to discourage people driving for commute and school run	Additional staff resources. Officer time to develop and run campaign.
	d) Encourage taxi companies to move to low emission vehicles by supporting grants and by providing incentives	Additional staff resources. Coordination with other local authorities
	e) Enable the rapid shift to electric vehicles through increased EV charging and facilitate through bus fleet, and LGV/HGV licensing	Funding is available to local authorities at 75% leaving £2,500 per charge point for the LA to fund.[1] £10 million fund about to buy new, or retrofit existing vehicles to latest emissions standards

Examples of good practice:

Nottingham City Council has introduced a Workplace Parking Levy to tackle traffic congestion. Money raised has helped to fund extensions to the tram system, as well as the redevelopment of Nottingham Station.

TfL are aiming to deliver the greenest taxi fleet in the world. They plan to do this through introducing new licensing requirements for new taxis to be Zero Emission Capable (ZEC), providing grants for ZEC vehicles and reducing vehicle age limits.

Edinburgh City Council's Electric Vehicle Framework outlines that in residential developments where there are 10+ parking spaces, every 6 spaces should include an electric vehicle charging point.

4. Sectoral Analysis: Waste

Waste

Interventions Summary

Improving waste streams and improving the efficiency of industrial processes

The following measures within the waste sector are defined within the tool:

- Waste reduction: An overall reduction in the weight of waste produced across all streams, for both commercial properties and domestic homes.
- Recycling rates: Models the different destinations for waste streams.

The in-boundary emissions impacts will largely relate to treatment (if it occurs in boundary) and transport. However, it is important to note that there are other emissions impacts associated with waste that may occur outside of the authority boundary. For example, in the production process associated with the item that has been consumed.

Where such emissions occur outside of the city boundary; the associated embodied emissions are not be accounted for here - these would only be reflected using consumption-based accounting which relies on methodologies outside of the scope of SCATTER.

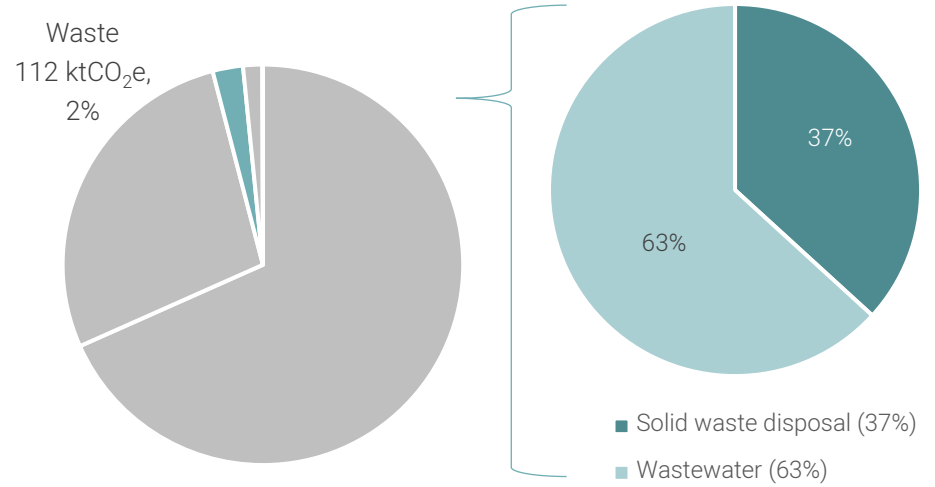
Waste
Background

Progress to date:

Council operations:
- Birmingham City Council (BCC) offices have segregated waste practices in place
- 250,000 tonnes of waste is collected per year [1].
- 55-60,000 tonnes of commercial waste collected by BCC (other by private operators)[2] .
- Green waste from council controlled areas such as parks and street trees, is chipped and sold to an Energy from Waste (EfW) plant in Worcester.

City-wide:
- Twin-streamed collection is applied, which means that BCC segregate some but not all waste.
- No food collection scheme currently exists, but will be implemented in line with national policy over the coming years.
- Food accounts for 35-40% of current waste stream[1].
- Municipal general refuse collection is currently weekly and fortnightly for recycling (paper one week, plastic, glass, tin the next).
- BCC charge for services to collect green and bulk waste, which is collected fortnightly.
- All recycling is processed in the UK with exception that the rolled Aluminium produced is exported to Germany to be used. Only plastics that cannot be recycled are burned.
- Commercial waste is usually mixed, with no current legislation that enforces segregation.
- Waste cooking oil is handled by private operators.
- Residual waste is incinerated at a Veolia (EfW) plant in the city.
- Green waste from households is collected by Veolia – composted outside of the city in Coventry.
- The existing waste services contract guarantees a certain tonnage to the EfW plant, where profits are shared on the sale of energy from waste generated.
- Volume of EfW expected to decreased by further increasing the volume of recyclate; however this will still leave a proportion of waste for incineration.
- Contract will be renewed for the 2024-2034 period; which may serve as an opportunity to enhance low carbon activities upon renewable.

Figure 19: SCATTER sector inventory for direct and indirect emissions from waste within Birmingham, 2017



27% of household waste recycled in Birmingham in 2016/17[1]

1- https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/664563/industrial-strategy-white-paper-web-ready-version.pdf
2 – Interview DS BCC 20/2

Waste

Relevant Plans and Policies

Regional

Defra WMCA work This is looking at all waste management options across West Midlands Combined Authority (WMCA).

- This will map current waste streams and what this could look like if streamlined across the combine authority. All cities currently use incineration.
- The project is led by the Local Partnerships, with WRAP involved
- It will look at where the waste will go.
- Target by 2030 is to achieve a household recycling rate of 55% (from 43% in 2019) across the West Midlands. [1]

Local

Waste Strategy 2017 [3]

Headline targets include:

- Achieving 70 per cent recycling by 2040 (compared to annual figure of 26.8 per cent in 2016/17).
- Reduce waste generated per person by 10 per cent (from 2014/15 baseline of 345kg) by 2025.
- Eliminate landfill waste by 2040 (currently approx. 7.5 per cent annually).

National

Our Waste, Our Resources: A strategy for England (2018) Aims to support the 25 year Environment Plan and sets out how the country will preserve resources by minimising waste, promoting resource efficiency and moving to a circular economy. Includes:

- Work towards eliminating food waste to landfill by 2030
- Work towards all plastic packaging placed on the market being recyclable, reusable or compostable by 2025
- Eliminate avoidable waste of all kinds by 2050

Waste and recycling: making recycling collections consistent in England (2019) – The government are working with local authorities, waste management businesses and others to implement a more consistent recycling system in England. The measures are expected to come into effect in 2023.

1. https://www.sustainabilitywestmidlands.org.uk/roadmap-to-2030/resource-efficiency/
2. https://www.birmingham.gov.uk/blog/birmingham-blog/post/11/waste-strategy-2017-2040-why-we-need-to-change
3. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/664563/industrial-strategy-white-paper-web-ready-version.pdf

Waste

SCATTER Interventions: Waste

Measure	Selected Current Context Indicators	SCATTER L4 Pathway		
		2025	2030	2050
a) Waste reduction[1]	1402,337 tonnes of household waste collected in Birmingham in 2017/18.[1] The volume of household waste collected has increased by 7% from 2014/15 levels.[2]	8% decrease in household waste	11% decrease in household waste	20% decrease in household waste
b) Increased recycling[3]	Mixed recycling rates across the cities – some wards up to 45%. Others below 10% with high contamination. [3] In 2017/18, 21% of household waste and 19% of non-household waste collected was sent for recycling, composting or re-use. [4]	41% household recycling rate	50% household recycling rate	85% household recycling rate
Estimated carbon saving (from the above waste treatment)		212,386 tCO_2e	593,374 tCO_2e	3,267,323 tCO_2e

1 – Percentages are defined in terms of weight, not volume. Other categories within SCATTER include Commercial and Industrial waste, Construction & Demolition waste, Sewage Sludge and Landfill Gas.
2 - Local Authority Collected and Household Waste Statistics 2014/15 - 2017/18, England
3 - Interview Darren Share 20/2
4 - Waste definitions consist of 'recycling' (one category), 'landfill', 'composting', and 'incineration or EfW'. \Updates made to the original DECC Pathways Calculator in respect of EU Waste Directive 2035 Targets.

Waste
Delivery

Proposed sub-task groups:

Co-benefits:

- Job creation: Friends of the Earth estimate that if a target of 70% recycling rate is reached it could create 50,000 new UK jobs.
- Protects eco-systems and wildlife: Through reduced need for raw material extraction and minimises pollution.
- Financial benefits: Lower costs associated waste collection and disposal and potential to generate income e.g. composting.

1 - https://friendsoftheearth.uk/natural-resources/9-benefits-recycling

Waste
What is needed from Stakeholders?

Birmingham City Council:
- Direct Control- Ensure that the council leads by example and has a strategy for monitoring and improving its own waste management.
- Stronger Influence- Work in partnership with Schools, Leisure Centre and top procurement suppliers to develop waste strategies.
- Medium Influence- Encourage and support other stakeholders, including businesses and organisations to adopt a circular economy strategy. Educate and engage with residents and communities over waste and recycling.

West Midlands Combined Authority:
- Work on delivering anaerobic digestion plants.
- Continue to work with Local Authorities to develop communications campaigns with the public and businesses.

National Government:
- Develop a national level framework for recycling.
- Provide funding for Research and Development into anaerobic digestion and energy from waste plants.
- Develop incentives for businesses to encourage recycling and waste reduction.

Other Partners:
- Sustainability West Midlands - Work across organisation to develop waste strategy and action plan.
- Schools- use momentum from Plastic free campaigns to educate children on recycling and waste reduction.

Businesses:
- Adopt a circular economy model and develop a strategy for waste reduction and recycling.
- Review procurement policy and ensure products are sustainably sourced.
- Review process to identify areas where efficiencies in production can be improved,.
- Encourage volunteering with local organisations involved in food growing and redistribution.

Community groups:
- Disconnect between big projects and investments, and communities and SMEs and society. Social benefits as a result of decarbonisation including wellbeing.
- Local food growing and redistribution groups- continue to offer volunteering opportunities and educate individuals on food waste.
- Support local Plastic Free and associated campaigns such as Refill.

Local Residents:
- Support businesses which offer sustainable products.
- Adopt the waste hierarchy at home and in the workplace.
- Get involved and volunteer with local food redistribution groups

Waste

Key Recommended Next Steps

Source	Carbon Reduction Measure	Costs and Resources
Council Waste	a&b) Lead by example and report on waste and recycling and develop a council's own strategy.	0.5 FTE.
City-wide waste	a) Develop continued community engagement strategy on waste reduction in the home	Within officer time.
	a) Develop a 'waste heroes' competition to highlight best practice from local businesses reducing waste.	0.5 FTE.
	b) Develop a waste strategy in line with WMCA and improve recycling reporting for the city.	0.5 FTE.
	b) Utilise road-level data (logging degree of contamination from last 12 months) to launch communication/educational campaign on recycling with support of community leaders.	Based on the experience of a large number of UK local authorities, effective communications costs a minimum of £1.00 per household for ongoing communications.
	b) Develop anaerobic digestion plants to treat food waste which is likely to be segregated in the future.	Officer time to coordinate with business and other local authorities.

Examples of good practice:

Cheshire West and WRAP case study resulted in:
- Recycling rates increasing from 34% in 08/09 to 48% in 09/10.
- Participation in the service rose from 82% to 96% following the introduction of the new service.
- By diverting an additional 3,302 tonnes of waste from landfill to recycling, Cheshire West would have saved 23 ktCO2e p.a.

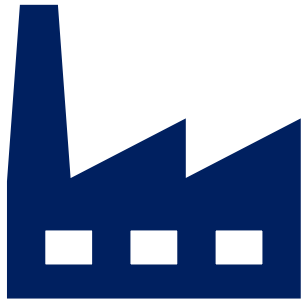
Loughborough Food Waste Processing projects aim to improve the reliability of anaerobic digesters.

4. Sectoral Analysis: Industry

Anthesis

Industry

Interventions Summary



Improving the efficiency of industrial processes

The following industrial measures are defined within the tool:

- **Industry efficiency:** Changes in sectoral emissions through improvements to equipment efficiency and process development.
- **Electrification of industry:** Increasing the degree of electrification of industrial processes (including chemical, metal and mineral processing).
- **Carbon capture and storage:** Uptake of carbon capture and storage technology across industrial sectors and processes.
- **Reducing oil production:** Reduced demand for oil and petroleum products against baseline levels, assuming no changes to the operational processes at refineries themselves.

Where such emissions occur outside of the city boundary; the associated embodied emissions are not be accounted for here - these would only be reflected using consumption-based accounting which relies on methodologies outside of the scope of SCATTER.

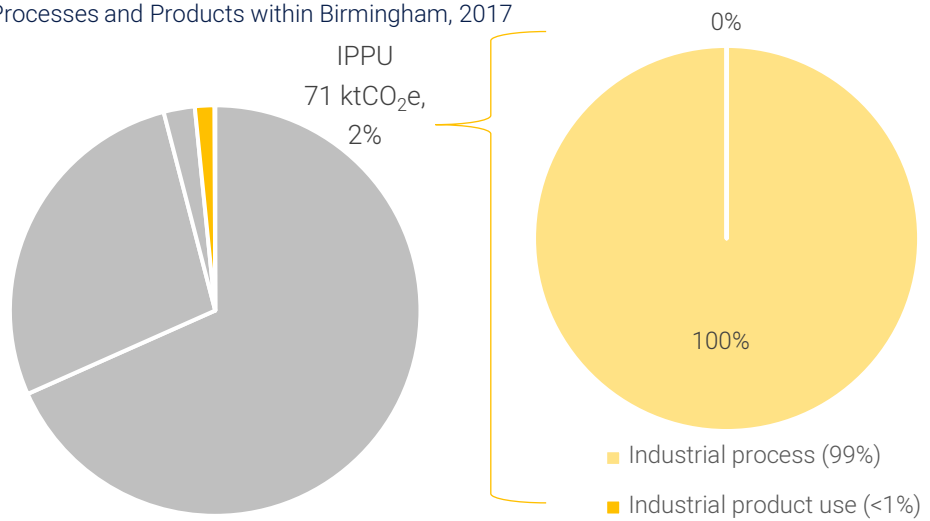
Industry
Background

Progress to date:

- Birmingham is a global centre for industry and commerce and the West Midlands is the UK's largest centre for manufacturing and engineering. Its distinctive strengths include low carbon transport innovation, data-driven health and life sciences, and globally competitive supply chain firms.
- Advanced manufacturing and engineering – particularly automotive – is a defining strength of Greater Birmingham's economy, employing more than 36,500.[1]
- Supply chain capabilities encompass a range of technologies and sectors including advanced digital design, composites, manufacturing metrology, metal precision manufacturing, advanced robotics, low emissions vehicles, research and development on batteries, energy storage, powertrains, and light-weighting.[1]
- BCC previously spent 75 million on a 'green bridge' programme helping businesses to be 'greener', invest in more efficient equipment and bring manufacturing in house, reducing energy and waste.
- BCC has engaged with vehicle engineering companies to help identify higher emissions/older vehicles to try and encourage them to upgrade.
- BCC is working with partners in construction industry and the rail college and Make UK to upgrade employee skills in line with the requirements of a low carbon economy.
- Greater Birmingham & Solihull Local Enterprise Partnership (GBSLEP) are currently developing the region's Low Carbon & Environmental Technology Action Plan.[2]

Note- Energy used for heating and appliances in industrial buildings is addressed in the Buildings Sector.

Figure 20: SCATTER sector inventory for direct and indirect emissions from Industrial Processes and Products within Birmingham, 2017



Almost £1.5 billion worth of UK-based Automotive sector R & D is carried out in Greater Birmingham[1]

1. https://gbslep.co.uk/what-we-do/business/advanced-manufacturing-engineering
2. LCET Sector Action Plan – Draft V1 December 2019

Industry
Relevant Plans and Policies

Regional

West Midlands Local Industrial Strategy (2019)
- Low Carbon industry-led steering group will be a platform for the region's stakeholders to oversee the development, prioritisation and implementation of the Low Carbon & Environmental Technology Action Plan interventions, giving businesses the opportunity to inform and influence future regional and LEP policies.
- The Action Plan is part of the West Midlands Industrial strategy.

Local

Greater Birmingham & Solihull Local Enterprise Partnership (GBSLEP) – Outlines that key sectors and technologies are an important core priority with a focus on:
- Stimulating demand led innovation
- Developing the competitiveness of supply chains
- Growing markets for inward investment
- Taking advantage of opportunities arising from emerging and enabling technologies

National

Industrial strategy
- Industrial Strategy: Building a Britain fit for the future (updated 2018).
- The Clean Growth Strategy: Leading the way to a low carbon future, BEIS (October 2017, as amended April 2018).
- The Route to Clean Growth, Using Industrial Strategies to drive change, Localis and Green Alliance (November 2019).

Industry

SCATTER Interventions: Industry

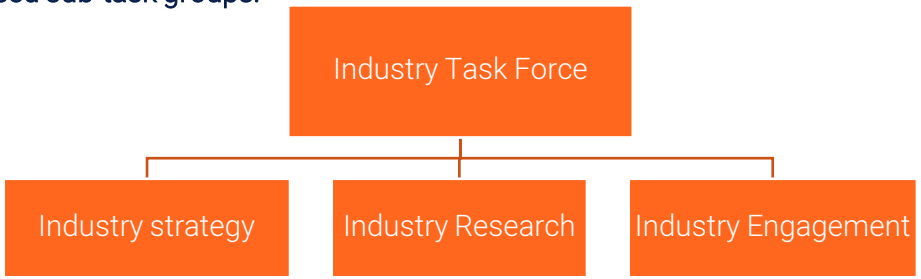
The Energy Intensity of Industry has been treated with the minimum level of ambition within the tool. Higher levels of ambition imply the adoption of carbon capture and storage (CCS) technologies, which have no precedent within Birmingham. A recent progress report into the UK's zero carbon ambitions and the role of breakthrough technologies states that government cannot assume that CCS will be running at scale by 2050. However, it is important that this does not constrain ambition in emissions reduction from industry.

Measure	Selected Current Context Indicators	SCATTER L1 Pathway		
		2025	2030	2050
a) Industry efficiency	Per BEIS figures, total emissions from industry and commercial sources decreased 33% between 2011-17.[1]	Stabilises at 35% reduction in emissions from industry.		
b) Electrification of industry	35% of UK industrial energy consumption in 2018 was electric[1]	No significant changes in the electrification of industrial energy consumption.		
c) Carbon Capture and Storage (CCS) on industry	UK government is investing £20m in supporting the construction of carbon capture, use and storage technologies at industrial sites across the UK[2] However, there are no technological CCS facilities in the region.	No CCS technology uptake within the city.		
Estimated Carbon Saving (from the above industrial processes)		1,434,497 tCO_2e	2,457,563 tCO_2e	6,668,804 tCO_2e
d) Oil production	No oil wells in the city.[3] ESSO Birmingham Oil terminal is located in the boundary.	18% reduction in oil production relative to 2015 levels	36% reduction in oil production relative to 2015 levels	77% reduction in oil production relative to 2015 levels

1- https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/820647/DUKES_1.1.5.xls
2- https://www.businessgreen.com/bg/news-analysis/3067118/the-time-is-now-government-unveils-plans-for-uks-first-carboncapture-and-usage-project
3 – Onshore Oil and Gas Activity

Industry
Delivery

Proposed sub-task groups:



Co-benefits:

- **Improved efficiency of operations** – businesses will likely see cost and energy use savings through improved efficiency of processes.
- **Increased local investment** – pioneering new technologies could increase localised investment in industry.
- **Job creation** – CCS and associated negative emissions technologies provides an opportunity for job creation:
    - The UK government announced investments of at least £800m to establish two or more new carbon capture storage clusters by 2030, which have the potential to create an estimated 6,000 high-skill, low-carbon jobs[1]

Figure 21: Advanced Manufacturing Hub from Economic Zones: Investing in Birmingham

1 - https://www.offshore-technology.com/news/uk-budget-2020-carbon-capture/

Industry
What is needed from Stakeholders?

Birmingham City Council:
- **Direct Control-** Ensure that the council has a programme in place for supporting efficiency improvements and low-to zero carbon product and process development for small-scale industry in the city.
- **Stronger Influence-** Work through the planning application process to encourage the provision of low-carbon and green infrastructure and installation of renewable energy at sites and installations in the city.
- **Medium Influence-** Encourage and support other stakeholders to prioritise and develop low-carbon infrastructure and products.

West Midlands Combined Authority:
- Build on the West Midlands Local Industrial Strategy to develop a more radical zero carbon agenda
- Work on delivering and prioritising zero and low-carbon industrial strategy across all sectors

National Government:
- Provide and expand funding for Research and Development into zero and low-carbon products and processes.
- Expand and prioritise incentives for businesses to develop and procure zero and low carbon products and services, and to develop process efficiency improvements.

Businesses:
Zero carbon agenda needs to be radical and fundamental.
- Review procurement policy, and ensure products and services are sourced with a view to reducing overall supply chain emissions.
- Review process to identify areas where efficiencies in production can be improved.
- Adopt a circular economy model and develop a strategy for waste reduction and recycling.
- Work with LEP to develop and deliver Low Carbon & Environmental Technology Action Plan.

Community groups:
- Build connections between big projects and investments, and communities and SMEs.
- Campaign and communicate social benefits as a result of decarbonisation, including wellbeing.

Local Residents:
- Support businesses which offer zero-carbon and low-carbon products and services.
- Adopt practices at home, though consumption and travel, and in the community, to reduce personal carbon footprint.

Other Partners:
- **Sustainability West Midlands -** Work across organisations to develop efficiency, zero and low-carbon, and waste reduction strategies and action plans

Industry
Key Recommended Next Steps

Source	Carbon Reduction Measure	Costs and Resources
City-wide Industry	a) Through WMCA industrial strategy: encourage industry to report emissions, risks and opportunities, and develop a strategy.	Officer time to coordinate with business and other local authorities
	a) Support the setting up of forum for industry.	Officer time to set up group and facilitate knowledge sharing
	a) A requirement to pursue clean growth should be written into guidance on local industrial strategy to identify opportunities for low carbon investment.	Officer time to coordinate with business and other local authorities
	b) Set guidance and provide training for promoting zero and low-carbon infrastructure when assessing industrial/commercial planning applications.	Officer time to facilitate with partners to provide training and guidance for Councillors and Planning Officers.

Examples of good practice:

Stoke-on-Trent is integrating waste heat from local ceramics producers into district heating, providing a new source of revenue for industry and establishing related training programmes at its local college.

Ireland's Large Industry Energy Network is a voluntary group that is working to develop and maintain robust energy management.

4. Sectoral Analysis: The Natural Environment

Natural Capital
Interventions Summary

Protecting and enhancing the city's natural capital

Natural capital refers to natural features, such as water, green space and trees from which people, society and the economy derive value. Such features provide a wide range of benefits, including improved health and wellness, enhanced community interactions, regulation of extreme heat and flooding, and increased property prices. In order for such benefits to be realised, natural assets must be managed effectively.

Recognising Birmingham's urban context and social challenges, we identify the following interventions:

- Managing existing tree stock: The ongoing effective management of trees is necessary in order for them to continue to be a net sink of carbon. Doing so will require overcoming challenges associated with a range of factors including planning urban development and managing pests and diseases. The enforcement of Tree Preservation Orders (TPOs) will continue to be an important component of our management response.

- New tree planting: In order to both sequester more carbon and provide more equitable natural capital benefits to the people of Birmingham, tree planting on a massive scale is required. Where necessary, we will also have to consider alternative interventions such as green roofs and walls to increase natural coverage where it is needed.

Implementing these measures will require the delivery of the Urban Forest Management Policy, which is recognised in the Birmingham Tree Policy Review (2018), as well as new actions including the development of a 'City-wide Tree Planting Strategy'.

The Natural Environment
Background

Progress to date

- The city is one of Britain's greenest – over 1/5th of area consists of green space (parks, nature reserves, allotments, golf courses and playing fields)[1].
- There are around 1,000,000 trees in the city[2]. Of this, around 124,000 are in parks and green spaces, 74,000 are street trees, and the remainder are in woodlands[3].
- There are 1,398 hectares of woodland (equivalent to 2,097 football pitches) within Birmingham's 591 parks and open spaces[2].
- Research published in 2017 suggests that tree cover in Birmingham is 19 ± 1.48%[4] and the most recent data indicates a higher figure of 21.26%[5]. While good relative to the UK average, is below the level of many major world cities[6].
- Some wards have in excess of 45% tree cover, while others have less than 10%[5]. There is a distinct correlation between lack of trees/ green infrastructure and the worst instances of issues including air quality, heat islands, flood risk, and social deprivation[6].
- Minimum tree canopy cover for urban locations in the UK to realise co-benefits is 20%[4]. Birmingham's Tree Policy goes further than this and recognises the need to achieve 25-30 % cover target in the longer-term to adapt to climate change (e.g. extreme heat and precipitation).
- We estimate that all trees in Birmingham sequester annually over 45,500 t CO_2.[7]
- Birmingham and Black Country Nature Improvement Area, which encompasses Birmingham, is unique nationally in that it is almost entirely urban[8].
- The Wildlife Trust works with over 60 organisations and has made significant improvements in the regional landscape including creation/ improvement of woodland, grassland, heathland and hedgerow (see right).

Estimated tree cover of 21.26%[5]

>45,500 tonnes CO_2

The amount of carbon dioxide sequestered annually by the city of Birmingham's existing stock of 1 million trees (including street/ highways trees, woodlands and trees in parks, cemeteries/ crematoria, schools, gardens, etc.) [7]

Birmingham & Black Country NIA achievements (2012-2016) include:

- 250 sites improved for nature
- 111 hectares of woodland/improved created
- 78 hectares of grassland improved/created
- 6 hectares of heathland improved/created
- 6.5 kilometres of hedgerow habitat improved/created
- 8.5 kilometres of wetland corridor improved/created[7]

The Natural Environment

Relevant Plans and Policies

National

The 25 Year Environment Plan - The '25YEP' sets out the UK Government's goals for improving the environment over the next 25 years. It includes commitments to create new forests/ woodlands, incentivise tree planting, explore innovative finance for afforestation; and increase protection of existing trees. The associated draft Environment Bill mandates that planning permission be dependent on new developments achieving a biodiversity net gain of at least 10%.

Land use: Policies for a Net Zero UK (2020) – CCC report sets out the policies and actions required to deliver the land sector's contribution to the UK net zero target including converting 22% of agricultural land (mostly from livestock) to forestry.

Woodland Trust Emergency Tree Plan for the UK – Recommends Local Authorities:

- Write an Emergency Tree Plan to identify land for trees.
- Protect existing native woodland and trees.
- Set annual expansion targets for tree/ woodland cover.
- Ensure all development land includes a minimum 30% tree canopy cover.

Regional

#WM2041: Our Actions to Meet the Climate Challenge – Green Paper - Outlines the WMCA's plans for climate mitigation, adaptation and social equity. Includes plans to invest in tree planting. Includes plans for a Natural Capital Investment Plan.

Birmingham and Black Country Nature Improvement Area Ecological Strategy 2017 – 2022 - Aims to protect Core Ecological Areas (least developed); enhance Linking Areas (matrix of 'connecting tissue' in the landscape); and create new sites in Opportunity Areas (intensively used green space incl. parks and agricultural land). The Wildlife Trust is working with >60 partners in the region to achieve its strategy.

Local

Adopted Birmingham Development Plan 2031 - A framework to guide development and regeneration in Birmingham until 2031, including commitments on natural capital.

Green Living Spaces Plan – Works towards achieving the vision of Birmingham as a leading green City. Applied natural capital valuation manage ecosystem services and provides guidance for future development and investment (sits under the BDP, above).

Climate Change Adaption Action Plan - Ensures the City is prepared for future climate impacts and extreme weather events, recognizing that a certain amount of disruption from physical climate change including extreme heat and flooding is inevitable.

Birmingham Tree Policy – Recommendations include:

- Ensuring 25-30% urban tree cover for climate change adaptation.
- Mandating tree valuation and exploring a 'Birmingham Tree Bank' financed by removal penalties to help fund tree planting.
- Raising capital through green bonds (e.g. linked to flood risk mitigation).
- Ensuring all major planning applications incorporate consideration of 'greening'.
- Developing an Urban Tree Management Strategy and renew every 5 years.
- Exploring formation of a region-wide Birmingham Forest Group.

Birmingham Health Economic Assessment & Natural Capital Accounts – Focused on valuation of the flow of services (incl. property value uplift, health benefits, biodiversity, flood mitigation, global climate regulation etc.) that stem from parks and green spaces.

Nature Conservation Strategy for Birmingham - Provides comprehensive advice and direction regarding nature conservation resources and practical guidelines for action.

The Naturally Birmingham Project - Designed to help councils find sustainable ways to manage and fund parks and open spaces across entire towns and cities.

The Natural Environment

Interventions: Natural Environment

Measure	Selected Current Context Indicators	Possible targets [SCATTER thresholds not presented]		
		2025	2030	2040
a) Managing existing tree stock	There are around 1,000,000 trees in Birmingham which, if managed effectively, will continue to be a net sink of carbon.	1,000,000 trees/ 34,000 ha tree canopy cover/ 45,500 tCO_2/ yr^{-1}	1,000,000 trees/ 34,000 ha tree canopy cover/ 45,500 tCO_2/ yr^{-1}	1,000,000 trees/ 34,000 ha tree canopy cover/ 45,500 tCO_2/ yr^{-1}
b) New tree planting	Present average tree cover is 21.26%, but some wards have <10% cover. Increasing this to a minimum of 25% in any ward would increase the average to 27.41% in the long-term (i.e. by 2070).	225,324 new trees/ 135 ha or 0.51% additional cover/ 481 tCO_2 / yr^{-1}*	450,649 new trees/ 513 ha or 1.94% additional cover/ 1,087 tCO_2 / yr^{-1}*	450,649 new trees/ 999 ha or 1.62% additional cover/ 2,266 tCO_2 / yr^{-1}*
Estimated carbon saving from the above		45,481 tCO_2 / yr^{-1}	46,087 tCO_2 / yr^{-1}	47,266 tCO_2 / yr^{-1}

*Note the sequestration potential of new tree planting is relatively low during early stages of tree growth as tree volume and thus CO2 uptake through respiration are relatively low. As trees grow larger the sequestration rate increases substantially. By 2070, this new planting could sequester >10,500 t CO2/ yr^{-1} while increasing tree canopy cover by 5.37%.

Estimated carbon savings:

- The method of estimating carbon savings differs in this instance as SCATTER is only used to predict energy system savings.
- We modelled the carbon sequestration of the city's current tree population of 1,000,000 trees based on sequestration rates estimated in an empirical study from a comparable urban tree population[1]. Note that in order to realise the potential sequestration benefits identified here, green waste relating to the tree population must be managed effectively for sequestration.
- We then assessed the carbon impact of planting enough trees to increase canopy cover to a minimum of 25% in any one ward in the long term. This is in recognition that urban tree cover must be a minimum of 25-30% in order to mitigate climate change impacts from heat and precipitation[6]. Our calculations assume that the newly planted trees with achieve a per tree canopy cover area similar to that observed within the city's current tree population towards the end of the century. In the nearer term (i.e. to 2040), tree canopy cover is expect to grow in line with estimates from specialist arborists. The full benefits of this planting in terms of both tree cover and carbon sequestration will not be realised for decades, but these efforts nonetheless represent essential long-term investment in the city's development.

The Natural Environment

Delivery

Proposed sub-task groups:

Figure 22 : Trees and green space adjacent to a residential development in Birmingham.[3]

Co-benefits of Natural Capital:[1]

- **Financial benefits**: Increases in house prices between 5%-18% when a property is associated with mature trees.
- **Liveability:** Trees and other vegetation can reduce noise pollution (up to 6-8 decibels) and act as a visual barrier. It can also improve comfort in urban areas by reducing wind speed and air turbulence.
- **Community:** Green space can provide a space for communities to engage, which can improve community cohesion, walkability of neighbourhoods, reduce crime levels and develop a connection to local place.
- **Resilience:** Trees and vegetation can reduce surface run-off and reduce flood risk. They can also help to reduce temperature and the urban heat island effect.
- **Benefits for child development:** Research suggests that exposure to nature can improve cognitive development and concentration.
- **Biodiversity:** Trees and green spaces can create habitats, support species and increase biodiversity.
- **Health:** there are multiple health benefits of green spaces and trees:
  - Certain trees and other vegetation can improve air quality by intercepting harmful pollutants.
  - Green space can encourage physical activity: the cost of physical inactivity to the local economy has been estimated at £21.9 million[2].
    - Children living in areas with good access to green spaces have lower prevalence of obesity (11-19%) compared with children limited access to green spaces.
  - There are also significant mental health benefits including helping to alleviate stress, anxiety and depression.[1]

The Natural Environment

What is needed from Stakeholders?

Birmingham City Council:

- **Direct Control -** Ensure that the council protects and enhances natural capital on its own property and that which it manages, including through the development and delivery of an Emergency Tree Plan.
- **Stronger Influence -** Work with Developers as well as Schools and Leisure Centres to deliver effective tree management and planting and other nature-based solutions (e.g. biochar and soil improvement) on their premises.
- **Medium Influence -** Carry out a spatial analysis to identify opportunities for investment in Green Infrastructure including tree planting. Partner with land holders to enhance and protect natural capital stock and support and engage business and communities to consider Green Infrastructure.

National Government:

- Develop ambitious planning policies and targets (such as biodiversity net gain) to ensure natural climate solutions are integrated into new developments.
- Provide funding for natural capital investments including through innovative new finance schemes.

Businesses:

- Encourage volunteering with local organisations involved in food growing and redistribution and those involved in natural capital solutions.
- Review land holdings and explore opportunity for tree planting and integrate green infrastructure onto property.

WMCA:

- Continue to work with the West Midlands Environment Board and Natural Capital Roundtable to develop and deliver the 25 Year Natural Capital Plan.
- Develop and deliver the Virtual Forest resource in order to assist community, individual, and private sector actors in engaging in tree planting activities.

Community Groups:

- Continue to work with local community groups to green neighbourhoods or invest in natural capital, including through running tree planting events.

Local Residents:

- Get involved and volunteer with local food growing, urban agriculture and community planting schemes.
- Avoid removing gardens and trees when converting driveways and building extensions
- Plant trees in line with guidance in own back gardens
- Increase engagement with the natural environment.

Other Partners:

- **Schools -** Increase opportunities for children to engage with the natural environment.
- **Land Owners and Farmers -**
  - Work with environment agency and other organisations to better manage soil
  - Explore new land and livestock management approaches to reduce carbon emissions.
  - Explore the use of government and alternative sources of finance opportunities for forestry on current livestock land.

The Natural Environment

Key Recommended Next Steps

Source	Carbon Reduction Measure	Costs and Resources
City Council Land	a) Protect and manage existing trees and woodland.	Existing staff and contractor cost.
	a&b) Manage Green Waste Effectively for Carbon Sequestration.	3.0 FTE staff costs to support green waste initiatives such as compost and biochar.
	b) Identify and cost opportunities for new tree planting.	Current costs per 30 trees are around £41. Street trees cost £2-5k per tree if planted properly. Ongoing costs for tree maintenance range from £60-£140 pa. Costs could be bourn in part by a Tree Bank funded by developer who remove trees (e.g. using a valuation technique such as CAVAT - Capital Asset Valuation for Amenity Trees).

Examples of good practice:

Greater Manchester's City of Trees worked with **Viridor**, the region's largest recycling company, to plant hundreds of street trees across the combined authority. Patrick Killeen, Operations Manager Greater Manchester Viridor said of the initiative:

"Street Trees provide a range of environmental benefits including reducing harmful pollutants in the air, aiding urban cooling due to climate change, reducing the risk of flooding and capturing carbon. They are a positive way we can contribute to improving the local streetscape."

The Stockholm Biochar Project sequesters carbon by turning park and garden waste into biochar. The biochar substitutes for finite planting materials, such as peat, clay, and sand, and is used by the city in public plant beds. The project plans to produce 7,000 tonnes of biochar by 2020.

1 – Image by Bjorn Embrén. https://www.biochar-journal.org/en/ct/77

The Natural Environment

Key Recommended Next Steps

Source	Carbon Reduction Measure	Costs and Resources
Private land	a) Carry out ongoing inventory and report on tree abundance, diversity and cover statistics.	Existing staff resource and volunteer resources.
	a) Expand Enforcement of Tree Preservation Orders.	1.0 FTE
	a) Ensure that existing guidance on protection and enhancement of natural capital is communicated effectively in the context of the Environment Bill and Biodiversity Net Gain.	Existing staff resource.
	a&b) Develop a city-wide Emergency Tree Plan.	Consultancy fee.
	a&b) Work with other landholders including developers to maximise the potential for tree planting and land management.	1.0 FTE
	b) Develop a Natural Capital Investment Plan including plans for a Tree Bank and Green Bonds.	Consultancy fee.
	b) Facilitate community sequestration schemes.	0.5 FTE
	b) Mandate that developers include within all developments *either* a minimum of 30% tree canopy cover; *or* a minimum 50% coverer of 'soft landscape' (incl. trees, green roofs, green walls, etc.).	Existing staff resource.

Examples of good practice:

The **London city of Ealing's** detailed report Valuing Ealing's Urban Trees provides the information necessary for the production of a comprehensive city management plan for Ealing's urban forest and to inform the council's tree strategy through providing baseline data for ward-level monitoring.

The report also calculated replacement and amenity costs of trees across the city to establish a baseline for pricing tree replacement schemes within the city's planning process.

The Natural Environment

Key Recommended Next Steps

Source	Carbon Reduction Measure	Costs and Resources
Beyond Birmingham	b) Work with the WMCA to identify opportunities for investment on new woodland/ tree planting that retain benefits for the people of Birmingham.	Existing staff resource.
Beyond Birmingham	b) Explore how offsetting any residual emissions from Birmingham's in regions beyond the combined authority can realise benefits for the people of Birmingham. This may include looking at UK national schemes such as the Woodland Carbon Code and the Peatland Code and estimating costs and timing of such initiatives. We advise strong caution in exploring offsetting more generally, as these should not displace or compensate for any 'lower ambition' actions. On the contrary, it is likely that such measures may be required 'in addition to' everything else. Local, natural environment offsets may however, present Birmingham with some wider socio-economic opportunities as the city seeks to mobilise and implement the full extent of measures directly 'in-boundary', as a first priority.	Consultancy fee

Leeds City Council, in partnership with Yorkshire Wildlife Trust and volunteers from the Environment Agency, Leeds City Council, Yorkshire Water, The Conservation Volunteers, Craven Conservation Group and SCAPA, a local manufacturer, are delivering a natural flood management pilot involving tree planting.

This £500,000 pilot programme, funded by the Council, uses natural methods to slow the flow of water from upstream in the catchment. This includes land management to reduce water run-off, woodland creation to increase tree canopy cover and river and flood plain restoration so that the landscape can hold more water in times of flood. Hundreds of trees have been planted as part of the trial.

Cheshire East are currently exploring local based offsets or 'insets' as a way of stimulating benefit in-region and helping to off-set the council's direct footprint.

4. Sectoral Analysis: Energy Supply

Energy Supply

Interventions Summary

Meeting demand with green energy

The measures across the buildings, transport waste & industry sectors are primarily focused on the reduction of demand for energy, as well as the adoption of technologies which are powered by electricity as opposed to fossil fuels (e.g. natural gas).

A crucial factor in transforming these measures into carbon emissions reductions is the adoption of **renewable electricity supply**, which sits across all sectors.

The tool considers a wide range of renewable technologies:

- **Solar PV:** Capacity from solar photovoltaic (PV) cells, either as roof-mounted arrays or at ground-level.
- **Onshore wind:** Capacity from onshore wind turbines. The added capacity from offshore wind turbines is treated at the national level.
- **Bioenergy supply:** Capacity from bioenergy which is both imported from out-of-boundary sources (as both feedstock and energy supply) and from in-boundary biomass stations.
- **Solar thermal:** Capacity from solar thermal technology, which differs from solar PV, but is still treated as a solar array on rooftops.
- **Hydro:** Capacity from hydroelectric power stations.
- **Wave, tidal and tidal stream:** Capacity from wave, tidal & tidal stream sources. Treated at the national level.
- **Storage:** Storage and battery technology capacity.

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SCATTER Level 4 Pathway targets

The future capacities stated are based on national estimates within the Legacy DECC 2050 Pathways Calculator, scaled down to Birmingham. We acknowledge that the extent of increase in certain technologies may not be feasible due to geographical and/or physical constraints of the city. However, where capacities are not met, energy supply from these sources may need to compensated by other cities elsewhere in the UK, (in addition to their own ambitious targets); so it is important that Birmingham contributes as much as possible to safeguard lower energy prices and carbon targets.

Energy Supply
Background

Progress to date

- Main focus is on energy from waste and heat decarbonisation.
- Energy supply contracts for BCC are up for renewal in the next 2 years, and a renewable tariff will be considered.
- Council buildings and offices in the centre are on the Birmingham District Energy Company (BDEC) heat network (Gas CHP).
- Engie operate the district heat scheme, BDEC, and potential for continued investment is being explored.
- Exploration of connecting Tyseley Energy Park (TEP) up to supply waste heat, and potential decommissioning of existing gas CHP if supplying to the BDEC heat network is being considered.
- Working with UK Government BEIS decarbonising heat in cities project over 18 months to develop a heat strategy for Birmingham.

Feasibility studies have been done on several schemes for heat networks. Heat network opportunities include[1]:

- HS2/Curzon Street 150 hectares, including 4,000 homes and 36,000 jobs. The estimated thermal generation required for the initial phases is 15MWth.
- Snow Hill station encompassing 200,000sq.m of new office floor space, 4,000 new residential units and the creation of 10,000 jobs.
- Smithfield redevelopment site, 34-acre mixed development 2,000 new homes, 3,000 new jobs, estimated thermal generation required is 26MWth.
- Birmingham City University land redevelopment, estimated that the existing heat requirements will need to be increased by 6MWth generation.
- Langley & Peddimore, Fort Parkway redevelopment sites, heat requirements is circa 250,000MWh/pa, investment of between £20m to £25m.
- Tyseley estimate heat demand including the transmission pipe to the city centre is circa 93,000MWh/pa, with a total investment potential of circa £30m.
- Greater Icknield Port Loop, estimated heat load of new developments would be circa 54,000MWh/pa with an estimate investment potential of £31m.
- Commonwealth Games 2022, post Games Village, 1,400 new homes.
- Energy Innovation Zones (EIZ's) near BCC: UK Central in Solihull; and Tyseley Energy Park (TEP).
- Low and zero emission refuelling hub. Looking at use of biodiesel.
- CoGen biomass plant 10MW output, private wire, will produce Hydrogen for buses.
- Close to finishing procurement of Hydrogen bus operator for 20 buses.
- Injection of Hydrogen into the gas grid being considered.
- Veolia Efw plant, very old, inefficient; new Tyseley plant to be built - concerns that this has been put out to the market to keep as an incinerator, without capacity to take off the waste heat.
- Food waste will need to segregated and will become a separate feedstock in future years – potential for Anaerobic Digestion but some volume loss to incinerator at TEP
- Poor grid infrastructure. Hard to find suitable locations for EV.
- Roll out of EV infrastructure with £2.92m government funding.
- Secured an EV partner and close to finalising contract. 394 charge points over 2 years as first phase. Rapid chargers targeting taxis, commercial Strategic locations – taxis / communities, outer ring roads and arterial routes.
- Running a behaviour change programme with schools covering carbon reduction, energy saving, renewables, air quality for schools under BCC control.

92.5 GWh of energy generated in Birmingham from renewable sources in 2018[2]

1 -. Birmingham's Energy Baseline (2019) Perform Green
2 - Based on 2018 data from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/743822/Renewable_electricity_by_Local_Authority_2014-2017.xlsx

Energy Supply
Relevant Plans and Policies

National

- Smart Export Guarantee (SEG), 2020 -The smart export guarantee (SEG) is an obligation set by the government for licensed electricity suppliers to offer a tariff and make payment to small-scale low-carbon generators for electricity exported to the National Grid, providing certain criteria are met.
- The Domestic Renewable Heat Incentive (RHI) was designed to drive uptake of renewable heat technologies. Since 2014, those who install eligible heat generating technologies can receive quarterly payments for seven years for the amount of renewable heat their system produces9. The RHI is only funded for new applicants to 2021.
- UK National Energy and Climate Plan sets out integrated climate and energy objectives, targets, policies and measures for the period 2021-2030.

Regional

A Regional Energy Strategy for the West Midlands (2018)- Brings together energy mapping into a high level strategy for the regions energy capital. It outlines how Birmingham fits within the region from an energy and low carbon perspective.

Greater Birmingham and Solihull Local Enterprise Partnership (GBSLEP)- sets out the aim for Birmingham's LEP to deliver jobs and growth for the city region. No direct reference to renewable energy or clean growth.

Local

Power to the People. An Integrated Approach to Clean Energy and Climate Innovation (2019) University of Birmingham – Part of the project to develop an Energy Innovation Zone, which explores potential scenarios, barriers and opportunities

Birmingham's Energy Baseline (2019)[1]
Strategic study on delivery mechanisms required for Birmingham's decentralised energy plans (2016)[1]

Birmingham Solar PV Study report (2016) – Aims to help BCC prepare for a renewable energy future by mapping out potential areas for PV installation.

Birmingham Clean Air Zone – The government as said Birmingham needs a clean air zone , it is expected to be introduced in 2020.

EVs and charging – Birmingham has been awarded funding for 197 EV charging points from the Office for Low Emission Vehicles. This will mean the decommissioning of the current 36 charging points in the city and upgrading them with new facilities. Work is expected to begin in 2020.

1 - TBD - Interview between Anthesis & BCC

Energy Supply

Interventions: Renewable Energy Supply

Measure	Selected Current Context Indicators	SCATTER Level 4 Pathway		
		2025	2030	2050
a) Solar PV	28.4 MW installed capacity, (7,071 sites) generating 27.6 GWh[1]	2.56 km^2 of PV arrays across roof space (equivalent to arrays on 34% of households)[2] 0.87 GW installed capacity 660 GWh generated per year	3.61 km^2 of PV arrays across roof space (equivalent to arrays on 46% of households) 1.23 GW installed capacity 930 GWh generated per year	8.18 km^2 of PV arrays across roof space (equivalent to arrays on 60% of households, with a further 3.06 km^2 of ground mounted and commercial property installations) 2.78 GW installed capacity 2,100 GWh generated per year
Estimated carbon saving		785,322 tCO_2e	1,766,783 tCO_2e	9,320,951 tCO_2e

Estimated carbon savings

- The method for estimating carbon savings is different from that used previously as this is addressing supply.
- Savings are cumulative over the period 2019-2050, relative to 2018.
- Emissions savings are estimated by applying the 2018 national grid factor average of 248g/kWh to the difference between the most recent year's data (2018) generation output and future generation output at each of the yearly milestones (and interim years). We acknowledge that the grid factor is likely to reduce over time, meaning that savings are likely to materially higher than if compared to a later base year. The 2018 value has been used to avoid double counting the input of renewables.
- It is not appropriate to sum any savings presented from renewable supply with savings achieved on the demand side of the energy system, as this is may result in double counting.

1 – Based on 2018 data from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/743822/Renewable_electricity_by_Local_Authority__2014-2017.xlsx
2 – The % of households quoted is taken from a 2.2 kW installation occupying 16m^2 of roof space and household number projections (as per the Energy Savings Trust Guidance)

Energy Supply
Interventions: Renewable Energy Supply

Measure	Selected Current Context Indicators	SCATTER Level 4 Pathway		
		2025	2030	2050
b) Onshore wind	0.006 MW installed capacity, generating 11 MWh per year.[1]	110 turbines installed 276 MW installed capacity (2.5 MW per turbine)	162 turbines installed 406 MW installed capacity (2.5 MW per turbine)	409 turbines installed 1023 MW installed capacity (2.5 MW per turbine)
Estimated carbon saving		818,376 tCO_2e	1,813,891 tCO_2e	9,880,871 tCO_2e
c) Bioenergy supply (heat & electricity)	1 installation of anaerobic digestion with 0.9 MW installed capacity, generating 4.9 GWh per year.[1] Other bioenergy sources generate 60 GWh per year.	161 MW installed capacity	171 MW installed capacity	264 MW installed capacity
Estimated carbon saving		1,409,960 tCO_2e	2,503,783 tCO_2e	6,516,308 tCO_2e
d) Solar thermal	Estimated 0.015 MW installed capacity.	0.8 km^2 of panels installed 45.2 MW installed capacity	13 km^2 of panels installed 70.6 MW installed capacity	3.2 km^2 of panels installed 176 MW installed capacity
Estimated carbon saving		463,028 tCO_2e	1,119,885 tCO_2e	6,652,390 tCO_2e

A note on supply technologies

SCATTER estimates values for the installed capacity of each supply technology, by taking a nationally assumed capacity figure (L1 was aligned to the 2017 National Grid's Future Energy Scenario, Two Degrees) and scaling down to region based on a local authority's size proxy (e.g. population, number of households, land area). This serves as an indicator for the nature and extent of renewable supply required to future demand.

SCATTER does not account for the geographies and local contexts unique to a given local authority, which we acknowledge play a very important role in the viability of a given technology.

1 – Based on 2018 data from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/743822/Renewable_electricity_by_Local_Authority__2014-2017.xlsx

Energy Supply
Interventions: Renewable Energy Supply

The following energy technologies operate within the SCATTER tool but have very little or no precedent nationally in terms of capacity or installations. Given Birmingham is approaching these technologies from a 'standing start' they are treated with the minimum ambition level within the tool (L1). For these or any of the supply technologies referenced in this section, if the technology is not feasible in the city boundary to the extent suggested, then the residual capacity is simply assumed to occur outside the boundary (with no impact to the emissions estimates).

A note on 'emergent technologies'

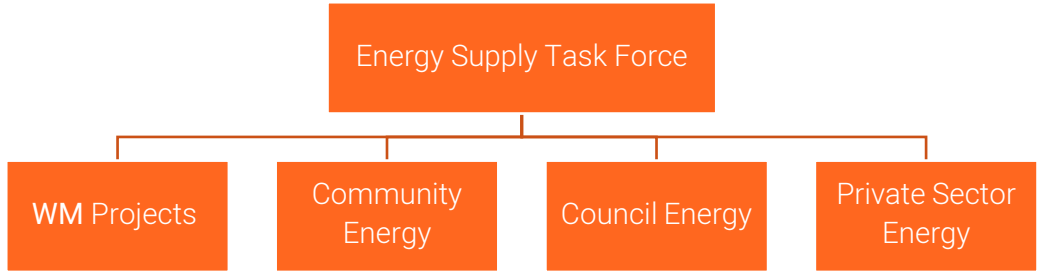
Due to funding constraints, SCATTER cannot currently model the potential impacts of new and emergent technologies that have yet to become established, so these emissions reductions measures are largely excluded from the tool.

Measure	Selected Current Context Indicators	SCATTER Level 1 Pathway		
		2025	2030	2050
e) Hydro power	No installed capacity as of 2018.	24.4 MW installed peak capacity	25.6 MW installed peak capacity	71.7 MW installed peak capacity
Estimated carbon saving for hydro power		132,583 tCO_2e	234,569 tCO_2e	642,737 tCO_2e
f) Wave, tidal and tidal stream	No installed capacity as of 2018.	Energy generation from wave, tidal stream and tidal wave grows steadily to 360 GWh by 2050 (29,000 GWh nationally).		
Estimated carbon saving for wave, tidal and tidal stream power		1,404,938 tCO_2e		
g) Sewage gas and Municipal Solid Waste (MSW)	10.5 MW installed sewage gas (at 1 site) generating 38,555 MWh, and 41.2 MW installed MSW capacity (at 3 sites) generating 21,413 MWh[1]	By 2030, TEED/TEP could supply ~50,000 people with ~500 GWh of heat and ~100 GWh of electricity per year [2]		
h) Storage	Development at TEP (WMCA) - transition hubs with battery storage. PassivHaus trials - could include battery storage trials. Mines (Staffordshire) could be potential for heat and pump storage Heat storage of waste heat generated 24/7 - use of thermal batteries; phase change materials - release the heat when needed.	2.39 GW storage capacity in standby generators	2.45 GW storage capacity in standby generators	2.65 GW storage capacity in standby generators

[1] Based on 2018 data https://www.gov.uk/government/statistics/regional-renewable-statistics
[2] Engie for all new developments and Siemens estimate for Tyseley based on average electricity/heat consumptions

Energy Supply
Delivery

Proposed sub-task groups:



Co-benefits:

- **Revenue generation**: Potential to reduce utility bills and generate a long-term source of income. Local projects such as community energy schemes can generate income for local people. This also has benefits such as increased autonomy, empowerment and resilience by providing a long term income and local control over finances.[1]
- **Economic resilience:** Local energy resilience and protection against future fossil fuel price increases.
- **Job creation**: Creation of jobs and upskilling of local people. In the UK, low carbon and renewable energy activities generated £44.5 billion turnover in 2017, directly employing 209,500 people (full-time equivalents).[2]
- **Fuel poverty reduction**: Reduction in fuel poverty through improving access to low cost energy in council housing stock.[2]

Figure 22: Mapping Birmingham's solar potential[3]

1. The potential for energy efficiency and renewable energy:
2. Ashden Climate Action Co-Benefits Toolkit
3 - https://www.cse.org.uk/projects/view/1331

Energy Supply
What is needed from Stakeholders?

Birmingham City Council:
- **Direct Control-** Ensure that council buildings are supplied by renewable energy firstly through installation on their own premises and then by ensuring the remaining supply is from green energy providers.
- **Stronger Influence-** work in partnership with Schools, Leisure Centres and partner businesses to install low carbon energy sources.
- **Medium Influence** – encourage and support other stakeholders in installing their own low carbon energy sources through helping to identify opportunities and providing guidance. Use the planning approval process to request renewable energy installations on commercial buildings.

WMCA:
- Continue to set high levels of ambition for carbon reduction through the regional frameworks.
- Continue to work closely with each of the local authorities that make up the city region.
- Lobbying of national government to provide funding in the region and to develop ambitious policies.

National Government:
- Develop progressive policies which stimulate the development of renewables and ensure the stability and certainty of renewable incentive tariffs.
- Invest in Research and Development of renewable and low carbon technology.
- Provide funding to support councils, businesses and individuals to install renewables.

Community groups:
- Community Renewables- Local groups and schools should explore the opportunity to partner with BCC/Energy Company and install community energy projects such as solar panels. Stakeholder engagement as part of BEIS project and baseline mapping. A lot of groups, hard to pull together.
- Crowd funding – small energy projects could be supported through crowd funding.

Businesses:
- Install renewable energy technology and consider supporting local communities to do the same.
- Ensure remaining energy supply, outside of own-generation, is purchased from renewable sources.
- Explore the potential of a Power Purchasing Agreement (PPA) alongside other local businesses and organisations, as a way of securing a financially beneficial deal.
- Explore the support available through the Business Growth Hub .
- SMEs to explore potential grants available for installing renewable technologies.
- Businesses can also play an important role in training and up-skilling local people to install and maintain low carbon technologies.
- Develop networks for knowledge and skills sharing.
- Facilitate energy, distribution, and transport pooling networks on Fort Parkway industrial zone EIZ where there are large industrial users such as iDunlop, Rolls Royce engines, Esso, and Jaguar Land Rover

Other Partners:
- Western Power Distribution- It is important that the local District Network Operator (DNO) is involved in energy projects and that communication channels are developed early on to ensure the electricity grid can accommodate the design and connection to the grid.
- Energy Companies- Support the council and business to increase renewable energy generation, e.g. ENGIE, Cadent gas distribution network https://cadentgas.com/home
- BCC are part of the Commonwealth Games development group. Sustainability and energy statements required for all aspects
- Academy Development Programme – required schools to look at energy generation and use of renewable energy e.g. heat pumps.
- Birmingham Smart City Alliance- Development of a smart and connected city.

Local Residents:
- Install renewable energy at your own residence or change provider to a renewable energy sources.
- Plan for when your heating system will be changed and consider moving to heat-pump technology.

Energy Supply
Key Recommended Next Steps

Source	Carbon Reduction Measure	Costs and Resources
Council energy supply	a-e) Develop an investment plan for renewables to 'self supply' electricity (as well as heat network) to council buildings, estate and assets.	1MW heat pump has a one-off cost of £0.8m but income can be generated through RHI.[1] Warrington Council invested £62m in a solar farm and storage with an operating surplus generated over the lifetime of the farm.[1]
	a-e) Ensure any excess demand not met by council owned renewables is from (3rd party) purchased renewables. • Challenge the 'quality' (i.e. how additional) of green energy • Explore the potential of a PPA with other local organisations	Negligible. The cost of switching to a 100% renewable energy provider can be cheaper than an alternative energy provider. [2] Council resourcing time to facilitate PPA.
City-wide energy supply	a-e) Deliver community energy projects and provide guidance to local residents and schools	Additional staff resource.
	a-d) Incorporate renewable energy and heat network opportunities into the local plan and provide guidance to developers. Request installation in commercial building upgrades through the planning approval process	Within existing staff resources.
	a-d) Work to align the energy strategy and spatial strategy to ensure energy policies can be implemented.	Within existing staff resources.
	a-d) Conduct up to date feasibility study into the potential for alternative renewable sources.	Feasibility and engagement campaign £20,000-£30,000.[2]
	a-d) Deliver support for SMEs to access funding and skills for energy projects.	Additional staff resource.

Examples of good practice:

Warrington city Council own two solar farms outside of the city. Enough energy is generated to power a town and it is expected to generate income for the local authority

Swindon Council developed a wholly owned subsidiary of the council, delivering the first renewable energy community Individual Savings Account (ISA) attracting local investment of £2.4m, a widely praised project.

Kent's Cleve Hill Solar Farm produces enough power for 91,000 homes and generates over £1m a year for local authorities.

1 – Ashden 31 Actions for Councils
2 – Based on Anthesis knowledge and Industry Experience

5. Hydrogen

“Producing hydrogen in low-carbon ways and using it to meet challenging demands (e.g. for heat in industrial processes, for heating buildings on colder winter days and for heavy transport) is likely to be an important part of the next stage of the UK’s energy transition.”

Committee on Climate Change

5. Hydrogen
Introduction

Hydrogen has been discussed as an alternative fuel source for some time and whilst it has promised much, little to date has been widely delivered or implemented.[1] Nevertheless, it remains a topic of interest and is often cited as part of a low carbon future.

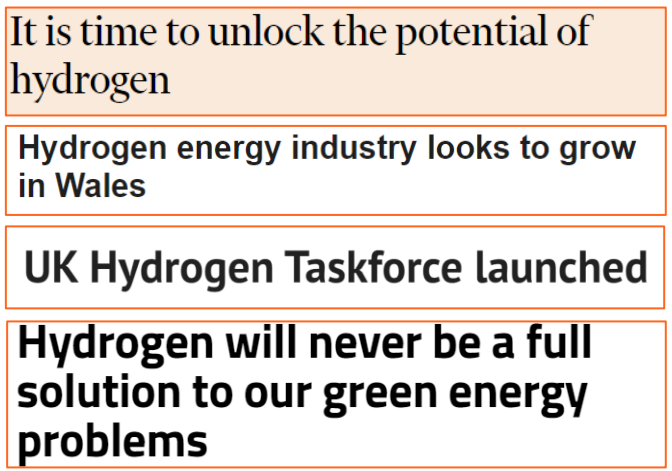
Hydrogen can be used in a fuel cell to generate electricity. It does not involve combustion but an electrochemical reaction and can run indefinitely providing there is a fuel source and oxygen[2]. Hydrogen can also be burned in any engine or boiler but the fuelling system must be hydrogen specific. Despite its high abundance on earth, hydrogen is not readily accessible as it bound in molecules. This means it has to be extracted. The most common method currently used is natural gas reforming which involves steam reacting with hydrocarbons (from fossil fuels) to produce hydrogen. It is also possible to use electrolysis to extract hydrogen from water.

Hydrogen Potential

Hydrogen has been identified as a having a role in the green energy transition because of its properties as a light, storable, energy dense fuel which produces no direct carbon emissions when it is used (however the production of hydrogen itself can emit carbon).[3] There are several qualities cited in support of its development:

- Compliments electrification - Hydrogen could have a role in decarbonising sectors which are difficult to electrify.
- Storage potential - Hydrogen is potentially a leading option for storing the energy generated from renewables.[3]
- Versatility - It has been identified as a potential fuel source in a variety of sectors including Transport, Buildings, Industry and Power Generation.

Figure 23: Examples of headlines on hydrogen



Key reports:

- International Energy Agency - The Future of Hydrogen
- International Renewable Energy Agency - Hydrogen: A Renewable Energy Perspective
- Committee on Climate Change - Hydrogen in a low carbon economy
- UK FIRES - Absolute Zero

Case Study: HyDeploy

This UK based project aims to demonstrate the benefits of injecting 20% volume of hydrogen into the existing natural gas network to heat homes.

- In the first phase of its development, hydrogen in being injected into the private gas network at Keele University. This trial is currently ongoing.
- Following on from this, the goal is to carry out a larger demonstration on a public gas network in the North East

HyDeploy argue that this is a safer and greener alternative to the natural gas we use now. They estimate that if this 20% injection was rolled out across the country it would save 6 million tonnes of CO_2 per year.

1 – Cited in Staffell et al (2019). The role of hydrogen and fuel cells in the global energy system.
2 – Hydrogen Europe- Fuel Cells
3 – International Energy Agency

5. Hydrogen
Introduction

Limitations

Despite its identified potential, there are several limitations to using hydrogen which explain why it has not been deployed widely:

- Limited commercial viability – At present in the UK, hydrogen is not commercially competitive due to the limited production and technology available to create a market for hydrogen.[1]
- Not currently low carbon –Less than 0.1% of global production of hydrogen comes from electrolysis, it is almost entirely supplied by natural gas and coal.[2] This means that global hydrogen production has an emissions footprint greater than the UK.[2] Producing hydrogen through electrolysis from renewable electricity involve losses in electricity[3] (Figure 24). Fuel cells have an electrical efficiency of up to 60% and there is currently limited surplus of renewable energy available to supply this.[1] It has been suggested the hydrogen could also be produced through Carbon Capture and Storage however this is itself yet to be developed at scale.[3]
- Technical feasibility –There are safety risks associated with the deployment of hydrogen that would have to be addressed such as leakage issues (it is a smaller molecule than natural gas), ignition temperature and NOx production.[1] Energy carriers such as ammonia and liquid organic hydrogen carriers also have a variety of safety considerations.[1]

Whilst there is growing research into a blending hydrogen into the gas network, this would still involve some level of natural gas and so would have a much smaller emissions saving.[1] A 100% switch to hydrogen from natural gas would require new infrastructure and new appliances in homes.

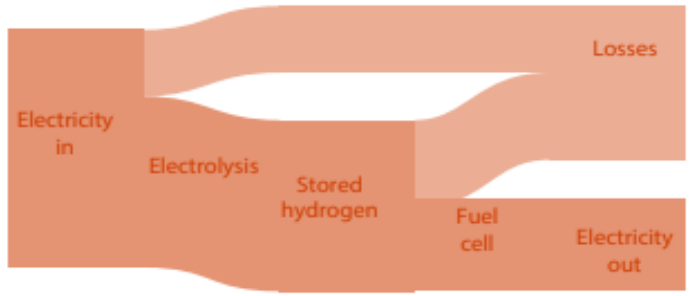


Figure 24: Illustration of the losses from electrolysis to produce hydrogen, dependent on application (Source: Absolute Zero)

Birmingham Hydrogen Analysis:

In the subsequent pages, Anthesis have provided a simplified theoretical model output of the potential for hydrogen in Birmingham based on publicly available reports. The contribution of hydrogen is considered in addition to the most ambitious SCATTER projection (see Figure 25) in line with the CCC's advice. The aim is to provide a high-level overlook of hydrogen potential by comparing the carbon intensities of alternative sources and does not go into detail on the objects or technologies replaced. The model considers time-frame and availability of hydrogen/implementation.

The modelling has focused on public transport and domestic heat as two potential areas for hydrogen usage. Analysis of the potential of hydrogen in industry has not been carried out due to limitations in process data available and incompatibility to the modelled SCATTER scenario.

We acknowledge inherent limitations in assumptions applied – these are simply intended to help inform relative priority of actions and how more robust estimates could be performed.

1 –Committee on Climate Change – Hydrogen in a Low Carbon Economy
2 – International Energy Agency
3 – Absolute Zero

5. Hydrogen

Public Transport Modelling

There is a possible role for hydrogen in decarbonising heavy duty transport modes such as buses and trains which may be more difficult or expensive to electrify. Using fuel cells in buses and trains could also have limited hydrogen infrastructure requirements.[1]

Methodology

Availability - Scenarios have been extracted from SCATTER pathways alongside "Tyseley Energy Park Energy Strategy report" produced by SIEMENS (2019)

- Moderate (current) ambition anticipates an initial hydrogen production of 0.7kt/year = 22 buses and 2 trains.
- High ambition aligns to an initial 1.9kt/year of hydrogen production = 50 buses and 6 trains.
- Rail is expected to make significant improvements in the high ambition SCATTER scenario. Once the emissions for rail have been reduced to zero, the remaining hydrogen has been allocated to bus travel.

Timeframe – Deployment starts from 2030 onwards[2] and then applies a yearly implementation rate of 0.2 to 2050.

Implementation – The model assumes a 5-fold increase in hydrogen availability by 2050 including other sources as well as Tyseley Energy Park.

Results

- The graphs presented show the residual emissions of the whole transport sector, with the potential contribution of hydrogen highlighted in darker green.
- The moderate ambition scenario further reduces emissions after electrification by 22% and the high ambition scenario by 78%.
- In comparison to a business as usual scenario for Birmingham, electrification and modal shift reduces 2050 emissions by 57% and hydrogen reduces by a further 9%. The bulk of the reductions would be achieved through demand and electrification measures.
- The key limiting factor in this analysis was the availability of hydrogen. The model considers locally produced hydrogen as this would have the lowest footprint and avoids some of the issues with transporting hydrogen.

Figure 25: Moderate ambition hydrogen scenario for Birmingham's transport sector only

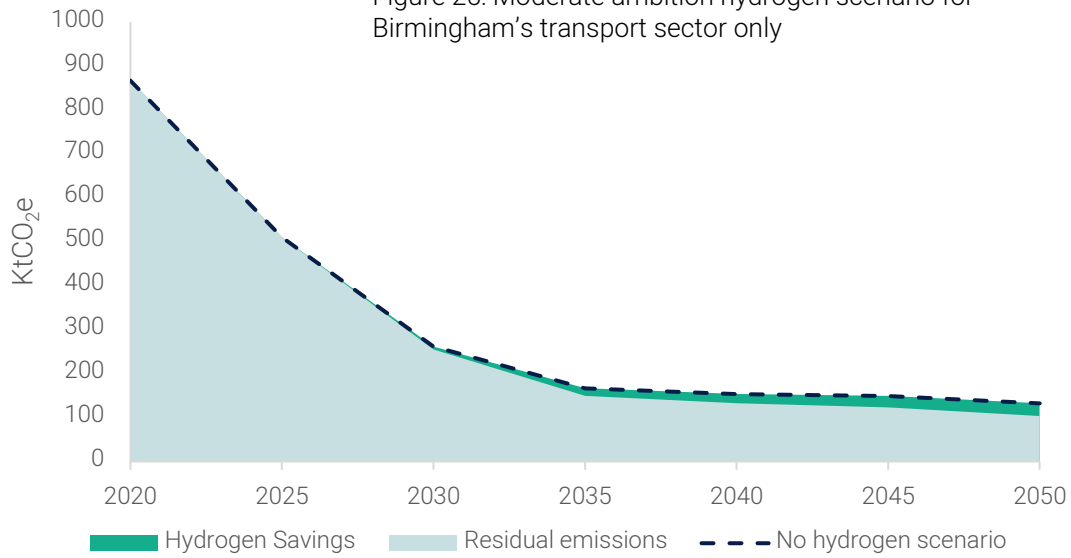
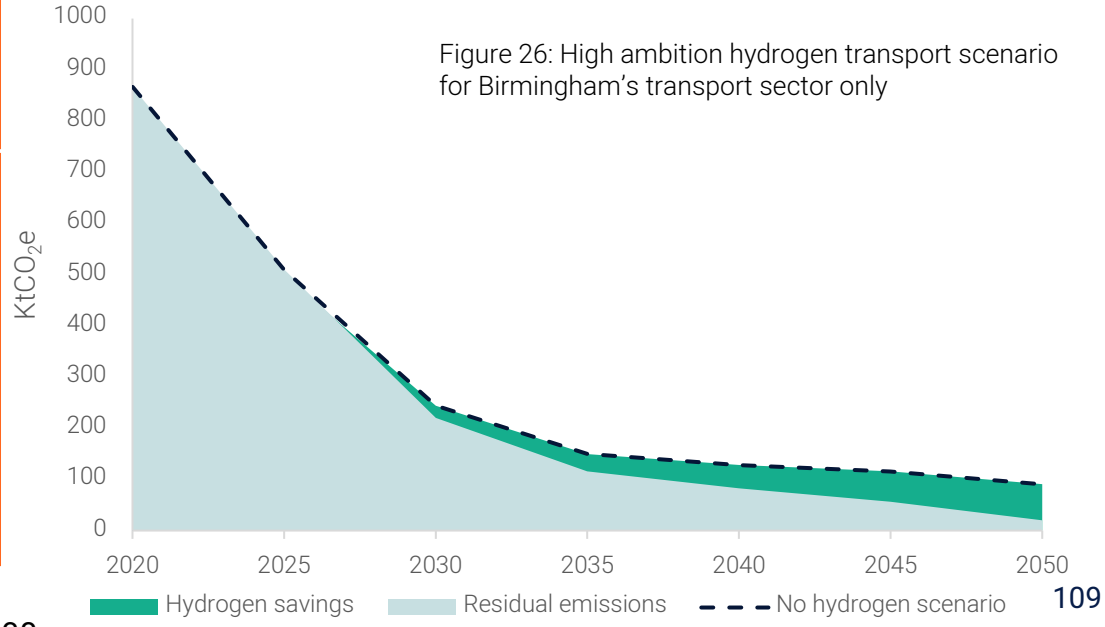


Figure 26: High ambition hydrogen transport scenario for Birmingham's transport sector only



1 –Committee on Climate Change – Hydrogen in a Low Carbon Economy
2 - "Tyseley Energy Park Energy Strategy report"

5. Hydrogen
Domestic Heating Modelling

Hydrogen has been identified as a potential fuel source for heating in domestic properties, particularly in meeting the demand for low carbon heat during higher demand periods in winter. This is because of its potential to be blended with natural gas or make use of the extensive gas network currently used.

Methodology

Timeframe – Implementation year of 2030.
Implementation – Assumes 20% of heating demand is supplied by hydrogen in 2050 and the implementation rate is linear.

- Carbon Intensity for hydrogen assumed to be 122 gCO_2e/kwh[1]. This is based on the best technologies currently available and reiterates the fact that hydrogen production is currently carbon intensive. Further reductions to this factor may be possible through future technologies such as carbon capture and storage. However, it is extremely difficult to predict the success/penetration of these technologies so a constant carbon factor has been applied in this analysis.

Results

- The results of this modelling scenario show that the emissions from domestic heating sector would actually increase with the adoption of current hydrogen fuel technology.
- This in part down to the fact this model does not predict a future carbon intensity reduction of hydrogen and from 2030 it is expected to be worse than the fuel mix of SCATTER's most ambitious projection (see Table 5).
- Whilst this may decrease over time, the results demonstrate the importance of other technologies in a low carbon transition and that hydrogen at its current level of development cannot displace already established and at scale technologies.
- The key limiting factor is the carbon intensity of the production of hydrogen for domestic properties.

Figure 27: Hydrogen used in domestic heating scenario

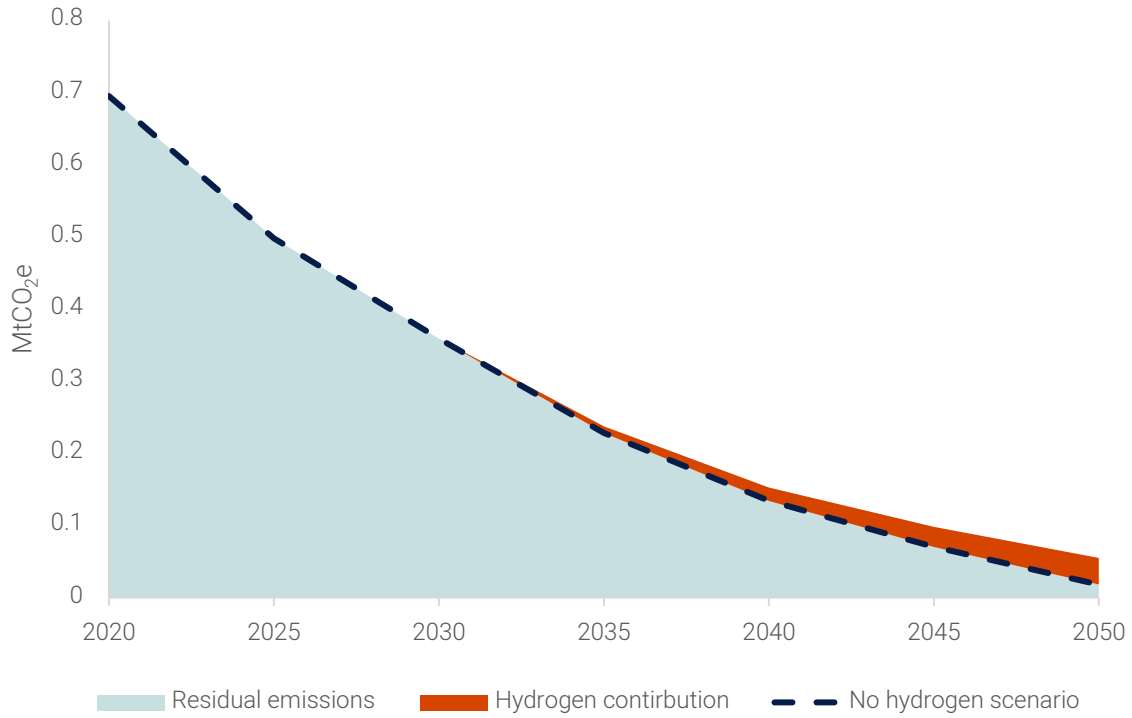


Table 5: Emissions factors for hydrogen in domestic properties

Scenario	2050 carbon intensity
SCATTER Level 4	0.01468
+ 20% hydrogen supply	0.03717

1 - Mori,M., Mrzljak, T., Drobnic, B., Sekavcnik, M. (2013) Integral Characteristics of Hydrogen Production in Electrolysers, Journal of Mechanical Engineering, 59, 10, 585-594

5. Hydrogen
Summary

- The results from these simplified models of hydrogen potential further highlight the barriers faced by limited supply of hydrogen and carbon intensive methods of hydrogen production.

- In light of the limitations discussed, the Committee on Climate Change suggest that hydrogen should be considered **selectively** where electrification is not feasible. This includes the following sectors:
    - Domestic heating
    - Transport HGVs including buses and Trains
    - Heavy Industry

- Whilst this means there is a potentially important role for hydrogen in the low carbon energy transition, it is still very much in development and significant rollout and savings will not be realised in the short term.

- Therefore, for the time being Birmingham City Council should support the research and trialling of hydrogen and prepare infrastructure for future adoption.

- Given the urgency of the climate emergency, this **must be balanced** with the roll-out of already established and readily available green technology such as electric cars, heat pumps and electric heating systems.

6. Monitoring and Reporting

Monitoring and Reporting
Introduction

This section seeks to provide a process for the continued monitoring and reporting of GHG emissions data for BCC and Birmingham City. The purpose of monitoring and reporting is to ensure there is a defined method for checking progress on key indicators towards the ambitious goals set out by BCC.

- Council emissions profile: Ensuring there is an internal process, responsibility and timeline for monitoring and reporting on the council's carbon footprint in line with the council's net zero carbon by 2030 ambition
- City-wide emissions profile: Ensuring there is an process, responsibility and timeline for monitoring and reporting on the city's emissions profile, to enable progress to be tracked towards the net zero carbon by 2030 ambition

In order to facilitate the above and ensure that progress is made towards the goals, there will need to be continued data collection procedures in place across all sectors and themes outlined in the report. The next pages of this section dive into the requirements for data collection in addition to the processes for assessing and reporting across the two inventory boundaries.

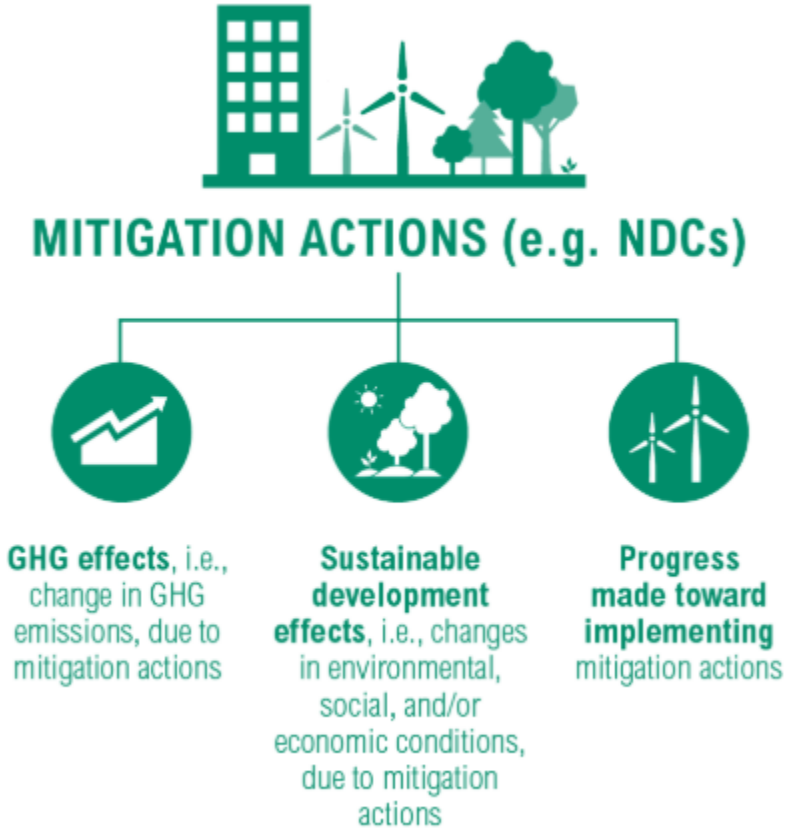


Figure 28: Monitoring and Reporting on mitigation actions
Source: WRI Measurement, Reporting and Verification (MRV) types

Monitoring and Reporting
Council Emissions

Monitoring

It will be vital for continued annual measurement of BCC's activities in the key areas of operation in order to understand if the projects underway have had the desired impact of reducing the council's emissions. Whilst monitoring specific emissions reductions from specific programmes or projects is more difficult, tracking key indicators will enable continued monitoring of key emissions drivers for BCC.

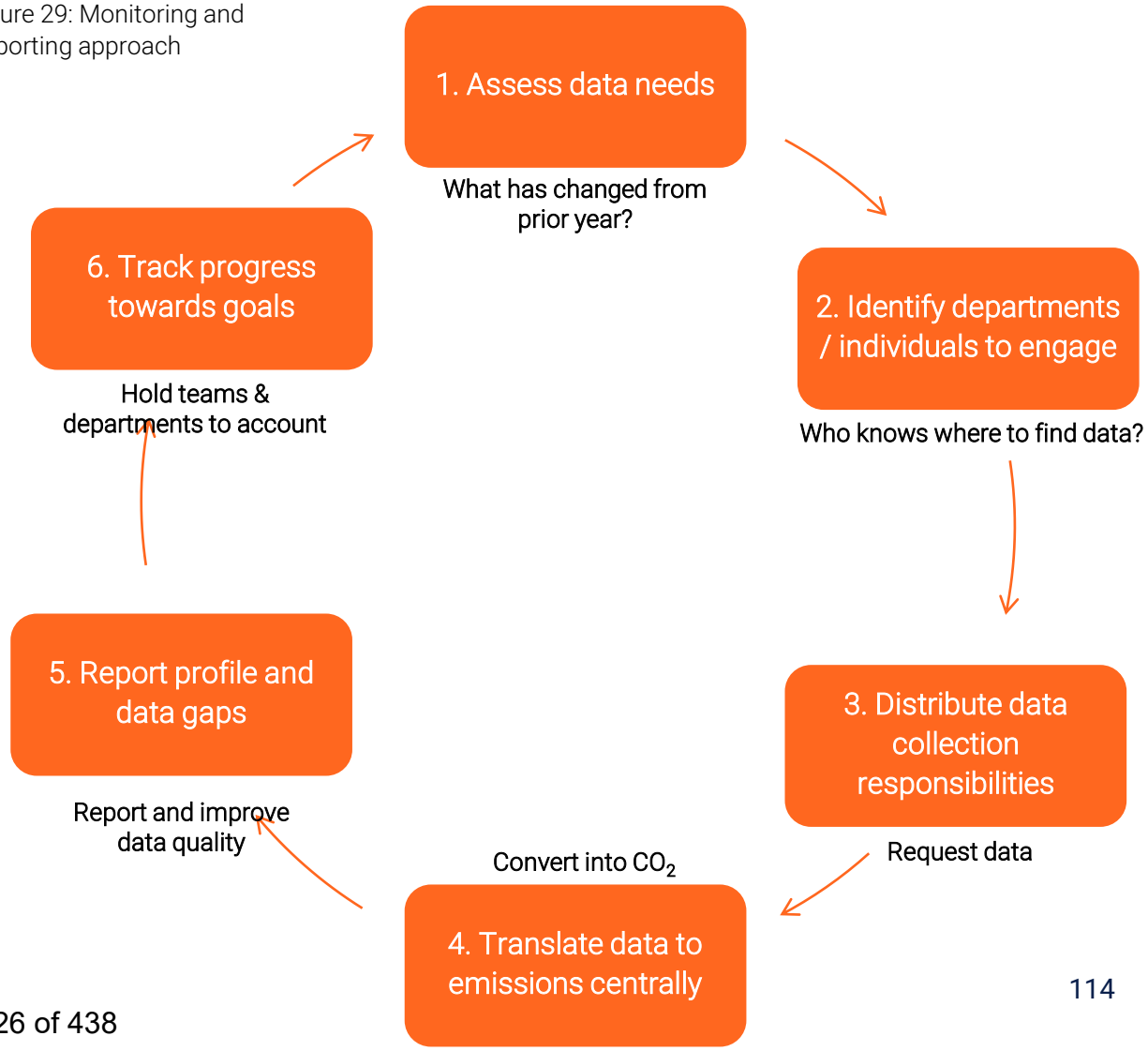
Reporting

Typically, council emissions profiles are not reported to external bodies and are used as an internal line in the sand to track progress against defined goals and identify areas for efficiency and reduction potential. Reporting on progress on emissions reduction can also be useful in demonstrating leadership from the council to citizens and businesses. This capitalises on the ability of BCC to influence the decisions and activities of external individuals and organisations to reflect the ambition in their own operations. The method uses the Greenhouse Gas Protocol (Corporate Standard).

Current year context: Data improvements
From Anthesis' data collection, it was possible to identify key gaps and inefficiencies in databases, including:
1) Access to more readily available fleet data.
2) Better categorised contracts and a strategic review of procurement data
3) Lack of clarity on gas supply for leased buildings. Only electricity was visible in the data; either because heat is all electrified or BCC do not pay the bills.
4) Regularly conducted, consistent staff travel surveys.

Current year context: Training
Tools and training will be provided to help enable and empower staff to better monitor key metrics and associated impacts.

Figure 29: Monitoring and Reporting approach



Monitoring and Reporting
City-wide Emissions

By preparing an updated annual city-wide emissions inventory aligned with the city-wide inventory provided in Chapter 3, progress towards the net zero ambition for the city can be monitored over time.

Monitoring

SCATTER provides a GHG inventory for emissions across the city based on publicly available datasets following guidance from the Global Protocol for City-wide GHG Emissions (GPC). The continued collection and calculation of this data into tonnes of carbon dioxide equivalent for all major sectors across the city will be essential to monitor progress. Should the calculation methodology or data sources change, it will be vital to recalibrate previous inventories in order to ensure data is comparable over time.

Reporting

The SCATTER inventory is prepared in the format aligned to the Global Covenant of Mayors for Climate and Energy (GCoM), under the Common Reporting Framework, of which Birmingham City Council is a signatory. It will be important for BCC to continue reporting the latest city-wide inventory to GCoM as this will:

- Allow progress to be verified externally
- Demonstrate leadership to other cities and local authorities
- Support peer-to-peer learning through the GCoM network

Covenant of Mayors for Climate & Energy

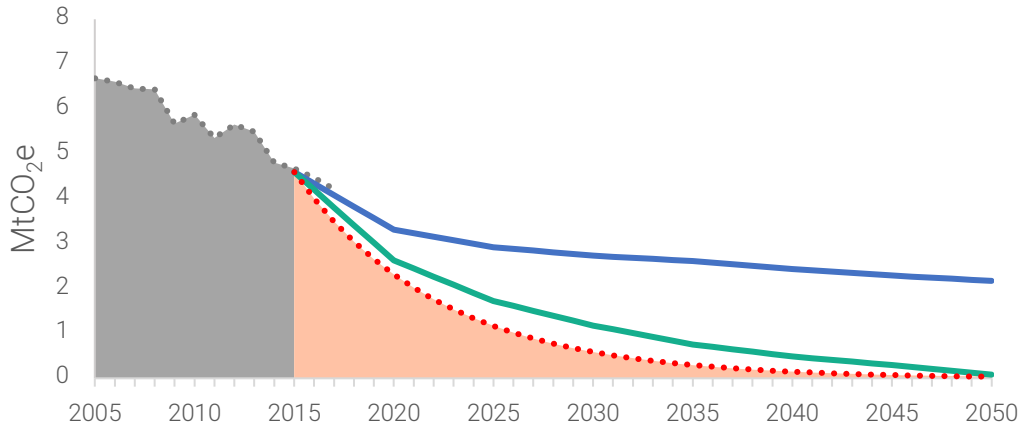


Figure 30: Tracking progress toward SCATTER trajectory

Monitoring and Reporting on Actions

Whilst there are no defined guidelines for monitoring and reporting on actions undertaken by councils to support the low carbon transition, it is advised to track key metrics to support monitoring of progress on each action.

"It is vital for good governance of our strategy that the effectiveness of individual actions and their overall impact are regularly monitored and reported on. In order to do this we will continue the activities of our Climate Change Steering Group which comprises senior personnel from relevant departments.

Their task will be to oversee and coordinate individual actions, to monitor cost effectiveness and CO_2 savings and to recommend changes to initiatives and the overall programme as required." Climate Change Strategy for Warrington

6. Monitoring and Reporting

Chapter	Monitoring and Reporting on Carbon Reduction Measure	Key metric(s)	Costs and Resources
Council	Develop a monitoring and communication campaign to reduce energy use.	Energy use data (kWh)	Carbon Trust estimates that the cost of a campaign is 1-2% of an annual energy bill.[1]
	Develop a monitoring and communication campaign to reduce waste and increase recycling, including paper.	Volumes of waste generated (kg) Volume of waste recycled (kg)	Additional staff resources
	Develop a SMART Action Plan and monitoring system and share experiences with other businesses and other organisations	As above	Additional staff resources.
	Establish monitoring systems and better holding commissioned suppliers to account on their carbon performance.	Whether supply has measured footprint (Y/N) in tCO_2	Additional staff resources.
	Define a process for undertaking regular staff travel and commuting surveys to allow better monitoring of internal travel methods.	Distance travelled (km) Modes of travel	Additional staff resources.
	Introduce a fleet management system and telematics to monitor pool car usage and mileage.	Mileage and vehicle types	If data is not available, then investment in telematics may be required to monitor mileage
Buildings	Implement standardised monitoring plus annual reporting of energy use and results of Display Energy Certificates (as applicable) at all council sites, including those not covered by centrally procured energy contracts.	Energy use data (kWh) Number of DEC in place	Proposed one officer to lead in coordinating efforts (c.£50,000 per annum).
	Develop and implement a pathway for increased measurement and reporting of i) energy demand and ii) improved energy efficiency in privately owned commercial buildings.	Energy use data (kWh) Energy efficiency measures	Team of three officers to provide outreach to business and manage project (£150,000 per annum) The Carbon Trust has a free carbon footprint tool for SMEs.
	Use energy monitoring and EPC data to drive a segmented approach, tackling those with largest impact and biggest opportunity.	Number of houses and EPC rating of houses	Officer time to complete analysis / outsource.

6. Monitoring and Reporting

Chapter	Monitoring and Reporting on Carbon Reduction Measure	Key metric(s)	Costs and Resources
Energy	Define a process for monitoring renewable energy developments including small scale installations.	Installed capacity (MW) Energy generation (MWh) Number of installations	Additional staff resources.
	Report on the progress of current heat network projects.	Number and scale of projects Installed capacity (MW)	Officer time.
	Review and monitor current and future developments for potential localised renewable energy supply.	Number and scale of projects Installed capacity (MW)	Additional staff resources.
Transport	Define a process for undertaking regular travel and commuting surveys of the public.	Mode of travel Distance travelled (km) Number of journeys	Additional staff resources.
	Monitor and report on the uptake of EVs and installation of EV charging infrastructure across the city	Number of EVs and types Number of EV charge points Type of EV charge points	Officer time.
Natural Environment	Monitor and measure progress towards afforestation through land-use surveys.	Number of trees Area of land afforested (km)	Fee for land-use surveys.
	Monitor the outcomes of community sequestration schemes.	Number of trees	Officer time.
Waste	Continue to monitor and report on collected and recycled waste across the city.	Volumes of waste generated (kg) Volume of waste recycled (kg)	Officer time.
	Develop incentives for businesses to monitor and report on the waste they generate.		Officer time.
Industry	Work with WMCA to engage with key industrial businesses to recommend monitoring and reporting of their emissions and energy use.	Tonnes of carbon dioxide (tCO_2) Energy use data (kWh)	Officer time.

Appendices

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Appendix 1
Data Tables for SCATTER Inventories

IE	= Included Elsewhere
NE	= Not Estimated
NO	= Not Occurring

Sub Sector	Direct, $ktCO_2e$	Indirect, $ktCO_2e$
Residential buildings	1005.2	561.3
Commercial buildings & facilities	178.1	97.4
Institutional buildings & facilities	287.6	492.2
Industrial buildings & facilities	222.0	285.3
Agriculture	1.0	0.0
Fugitive emissions	0.0	n/a
On-road	1220.3	IE
Rail	28.4	IE
Waterborne navigation	3.4	NO
Aviation	NO	IE
Off-road	12.2	IE
Solid waste disposal	41.3	n/a
Biological treatment	0.0	n/a
Incineration and open burning	0.0	n/a
Wastewater	70.9	n/a
Industrial process	70.9	n/a
Product use	0.0	n/a
Livestock	0.3	n/a
Land use	-17.6	n/a
Other AFOLU	0.0	n/a
Electricity-only generation	366.9	n/a
CHP generation	2.1	n/a
Heat/cold generation	NO	n/a
Local renewable generation	3.8	n/a
Sub-total	3123.9	1436.2
Grand total	4560.1	

SCATTER data

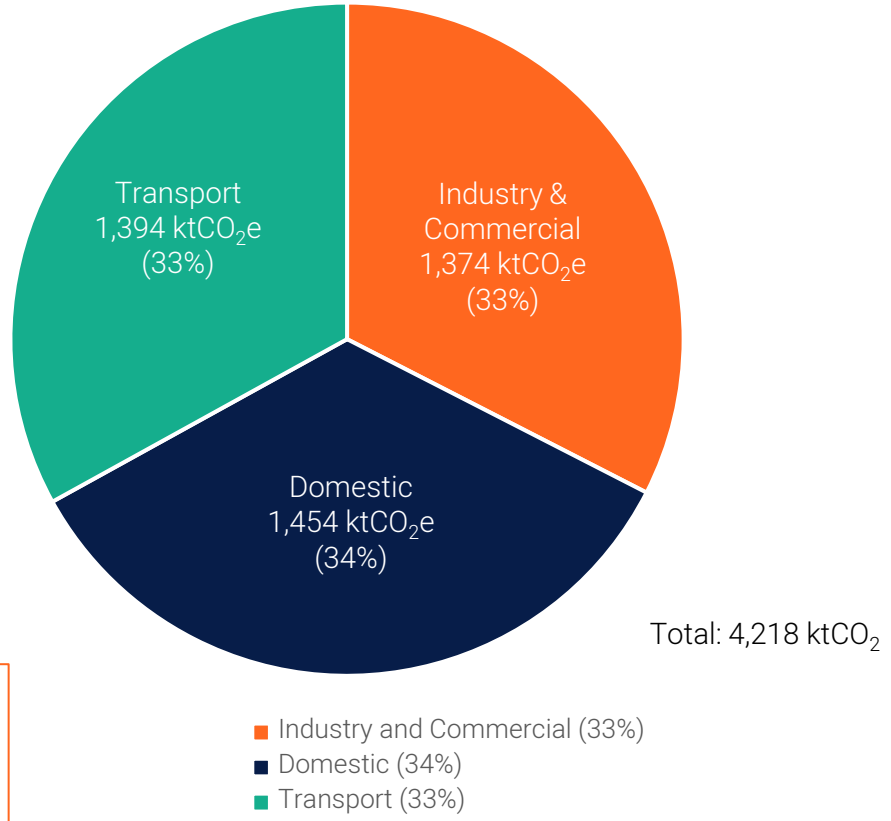
- The table to the right shows a breakdown of emissions for Birmingham City's 2017 footprint.
- The inventory pie charts presented on page 25 do not include agriculture and land use processes as these typically have a negative value for emissions. However , they are presented in this data table.
- Within the SCATTER model, national figures for emissions within certain sectors are scaled down to a local authority level based upon a series of assumptions and factors.
- For more information on SCATTER methodology refer to the following appendices or https://scattercities.com/.

Appendix 2

BEIS Emissions Summaries

Sector	Scope 1 & 2 Emissions, $ktCO_2$
Industry and Commercial Electricity	645.4
Industry and Commercial Gas	588.1
Large Industrial Installations	15.7
Industrial and Commercial Other Fuels	122.8
Agriculture	1.6
Domestic Electricity	402.5
Domestic Gas	1,028.3
Domestic 'Other Fuels'	23.5
Road Transport (A roads)	407.7
Road Transport (Motorways)	213.2
Road Transport (Minor roads)	718.8
Diesel Railways	31.6
Transport Other	23.0
LULUCF Net Emissions	-3.8
Grand Total	**4,218.4**

Figure 31: BEIS sector inventory for direct and indirect emissions within Birmingham, 2017



Differences from SCATTER

- BEIS also provide data on greenhouse gas emissions at a local authority level.
- The BEIS data (above) and SCATTER data (previous page) show different totals and sectors because they are compiled using different methodologies. The SCATTER model and BEIS datasets are for the 2017 reporting period. See Appendix 3 for a further summary of the difference in methodology.

Appendix 3

SCATTER Frequently Asked Questions

What do the different emissions categories mean within the SCATTER Inventory?

Direct = GHG emissions from sources located within the local authority boundary (also referred to as Scope 1). For example petrol, diesel or natural gas.

Indirect = GHG emissions occurring as a consequence of the use of grid-supplied electricity, heat, steam and/or cooling within the local authority boundary (also referred to as Scope 2).

Other = All other GHG emissions that occur outside the local authority boundary as a result of activities taking place within the boundary (also referred to as Scope 3). This category is not complete and only shows sub-categories required for CDP / Global Covenant of Mayors reporting.

The BEIS Local Emissions Summary does not differentiate between direct/indirect/other (or the various 'scopes').

What do the different sectors and subsectors represent within the SCATTER Inventory?

- **The Direct Emissions Summary and Subsector categories** are aligned to the the World Resource Institute's Global Protocol for Community-Scale Greenhouse Gas Emission Inventories ("GPC"), as accepted by CDP and the Global Covenant of Mayors.
- **The BEIS Local Emissions Summary** represents Local Authority level data published annually by the Department for Business Energy & Industrial Strategy (BEIS).
- **Stationary energy** includes emissions associated with industrial buildings and facilities (e.g. gas & electricity).
- **IPPU** specifically relates to emissions that arise from production of products within the following industries: iron and steel, non-ferrous metals, mineral products, chemicals. These are derived from DUKES data (1.1-1.3 & 5.1).
- **Waterborne Navigation and Aviation** relate to trips that occur within the region. The figures are derived based on national data (Civil Aviation Authority & Department for Transport) and scaled to the area administered by Birmingham City Council.
- **The full methodology available on request at** http://SCATTERcities.com.

Why does the BEIS summary differ from the SCATTER summary?

- The BEIS summary **represents CO_2 only**; SCATTER also includes emissions factors for other greenhouse gases such as Nitrous Oxide (N_2O) and Methane (CH_4). These are reported as a CO_2 'equivalents (e)'.
- The BEIS summary **does not provide scope split**; SCATTER reports emissions by scope 1, 2, and 3 (i.e. direct, indirect or other categories).
- **The BEIS summary categories are not directly consistent or mapped to the BEIS LA fuel data** which is available as a separate data set. SCATTER uses published fuel data and applies current-year emissions factors, whereas the BEIS data calculations scale down national emissions in each transport area. Specifically with regards to road transport, BEIS data splits total emissions across road type; SCATTER uses fuel consumption for on-road transport per LA.
- **Different treatment of 'rural' emissions** i.e. Agriculture, Forestry and Other Land Use (AFOLU) and Land Use, Land Use Change & Forestry (LULUCF) categories are derived from different underlying data sets and have been explored further within Section 5 of this report.

Appendix 4
Deriving the Birmingham carbon budget

Aviation and shipping

Aviation and shipping emissions are deducted from the budget at the UK level, **not** at the Birmingham City region level. Therefore, the carbon budget allocated to Birmingham under the Tyndall Centre analysis does not include aviation emissions.

The Tyndall Centre analysis assumes the UK emissions from aviation as remaining constant up until 2030, followed by a linear reduction to full decarbonisation in the sector until 2075. These aviation assumptions are at odds with current market trends, which indicate that worldwide emissions from flights rose by 32% between 2013 and 2018. Similarly, Airbus recently reported they anticipate the number of commercial planes in operation to double by 2038.

With government predictions expecting significant growth in aviation and shipping emissions, this would erode the remaining UK budget available for local authorities, requiring even greater reductions in other emissions in order to keep within the 1.5 °C budget. It is therefore recommended that local and national governments work collaboratively to consider strategies that limit emissions growth from aviation and shipping.

For the avoidance of doubt; Tyndall Centre Research does not suggest that action to reduce Aviation and Shipping is limited to the national level.

By 2035, emissions must reduce by over 90% against 2015 levels to remain in budget

Budget milestones

The table below gives the cumulative emissions totals and percentage reductions against 2015 baselines for Birmingham:

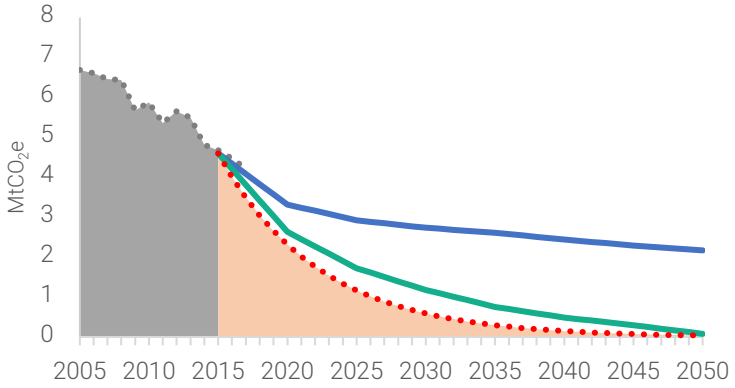
Table 6: Birmingham City region Carbon Budget, Tyndall Centre analysis

Year	Reduction in emissions against 2015 levels
2020	25%
2025	62%
2030	81%
2035	90%
2040	95%
2045	98%
2050	99%

Appendix 5

The SCATTER Model

Figure 32: Birmingham Carbon Budget and Pathways for the city-wide energy system



SCATTER "Level 1' Pathway – Assumes the selected region doesn't take much action beyond current, national policy and nationally led decarbonisation of the electricity grid.[1]

SCATTER "Level 4" Pathway – Assumes the selected region goes significantly beyond national policy and National Grid assumptions, across both energy supply and demand measures. Many assumptions aligned with the legacy DECC 2050 Pathways calculator 'Level 4'. See Appendix 4 for further details.

Tyndall Paris Aligned Budget – The finite, cumulative amount that the region should emit between now and 2050, based on research performed by the Tyndall Centre for Climate Change Research.[2]

Tyndall Paris Aligned Pathway – The yearly totals that must reduce 12.8% on average each year to keep within the budget. Note: Unlike the SCATTER Pathways, this does not specify what tangible measures could achieve this pathway, rather, it sets out what science (IPCC[3]) indicates we need to aim for.

Historic Pathway – Previous emissions totals as reported within the BEIS Local Authority Emissions data sets.[4]

Exploring the SCATTER trajectory

The pathways graph on the left shows two possible future emissions pathways over time, as modelled by the SCATTER pathways tool. This tool focuses on energy system (fossil fuel consumption) emissions reductions within Birmingham. The pathways do not represent reductions outside of the BCC city boundary (i.e. consumption-based emissions). While the tool SCATTER tool chart demonstrates a timeline to 2050, the reductions shown to 2030 are expected as a result of the described emissions reduction measures.

Closing the gap

Gaps exists between the SCATTER Level 4 Pathway and the Tyndall Paris Aligned Pathway / zero carbon axis is because modelling assumptions are based on present day evidence & judgment. Such assumptions are not intended to constrain the future ambition to close the gap. In addition, there is a gap between the net zero ambition for 2030 and the expected trajectory for level 4 ambition. To close this gap, there will need to be consideration for offsetting measures either in-boundary or out-of-boundary, using negative emissions technologies or further natural carbon sequestration beyond what has been described.

Both Pathways can be compared against the Tyndall Centre for Climate Change Research's Paris Aligned Budget. This is derived from climate science[3] and applies a method for scaling down global carbon emissions budgets that are 'likely' to keep temperature change "well below 2°C and pursuing 1.5°C", to local authority regions. Unlike the SCATTER pathways, this is based on climate science, not tangible energy supply and demand measures in region. The cumulative nature of CO_2 reinforces the need for to take a 'budget' approach, where any annual shortfalls accumulate over time. This Pathway is just one way of allocating a finite, carbon budget (the area underneath the curve). Alternatively, the same budget will last only 7 years if emissions remain at current levels. This highlights the need for urgent action **now**.

1 – The BAU carbon intensity of electricity tracks the National Grid Future Energy Scenario (FES) "2 Degrees", 2017), on the basis that this was aligned with the legislated targets at the time the SCATTER tool was developed.
2 – This is based on information not yet publicly available, however the method is broadly comparable with work performed for the Greater Manchester Combined Authority and the City of Manchester. Contact c.w.jones@tyndall.ac.uk for further information.
3 – Intergovernmental Panel on Climate Change, 1.5°C Special Report, 2018
4 – Data is published 2 years in arrears, 2017 published data is represented on the graph as the SCATTER Pathways tool had not been updated at the time of writing. % Reduction figures presented do reflect the 2018 published BEIS data

Appendix 5
The SCATTER Model

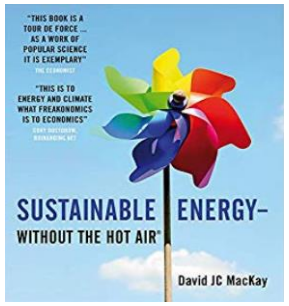
About the model

SCATTER is intended to serve as one of many information sources to help users inform their priorities for emissions reduction. Specifically with reference to the forward-looking pathways modelling element, it is intended to focus on the 'what' rather than the 'how'. It is important to note that SCATTER does not intend to prescribe certain technologies or policies, and similarly does not intend to discount other methods of arriving at the same outcome, just because they do not feature in the model. The SCATTER pathways serve as 'lines in the sand' and give users an indication of whether they are likely to be on-target or off-target for a carbon neutral trajectory through the adoption of interventions to drive the transition to a low carbon economy.

Naturally, technologies, assumptions and approaches to energy models are evolving all the time, and we would welcome the opportunity to receive feedback and/or collaborate on refinements of SCATTER in the future. Please share any feedback with scatter@anthesisgroup.com.

Basic principles

Sir David MacKay's 'Sustainable Energy - Without Hot Air (2009)" underpins the basis for the pathways modelling. As a scientific advisor to the Department for Energy & Climate Change (DECC), now BEIS, MacKay's work led to the development of the 2050 Pathways calculator. An open source, Microsoft Excel version of this tool was published by DECC which we used as the foundation for SCATTER.



Two key modifications were made by Anthesis:

1) We scaled it down for sub-national regions: Scaling assumptions and localised data sets were built into the tool so that results were representative of cities and local authority regions, rather than the UK as a whole.

2) We pushed ambition further: Technology specifications changes were reviewed and updated where judged to be out of date and constraining ambition. Given that almost a decade had passed since MacKay's publication and the release of the 2050 Pathways tool, we sought the counsel of a technical panel to make these updates. The technical panel comprised subject matter experts from Arup, BEIS, Electricity North West, GMCA, The Business Growth Hub, The Energy Systems Catapult, The Tyndall Centre and Siemens. We also referenced the 2050 Wiki page during the course of the update.

Many other sector specific aspects of modelling treatment and assumptions have required consideration and interpretation as we have applied the model to various cities and local authorities.

Appendix 6

Supply & Demand

The energy system has two main components; energy supply, and energy demand. In this report, the term 'energy system' relates to energy in the form of solid, liquid and gaseous energy that is used to provide fuel, heat and electricity across buildings, transport and industrial sectors. Energy must be supplied to each of these sectors, in order to meet the demand for energy that the sectors require. Demand drives the amount of supply we need, and actors such as businesses, residents and public services all play a part in contributing to this demand.

Future demand is hard to predict. Recently published analysis within the National Grid's Future Energy Scenarios (FES) 2019 indicates that even under a scenario that meets the UK's net zero by 2050 (Two Degrees), electricity demand still increases. SCATTER's L4 Pathway on the other hand (consistent with the legacy 2050 Pathways tool), assumes that electricity demand still reduces overall. Factors such as increased electrification of heat and transport are naturally big drivers for the increase, but incentives and opportunities for demand reduction and energy efficiency measures are still significant and could slow or tip trends in the other direction.

Reducing demand should always come first.

Economically, this usually makes sense, whether at an individual, organizational or city level. For example, energy bills can reduce and at a city level, costs associated with installing new generation assets, new grid connections and grid reinforcement works and be minimised.

Socially, there are benefits if citizens can be better off if they shift to healthier forms of transport just as walking & cycling, or increase efficiency of journeys by car sharing.

Table 7: FES & SCATTER Demand side assumptions at 2030 and 2050.

Source	Change in current[1] demand	
	2030	2050
FES Two Degrees (2019)	▲ 5%	▲ 48%
SCATTER Level 4 (L4) Pathway	▼ 25%	▼ 45%

Environmentally, emissions savings can often be achieved much quicker by implementing various demand side behaviour changes or 'quick win' efficiency measures. This can help safeguard carbon budgets and avoid placing too much reliance on slower, riskier, renewable supply infrastructure to deliver the emissions savings so critically required.

The potential for demand reduction is still huge. The International Energy Agency (IEA) estimated that efficiency measures (i.e. demand side reduction), could contribute 40% towards our emissions targets[2].

1 - FES: 2018, SCATTER: 2017 levels, electricity demand only.
2 – International Energy Agency, Energy Technology Perspectives, 2017

Appendix 7

Summary list of modifications between SCATTER and DECC Pathways Calculator

Measure	Updated from original Pathways Calculator?
Energy generation & storage	
Onshore wind	N
Biomass power stations	Y
Solar panels for electricity	N
Solar panels for hot water	N
Storage, demand shifting & interconnection	N
Geothermal	N
Hydro	N
CCS	N
Bioenergy sourcing	
Increase in land used to grow crops for bioenergy	Y
Reduction in quantity of waste	N
Increase the proportion of waste recycled	Y
Bioenergy imports	N
Transport	
Reducing distance travelled by individuals	N
Shift to zero emission transport	N
Choice of fuel cell or battery powered zero emission vehicles	N
Freight: Shift to rail and water and low emission HGVs	N

Measure	Updated from original Pathways Calculator?
Domestic buildings	
Average temperature of homes	N
Home insulation	Y
Home heating electrification	Y
Home heating that isn't electric	N
Home lighting & appliances	N
Electrification of home cooking	N
Commercial buildings	
Commercial demand for heating and cooling	Y
Commercial heating electrification	Y
Commercial heating that isn't electric	N
Commercial lighting & appliances	N
Electrification of commercial cooking	N
Industrial processes	
Energy intensity of industry	Y

Notes on updates to the SCATTER model

- Updates flagged do not include scaling to local region – it is assumed that this happened for all measures. They relate to instances where the upper threshold of the ambition has been pushed further(i.e. at Level 4)
- Updates exclude alignment of Level 1 ambition to the National Grid FES (2017)
- Note that bioenergy source did not have material bearing on the model due to assumptions linked to bioenergy shortfalls (i.e. it is assumed that bioenergy would be sourced from outside of region, or another renewable source would be used). Waste assumptions may however drive more sustainable consumption behaviours.

Appendix 8
Domestic Retrofit Measures Assumed Within SCATTER

Retrofit Measure	Number of households retrofitted per annum					
Year	2025	2030	2035	2040	2045	2050
Solid wall insulation	3,708	3,805	3,878	5,080	41	41
Cavity wall insulation	188	266	269	1,561	-	-
Floor insulation	4,231	4,342	4,425	5,796	4,474	4,474
Superglazing	8,412	8,633	8,798	11,524	8,895	8,895
Lofts	9,228	9,491	9,672	13,013	-	-
Draughtproofing	555	771	781	4,338	43	43

Domestic retrofit assumptions

- This data is included within SCATTER but is not directly linked to the emissions calculation in the model (it was used to inform cost assumptions in the original legacy DECC 2050 Pathways calculator).
- The numbers shown are the minimum assumed measures for the L4 Pathway, as ambition was pushed further than the legacy DECC tool to which this table relates.
- 2050 household levels are predicted to be 533,520, derived from non-region specific growth assumptions in legacy DECC Pathways tool.
- Household is defined as per https://www.gov.uk/guidance/definitions-of-general-housing-terms#household
- The average heat loss per home includes new builds (at PassivHaus standard), which will contribute to lowering the average over time.
- For further detail, please refer to Section D of the DECC 2050 Pathways guidance:

Appendix 9
Energy Performance Certificates (EPCs)

Non-domestic EPC ratings for Birmingham, 2008-19	
EPC rating	Number of lodgements
A	193
A+	1
B	1503
C	4983
D	5487
E	2976
F	1137
G	1236
Not Recorded	9
Total number of lodgements	17,525

Domestic EPC ratings for Birmingham, 2008-19	
EPC Rating	Number of lodgements
A	142
B	8161
C	74521
D	147106
E	84764
F	18192
G	5455
Not Recorded	5
Total number of lodgements	338,346

Energy Performance Certificates

- Energy Performance Certificates provide an energy efficiency rating from A (most) to G (least) and are valid for 10 years. It provides information on a properties energy use and typical energy costings.
- Defining in terms of 'lodgements' allows direct comparison between domestic and non-domestic property.
- In Birmingham, 79% of domestic properties carry a publicly available EPC rating.
- Live reporting on the EPC ratings of all properties (both domestic and non-domestic) can be found at: https://www.gov.uk/government/statistical-data-sets/live-tables-on-energy-performance-of-buildings-certificates#epcs-for-all-properties-non-domestic-and-domestic

Appendix 10
Domestic & Commercial Heating and Hot Water Systems Assumed Within SCATTER

Heating and hot water systems share, as a % of households (domestic)					
Technology package	2020	2025	2030	2040	2050
Gas boiler (old)	44%	37%	31%	19%	6%
Gas boiler (new)	39%	34%	28%	17%	6%
Resistive heating	7%	7%	7%	7%	7%
Oil-fired boiler	6%	6%	5%	3%	1%
Solid-fuel boiler	2%	2%	2%	1%	0%
Stirling engine μCHP	-	-	-	-	-
Fuel-cell μCHP	-	-	-	-	-
Air-source heat pump	1%	9%	18%	35%	52%
Ground-source heat pump	-	4%	9%	17%	26%
Geothermal	-	-	-	-	-
Community scale gas CHP	1%	0%	0%	0%	0%
Community scale solid-fuel CHP	-	-	-	-	-
District heating from power stations	-	0%	1%	2%	3%

Heating and hot water systems share, as a % of households (commercial)					
Technology package	2020	2025	2030	2040	2050
Gas boiler (old)	45%	37%	30%	15%	0%
Gas boiler (new)	16%	13%	11%	5%	0%
Resistive heating	18%	16%	14%	11%	7%
Oil-fired boiler	8%	7%	5%	3%	0%
Solid-fuel boiler	-	-	-	-	0%
Stirling engine μCHP	-	-	-	-	0%
Fuel-cell μCHP	-	-	-	-	0%
Air-source heat pump	9%	17%	26%	43%	60%
Ground-source heat pump	4%	9%	13%	21%	30%
Geothermal	-	-	-	-	0%
Community scale gas CHP	-	-	-	-	0%
Community scale solid-fuel CHP	-	-	-	-	0%
District heating from power stations	0%	1%	1%	2%	3%

Heat supply assumptions

- Domestic (left) and commercial (right) share of heating technologies assumed within SCATTER
- Matrix is unchanged from original DECC Pathways Calculator. It is acknowledged newer technologies or fuel sources such as hydrogen are not reflected in this tool.

Appendix 11
Transport Assumptions

Projection of modal share of transport (units: % of passenger-km)			
Mode	2015	2050 BAU	2050 L4
Walking	4%	4%	4%
Bicycles	1%	1%	5%
Cars, Vans, and Motorcycles	80%	80%	62%
Buses	5%	5%	19%
Railways	9%	9%	10%
Travel demand relative to 2015	100%	100%	75%

Ambition level (units: Pax* / vehicle-km) @ 2050			
Mode	2015	2050 BAU	2050 L4
Cars, Vans, and Motorcycles	1.56	1.56	1.65
Buses	11.32	11.32	18.00
Railways	0.32	0.37	0.42

Transport Modal Assumptions

This shows the underlying assumptions around the share of different transport modes and passenger numbers in 2050.

- The comparison between 2050 BAU and 2050 Level 4 pathway shows the need to reduce the share of car transport and shift to modes such as buses, bicycles and railways.
- The final row outlines that an overall reduction in distance travelled (regardless of mode) is also required
- Pax refers to any peoples, persons and occupants (i.e. passengers)

*Pax ~ people/persons/occupants

Appendix 12

Intervention Estimated Carbon Savings

Sector	Measure	Estimated cumulative carbon savings (tCO_2e)		
		2025	2030	2050
Domestic buildings	Reduce demand for domestic space heating & water through insulation, reduced heat demand & increased heat electrification.	2,369,726	5,043,170	20,933,320
	Increase efficiency and electrification of domestic lighting, appliances, and cooking.	2,941,595	5,279,085	15,314,525
Non-Domestic buildings	Reduce demand for non-domestic space heating & water through insulation, reduced heat demand & increased heat electrification.	1,039,858	2,168,304	9,002,845
	Increase efficiency and electrification of commercial lighting, appliances, and cooking	474,293	864,863	2,613,094
Transport	Road freight electrification and shift to rail freight	755,293	1,730,404	6,434,667
	Phase out of fossil cars and buses and shift to electric vehicles Distance reduction Signiant modal shifts – increasing public transport use	3,727,711	7,848,932	27,068,375
	Rail electrification	454,938	864,863	2,431,375
Waste	Waste reduction and increase in recycling	212,386	593,374	3,267,323
Industry	Improved industrial processes efficiency and electrification Carbon Capture and Storage	1,434,497	2,457,563	6,668,804
Natural capital	Managing existing tree stocks and new tree planting	319,943*	551,629*	1,514,681*

Estimated carbon savings:

- All savings are cumulative and estimated in relation to 2017 emissions levels.
- The base year of SCATTER is 2015 and so the trend in BEIS data from 2015 - 2017 has been applied to the SCATTER data in order to predict the 2017 emissions level.

*Measures cumulative sequestration by existing and newly planted trees in line with the model underpinning data presented under Interventions: Natural Environment (Page 90).

Appendix 12

Intervention Estimated Carbon Savings

Sector	Measure	Estimated cumulative carbon savings (tCO_2e)		
		2025	2030	2050
Energy supply	Increase solar PV capacity	785,322	1,766,783	9,320,951
	Increase onshore wind capacity	818,376	1,813,891	9,880,871
	Increasing bioenergy supply (heat & electricity)	1,409,960	2,503,783	6,516,308
	Increasing solar thermal capacity	463,028	1,119,885	6,652,390
	Increasing hydro power generation	132,583	234,569	642,737
	Increasing wave, tidal and tidal stream power generation	1,404,938		
	Increasing hydrogen production for transport	57,000		

Estimated carbon savings

- The method for estimating carbon savings is different from that used previously as this is addressing supply.
- Savings are cumulative over the period 2019-2050, relative to 2018.
- Emissions savings are estimated by applying the 2018 national grid factor average of 248g/kWh to the difference between the most recent year's data (2018) generation output and future generation output at each of the yearly milestones (and interim years). We acknowledge that the grid factor is likely to reduce over time, meaning that savings are likely to materially higher than if compared to a later base year. The 2018 value has been used to avoid double counting the input of renewables.
- It is not appropriate to sum any savings presented from renewable supply with savings achieved on the demand side of the energy system, as this is may result in double counting.

Anthesis

1 – Based on 2018 data from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/743822/Renewable_electricity_by_Local_Authority__2014-2017.xlsx
2 – The % of households quoted is taken from a 2.2 kW installation occupying 16m² of roof space and household number projections (as per the Energy Savings Trust Guidance)

Appendix 13

Glossary of Terms

AFOLU – Agriculture, forestry & land use.

BEIS – UK Government Department for Business, Energy and Industrial Strategy.

Carbon dioxide equivalent (CO_2e) – the standard unit of measurement for greenhouse gases. One tonne of CO_2 is roughly equivalent to seven months of commuting daily by car between Lewes & Brighton or burning 1-2 bathtubs' worth of crude oil. "Equivalent" means that other greenhouse gases have been included in the calculations.

Carbon Neutral/ Net Zero - these two terms typically mean the same thing. Whilst emissions are reduced overall, those that remain (e.g. from industrial and agricultural sectors) are then offset through carbon dioxide removal from the atmosphere. This removal may occur through technology such as carbon capture and storage (CCS) technologies, or through natural sequestration by rewilding or afforestation.

Carbon sink – a process or natural feature that removes carbon from the local atmosphere (e.g. trees or wetlands). The carbon is said to be *sequestered* from the atmosphere.

Climate Emergency – a situation in which urgent action is required to reduce or halt climate change and avoid potentially irreversible environmental damage resulting from it.

Co-benefit: The positive effects that a policy or measure aimed at one objective might have on other objectives.

Decarbonisation – the process of changing our activities and industry practices to create an economy that sustainably reduces emissions of carbon dioxide.

Energy system – the consumption of fuel, heat and electricity across buildings, transport and industrial sectors, from solid, liquid and gaseous sources.

EPC – Energy Performance Certificate. An assessment which measures the energy efficiency of a building on a scale from A (most efficient) to G (least efficient).

EV – short for electric vehicle. A vehicle powered by an electric battery.

Fuel poverty – a person is considered to be in fuel poverty if they are a member of a household living on a lower income in a home which cannot be kept warm at reasonable cost. Statistically this has been defined as needing to spend amore than 10% of its income to maintain adequate heating.

GHG – Greenhouse gases; gases which when released into the atmosphere contribute to the greenhouse effect.

HEV - short for hybrid electric vehicle. A vehicle powered by some combination of electric and fossil fuel sources.

ICE - short for internal combustion engine. A vehicle powered by petrol or diesel fuel.

IPCC – Intergovernmental Panel for Climate Change.

LULUCF – Land use, land use change & forestry.

Appendix 13

Glossary of Terms

Natural Capital: This refers to the 'stocks' of renewable and non-renewable natural resources available to society. It refers to nature in the context of the five capitals model in economics (i.e. financial, manufactured, social, human and natural capital). It is associated with monetary or other valuation and accounting techniques. Examples include soil, water, and forests.

NET – negative emissions technology. Technologies which remove carbon dioxide from the atmosphere. Typically used in reference to technologies that differ from sequestration from natural capital.

SCATTER – the Anthesis-developed tool which is used to set emissions baselines and reductions targets. See the SCATTER website for more information.

Science-based target - a goal for emissions reduction developed in line with the scale of reductions required to keep global warming below a given temperature threshold (typically 1.5°C or 2°C) from pre-industrial levels.

TCFD – Taskforce for Climate-related Financial Disclosures. A corporate initiative which develops voluntary, consistent climate-related financial risk disclosures for use by companies in providing information to investors and other stakeholders.

T&D – Transmission and Distribution. The different stages of carrying electricity from the generator/power plant to a home or business for usage.

Thermal leakiness - Thermal leakiness is a measure of how well a house retains heat. A house with high thermal leakiness will not retain heat very easily and will be more expensive to keep warm. Thermal leakiness is dependent on thermal conductivity of the building fabric (i.e. .'U-values' of ceilings, floors, walls and windows), ventilation (i.e. effectiveness of draught-proofing) and the temperature difference with the outside (i.e. the average temperature of the home based on the occupant's preference or use of thermostat).

ULEV – short for Ultra Low Emission Vehicle. Currently defined as a vehicle which emits less than 75 grams of CO_2 per kilometre (g/km).

WTT – well to tank. An average of all GHG emissions released into the atmosphere from the production, processing and delivery of fuel.

Appendix 14
Sector Analysis: Internal Council Behaviour Change and Council Strategy and Engagement- References

Internal Council Behaviour change

Delivery

1 - Job seekers target companies putting sustainability into practice

2 - Impact of the Cycle to Work Scheme

3 - https://employeebenefits.co.uk/does-flexible-working-improve-mental-wellbeing/

Key Recommended Next Steps:

1– Ashden 31 Actions for Councils

2 - Based on email correspondence with the Carbon Literacy Project (05/12/19).

Council Strategy and Engagement

Delivery
1 - Ashden Climate Action Co-Benefits Toolkit

Key Recommended Next Steps (page 1)
1 – Based on Anthesis knowledge and experience.
2 – Ashden 31 Actions for Councils

Key Recommended Next Steps (page 2)
1 – Based on Anthesis knowledge and experience.
2 – Ashden 31 Actions for Councils

Sectoral Analysis: Buildings - References

Background: Current Context
1. https://www.birmingham.gov.uk/news/article/418/birmingham_reveals_ten_year_housing_plan plus stakeholder interview
2. https://www.gov.uk/government/statistics/household-energy-efficiency-statistics-headline-release-january-2020. Based on 411,000 households in Birmingham
3.https://www.birmingham.gov.uk/news/article/273/sport_and_recreation_moves_to_the_next_level_as_new_northfield_leisure_centre_opens_to_public
4. https://www.engie.co.uk/wp-content/uploads/2016/12/birmingham-district-energy-cpc-online.pdf
5. https://www.building.co.uk/focus/bes-birmingham-or-bust/5078012.article plus internal 2018 HECA report
6.https://www.birmingham.gov.uk/news/article/539/connected_for_warmth_scheme_to_provide_free_central_heating_in_birmingham?utm_content=&utm_medium=email&utm_name=&utm_source=govdelivery&utm_term=
7. BCC HECA Report 2018
8. https://www.birmingham.gov.uk/downloads/file/5433/adopted_birmingham_development_plan_2031
9. https://www.birmingham.gov.uk/news/article/418/birmingham_reveals_ten_year_housing_plan
10. https://www.birmingham.gov.uk/downloads/download/155/birmingham_curzon_hs2_masterplan_for_growth
11..https://epc.opendatacommunities.org/
12. https://www.gov.uk/government/statistical-data-sets/live-tables-on-energy-performance-of-buildings-certificates

Background: Relevant Plans and Policies
1. https://www.gov.uk/government/consultations/the-future-homes-standard-changes-to-part-l-and-part-f-of-the-building-regulations-for-new-dwellings
2. https://www.bioregional.com/news-and-opinion/future-homes-standard-lets-not-waste-the-biggest-opportunity-we-have-for-the-uk-to-show-climate-leadership-in-2020
3. https://www.gov.uk/guidance/domestic-private-rented-property-minimum-energy-efficiency-standard-landlord-guidance
4. https://www.ofgem.gov.uk/publications-and-updates/eco3-measures-table
5. https://s3-eu-west-1.amazonaws.com/media.cp.catapult/wp-content/uploads/2020/01/30170148/HIP-Retrofit-Towards-a-Sector-Wide-Roadmap-–-2020-WEB.pdf

SCATTER Interventions: Domestic Buildings (1)
1. Sub-regional Fuel Poverty Data England
2. https://www.gov.uk/government/statistical-data-sets/live-tables-on-energy-performance-of-buildings-certificates
3. Reductions may be achieved through better heating controls (i.e. 'Smart thermostats') that zone the heat, as opposed to reducing comfort
4. ECUK (2017) Table 3.16: Internal and external temperatures 1970 to 2012

SCATTER Interventions: Domestic Buildings (2)
1. Assuming 1 meter per household based on MSOA estimates of properties not connected to the gas network 2015- 2018
2. Air-source and ground-source heat pump technology
3.https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/820753/2019_Electrical_Products_Tables.xlsx
4. Based on legacy SCATTER assumptions

SCATTER Interventions: Non-Domestic Buildings
1. See Appendix 10; a 'lodgement' is assumed to represent the same unit as 'household' (for domestic buildings) and allows comparison between the two different sector's properties.
2. Based on SCATTER legacy tool.
3.https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/820753/2019_Electrical_Products_Tables.xlsx

Buildings - Delivery
1. https://www.gov.uk/government/collections/fuel-poverty-sub-regional-statistics
2.https://www.health.org.uk/sites/default/files/upload/publications/2020/Health%20Equity%20in%20England_The%20Marmot%20Review%2010%20Years%20On_full%20report.pdf
3. https://energysavingtrust.org.uk/about-us/news/minimum-energy-efficiency-standards-private-rented-sector
4. https://s3-eu-west-1.amazonaws.com/media.cp.catapult/wp-content/uploads/2020/01/30170148/HIP-Retrofit-Towards-a-Sector-Wide-Roadmap-%E2%80%93-2020-WEB.pdf
5. https://www.bre.co.uk/filelibrary/pdf/87741-Cost-of-Poor-Housing-Briefing-Paper-v3.pdf
6. https://www.ncb.org.uk/sites/default/files/uploads/documents/ncb_fuel_poverty_report.pdf
7. https://www.ashden.org/programmes/co-benefits

What is needed from Stakeholders
1. https://shapuk.files.wordpress.com/2019/02/turning-housing-into-homes-fit-for-2050-shap-research-summary-report-february-2019.pdf
2. https://s3-eu-west-1.amazonaws.com/media.cp.catapult/wp-content/uploads/2020/01/30170148/HIP-Retrofit-Towards-a-Sector-Wide-Roadmap-–-2020-WEB.pdf

Key Recommended Next Steps – Domestic - Council
1. https://epc.opendatacommunities.org/
2. https://www.birmingham.ac.uk/Documents/college-eps/energy/Publications/power-to-the-people.pdf

Domestic, Non-council
1. https://www.ashden.org/programmes/top-31-climate-actions-for-councils
2. https://www.ofgem.gov.uk/environmental-programmes/eco
3. Happy Energy

Domestic Sector Funding Opportunities
1. https://epc.opendatacommunities.org/

Key Recommended Next Steps- Council buildings and estate
1. Based on Anthesis industry experience and judgement.
2. https://www.birmingham.ac.uk/Documents/college-eps/energy/Publications/power-to-the-people.pdf

Key Recommended Next Steps - Commercial and industrial
1. Based on Anthesis industry experience and judgement.

Sector Analysis: Transport - References

Background

1 - Birmingham Transport Plan: https://www.birmingham.gov.uk/info/20013/roads_travel_and_parking/2032/draft_birmingham_transport_plan

2. https://www.birmingham.gov.uk/info/20076/pollution/1278/air_pollution_affecting_me_and_my_family

3. Birmingham's Energy Baseline (2019) Perform Green

4. https://www.sustrans.org.uk/media/2950/bike-life-birmingham-2017.pdf

5. https://www.zap-map.com/location-search/birmingham-charging-points/

SCATTER interventions: Modal Shift

1 –JM BCC interview 13/2/2020

2 – Draft_Birmingham_Transport_Plan.pdf

3 - https://www.gov.uk/government/statistical-data-sets/all-vehicles-veh01

4 - Department for Transport Statistics - Table TRA3105 Heavy goods vehicle traffic by axle configuration and road category in Great Britain, 2015

5 – SCATTER assumptions in this area do not include hydrogen as freight fuel and are left unmodified from the legacy DECC 2050 Pathways calculator

SCATTER interventions: Decarbonising Transport

1 – https://www.zap-map.com/location-search/birmingham-charging-points/

2 - https://www.wmca.org.uk/media/1366/west-midlands-low-emission-delivery-plan_elementenergy-for-transport-for-west-midlands_july2016.pdf

3. Siemens ALL_TEP_Energy_Strategy_Report_Final.pdf

4. https://www.porterbrook.co.uk/news/mainline-testing-of-uks-first-hydrogen-train-gets-green-light

Delivery

1 - Ashden Climate Action Co-Benefits Toolkit

2 – Birmingham 2019 Air Quality Annual Status Report (ASR)

3- Energy Savings Trust

4 – Go Ultra Low

5 - https://www.birmingham.gov.uk/info/20076/pollution/1763/a_clean_air_zone_for_birmingham/2

6 - https://energysavingtrust.org.uk/sites/default/files/reports/4868_EST_A4_Plug in fleet best practice guide.pdf

Key Recommended Next Steps (page 1)

1 - Energy Savings Trust compare EV and ICE pool car

2 - CNEX low emission van guide – 50 kW charging point can charge an electric van in <1 hour

3 - https://static1.squarespace.com/static/5ae87244b105982d79d73cf5/t/5be2dbac0e2e72e2e81ba15c/1541594076246/ERCV+Final+Report.pdf

4 - Appy Fleet

Key Recommended Next Steps (page 2)

1 – Ashden 31 Actions for Councils

2 - Cycle route costings

Sector Analysis: The Natural Environment - References

Background

1- Birmingham Local Development Plan 2018.
https://www.birmingham.gov.uk/info/20054/planning_strategies_and_policies/78/birmingham_development_plan
2 - Birmingham City Council 2019.
https://www.birmingham.gov.uk/news/article/448/birmingham_bids_to_become_a_tree_city_of_the_world
3 - Birmingham City Council, unpublished data.
4 - Diock et al 2017.
https://www.researchgate.net/publication/322337570_The_Canopy_Cover_of_England%27s_Towns_and_Cities_baselining_and_setting_targets_to_improve_human_health_and_well-being
5 - Canopy Cover Project 2017. https://www.forestresearch.gov.uk/research/i-tree-eco/urbancanopycover/
6 - Birmingham Tree Policy 2018. https://www.birmingham.gov.uk/download/downloads/id/9309/birmingham_tree_policy.pdf
7 – Based on the estimated number of trees in Birmingham being 1,000,000 (as discussed here), which includes trees on public and private land including street/ highways trees, woodlands and trees in parks, cemeteries/ crematoria, schools, gardens, etc. An aggregate tree sequestration factor (0.046 t CO2/ yr^{-1} per tree) was derived from data presented from a study at Leeds University, which used i-Tree Eco to perform tree surveys and calculate carbon storage and sequestration for campus 1450 trees with a similar taxonomic composition to the Birmingham tree population.
8 - BBC Wildlife Trust 2017. https://www.bbcwildlife.org.uk/sites/default/files/2018-10/NIA%20Ecological%20Strategy%202017-22%20Technical%20Report.pdf

Interventions

1- Guan et al 2019. https://leaf.leeds.ac.uk/wp-content/uploads/sites/86/2019/08/i-Tree-Report-2019-v1.42.pdf
2 - Birmingham Tree Policy 2020. https://www.birmingham.gov.uk/download/downloads/id/9309/birmingham_tree_policy.pdf

Delivery

1 - https://www.cityoftrees.org.uk/why-trees
2 - https://www.sportbirmingham.org/uploads/city-profile-birmingham-18.pdf
3 - https://btfl.org.uk/2019/07/14/tree-city-of-the-world

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Appendix 6: Progress Against the City Council's Early Commitments

No.	Commitment	Timescale	Progress
		Transport	
1	Undertake awareness campaigns targeting the highest polluting trips and users to encourage people to reduce their carbon footprint from transport (for example, increasing awareness of people's travel choices and promoting behavioural change)	2020-21	Communicating the scale of change that is required through the Birmingham Transport Plan consultation.
2	Explore additional policy measures, such as the evaluation of transport interventions and the creation of a carbon fund	2020-21	In progress. One example is the Emergency Birmingham Transport Plan which was published to deliver a low carbon recovery from Covid -19, fast tracking some changes in mode share by locking in the increase in active modes during lock down. This includes a review of all current schemes to identify changes which may be required to meet the objectives of a low carbon recovery.
3	The City Council to lead by example in adopting and supporting low-carbon transport practices (for example, awareness raising campaigns with staff and reducing business mileage)	2020 onwards	In progress. An example is the forced adoption of extensive working from home practices during lock down has allowed the City Council (and other organisations) to test out how flexible working can provide the opportunity to reduce the impact of commuting on lowering our carbon impact.
		Green and Blue Infrastructure	
4	Undertake a feasibility study looking at early interventions to enhance the Cole Valley Corridor, including Glebe Farm Recreation Ground	2020	The city's Landscape Practice Group (LPG) have been commissioned to undertake a study on the feasibility of delivering some of the interventions identified in the Cole Valley Vision Plan, particularly those capital works around Glebe Farm Recreation Ground. Investigations into improving path networks and links will be explored along with features to encourage the local community to engage with the

			local resource. Improved cycleway signage is due to be delivered this year as part of LPG's commissioned works and potential for solar way marking of the cycle route will be investigated.
5	Improve information and data on webpages	2020	Discussions on what information needs to be presented are underway. Some information has been collated as part of the production of the draft design guide; however, with the exit from the EU and the Environment Bill still progressing through Government, there is a need to consider what legislative changes are due to come into force, such as the mandating of Biodiversity Net Gain, which would need to be reflected in any published documentation.
6	Nature Recovery Network/Natural Capital Mapping to support effective mitigation and enhancement measures	2020	Exploratory work is being undertaken in conjunction with EcoRecord (the biological records service for B&BC) as part of the Future Parks Accelerator project on pilot sites. Some learning has been obtained from the Natural England GI pilot as part of the Black Country Review and work undertaken on the B&BC Nature Improvement Area.
7	Urban Forest Management Policy – update technical note	2020	Much of the groundwork has been undertaken for this update of the existing management policy starting with the Tree Policy review in early 2018.
8	Biochar investigation to consider the capture of carbon through the pyrolytic conversion of timber	2020	Meeting held to discuss the emerging tree policies and desire for increase of tree Canopy Cover and how this links to the potential production of Biochar from wood waste for use as a soil ameliorant and a way of locking carbon into the ground. Further conversation has been had with Bloomberg Philanthropies and Ecotopic (Stockholm based operators and demonstrator) to progress the potential for a Birmingham based trial as well as

			discussions with representatives from the Energy and Bioproducts Research Institute (EBRI) based at Aston University Campus.
9	Support other service areas in their delivery of R20 – particularly around transport and housing	2020	Support is being given to other service areas around their commitments to R20, the Biochar investigation feeds directly into the Energy strands plus could tie in with housing as part of a district heat network. Ongoing as part of day to day works although as other projects develop officer time may come under pressure.
10	Deliver training/awareness sessions to other service areas on broad green and blue infrastructure, biodiversity, and sustainability topics	2020	Yet to commence as a key topic will be the Government's requirements for Biodiversity Net Gain (BNG).
11	Collaborate with partners to secure funding and deliver projects that contribute to overall R20 aims (for example, a Sky Park (a green walking route on the elevated, disused section of the viaduct running through Digbeth) and improvements to the River Rea to enhance the green corridor in the city centre)	2020 onwards	Initial work with Canals and Rivers Trust has commenced to identify suitable interventions that can be put forward for implementation as part of the wider Digbeth regeneration. Proposals include improvements to the accessibility of the canal network towpaths (infrastructure and signage) and biodiversity enhancements.
Energy			
12	Commence the Heat Decarbonisation Delivery Plan (developed with BEIS)	2020	Work commenced January 2020. The initial stage (January to August 2020) of data collation, stakeholder engagement and initial modelling. This first phase will identify opportunities for heat decarbonisation with specific interventions defined by BEIS for Phase 2 further development, potentially including the low/zero carbon interventions for the City Council's new housing development, retrofit of existing stock, and feasibility of use of ground, air and water source heat pump deployment; city-wide energy from waste opportunities for deploying future district heating; the role of Hydrogen

			as a source of heating; and planning policy interventions. Phase 2 will follow from September 2020 and will assess the financial implications, funding routes and investment models required to support the interventions approved by BEIS as a feasible delivery plan.
13	The City Council's Energy Strategy	2020 onwards	The City Council's Energy Strategy is currently being developed - focussing on key actions that the Council has within its authority, scope of role and service delivery responsibilities.
14	Undertake a procurement review of energy supply to City Council buildings	2020-23	The City Council's energy supply contracts allow for the purchase of green energy. The move to green energy would present a net budget pressure of circa £80k . However a decision on this was required prior to 1st April for the 2020/21 supply year. This option will be available for the 2021/22 supply year and a decision will be required in Q4 2020 and a quotation can be provided during this period.
15	Develop a renewable energy electric charge point network	2020-22 (initial phase)	Procurement of EV Development Partner has been completed. the contract is now finalised; leading a concentrated two-year EV charge point deployment of 197 OLEV funded chargers (up to 394 charge points) across the city. The OLEV funding prioritises taxi vehicles, but the charge points will be publicly accessible, giving time to further develop the network for a wider publicly accessible charge point network from the end of year 2 to year 12, as part of an emerging charge point strategy.
Housing			
16	Initiate a Passivhaus (zero carbon house) pilot	2020-21	A review of the current BMHT build programme has seen a site at Dawberry Fields selected to pilot Passivhaus development. A review of Passivhaus delivery in other

			Local Authorities is underway, and identification of appropriate consultancy expertise to guide the development is in hand.
17	Deliver a zero carbon retrofit conference exploring best practice and funding models	2020	The conference took place online from 21st to 23rd July 2020.
18	Develop a database of advice and a Communications Plan for providing zero carbon retrofit information to home owners, landlords and residents	2020-21	Ongoing – Draft documents under review to include actions and direction arising from the R20 / Climate Change Taskforce and legislative changes.
Developing the Green Economy			
19	Commence a governance review with stakeholders to maximise the value of and investment in the Tyseley Environmental Enterprise District and the wider area	2020	Chaired thematic workshop involving Members and various R20 Taskforce members related to the development of the Green Economy. As thematic lead met with consultants from Anthesis setting out our current and future carbon reduction initiatives, key barriers and the need for radical steps to achieve zero carbon.
20	Develop a clear business offer related to Tyseley Energy Park to attract SME's and capital investment into the area	2020	Discussions to develop a clear business offer related to Tyseley Energy Park are planned to take place in March 2020. The offer will be designed to attract SMEs and capital investment into the area.
21	Deliver the CAZ Heavy Duty Vehicle Fund to support SME's to purchase and/or lease new compliant vehicles or retrofit non-compliant vehicles to achieve Euro 6 compliance and improve air quality	2020-23	Clean Air Zone - implementation of £10m Heavy Duty Vehicle (HDV) Fund was approved by Cabinet on 11 February 2020. Fund designed to support SMEs to purchase and/or lease new compliant vehicles/retrofit non-compliant vehicles to achieve compliance and improve air quality due to be launched during 2020. The scheme for Birmingham-licensed hackney carriage and private vehicles which aims to encourage an upgrade to this fleet through retrofits, purchase of hybrids or EVs (total value c. £15m) is also due to open for applications at the same time as the HDV scheme. A scheme to develop rental of EV taxis is being developed.

			A scrappage and/or mobility credit scheme for workers in the CAZ earning less than £30k p.a. will be launched in late 2020 and will encourage people to scrap a 'non compliant' vehicle for one that is compliant or use the money for 'mobility' credits.
22	Undertake a detailed baseline study – including a market overview and identifying challenges, gaps in provision, and opportunities	2020	Initial baseline of the green economy has been undertaken.
Planning			
23	Review and strengthen planning policies relating to green and blue infrastructure	2020	Yet to commence but will form part of the wider review of the Birmingham Development Plan and associated polices plus implementation of any new legislation arising from the Environment Bill.
24	Review, strengthen and expand design guide information relating to green and blue infrastructure, and links to low carbon, sustainability and biodiversity, low and zero carbon energy and sustainable construction	2020	The Planning Sandpit event considered what is needed in this area. The outcomes of the Sandpit has informed the recommendations in this Council Report and will inform the subsequent work on R20.
25	Commence a review of the Big City Plan	2020	Work commenced in Spring 2020.
Procurement and Contract Management			
26	Commence a City Council-wide Procurement and Contract Management strategy review (for new and existing contracts) to explore alignment with R20 principles	2020-21	The commencement of the City Council wide Procurement and Contract Management Strategy review is subject to the publishing of the PWC review of Procurement across the Authority that is expected in Quarter 3 2020. The implementation of the PWC review and the drafting of a Procurement and Contract Management Strategy have been delayed due to the urgent procurement response to COVID-19. Some measures to aid the R20 carbon reduction agenda are already built into the City Council's Birmingham Business Charter for Social Responsibility and

			these are also due to be reviewed in 20/21 Q1. Other measures (e.g. engaging suppliers to determine/cost out CO2 reduction interventions) can be developed subject to the Council's baseline position being established and shared to determine specific priority areas and any related budget provision. To this end, Anthesis have been provided links to published procurement spend data which they have asked for in order to calculate the City Council's carbon footprint.
	To review the Energy from Waste facility at Tyseley	On-going	We have an Energy from Waste at Tyseley which processes 350,000 tonnes of the city's waste per year and produces 25MW of electricity for which we receive payment. Three phases for the future of the plant: o Ph1 we are in which is extension of Veolia contract to January 2024 and cannot be extended. o Ph2 is for next 10 years, this exercise is in its Procurement Phase. Due to its commercial sensitivity we not able to share details. As part of this we are looking to reduce the amount of waste we are committed from 300,000 tonnes a year to 100,000 tonnes a year, currently Veolia get all waste bar paper. o Ph3 is post Tyseley, what we do next beyond that, this is what we need to think about now, what we will do with our waste 2030+. Seeking funding from government to support transition. The target is zero waste to landfill over transitional contract.
Governance			
27	Undertake a governance review to explore embedding environmental and sustainability principles in the City Council's decision-making process (for example, through	2020	In progress

	environmental/climate impact assessments and appraisals)		
HR			
28	Exploring opportunities to reduce workforce carbon emissions through changes in working practices (for example, through agile working and the use of technology to reduce the need to travel)	2020-21	Covid19 has changed working practices considerably with a significant number of people working from home full time. As we establish post Covid19 working practice we will need to explore opportunities to reduce workforce carbon emissions.

Birmingham City Council

Carbon Emission Reduction Study for the City of Birmingham

Interventions and Recommendations Summary

September 2020

DR

Anthesis

Sectoral Analysis
Structure

Key elements to each Sector

- **Interventions** - Based on SCATTER pathways tool to provide an indication of the scale of change required. The following tables provide proxies for the nature and extent of Birmingham specific measures. These are all assumed in order to track the green SCATTER Level 4 (L4) pathway Interventions as shown on page 29 unless stated otherwise. Where relevant, these have been linked to key recommended next steps for action.

- **Key Recommended Next Steps** – Includes some suggestions of what can be done now to work towards the SCATTER targets, plus an idea of resourcing and examples of best practice. These are not intended to be an exhaustive list. This is separated into actions specifically for the council and actions for the council to carry out in the wider city. Indicative **potential** costs of each measure have been provided where possible.

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Current Emissions Profile – Birmingham City Region's Emission Pathways

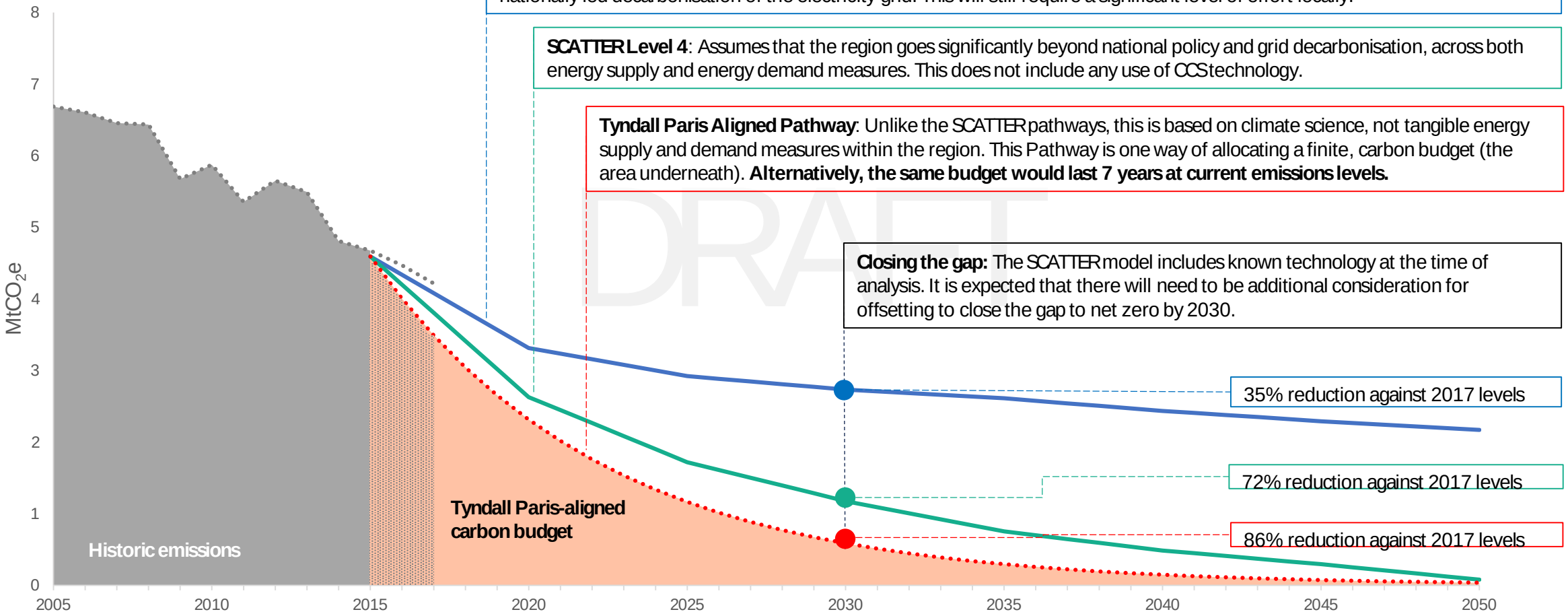
Summary

SCATTER Level 1: Assumes minimal action beyond current, national policy (where sufficiently defined by sector or measure) and nationally led decarbonisation of the electricity grid. This will still require a significant level of effort locally.

SCATTER Level 4: Assumes that the region goes significantly beyond national policy and grid decarbonisation, across both energy supply and energy demand measures. This does not include any use of CCS technology.

Tyndall Paris Aligned Pathway: Unlike the SCATTER pathways, this is based on climate science, not tangible energy supply and demand measures within the region. This Pathway is one way of allocating a finite, carbon budget (the area underneath). **Alternatively, the same budget would last 7 years at current emissions levels.**

Closing the gap: The SCATTER model includes known technology at the time of analysis. It is expected that there will need to be additional consideration for offsetting to close the gap to net zero by 2030.



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Stakeholder review
R20 Task Force Engagement

Summary notes
Following the circulation of the draft report in June 2020, Task Force members and officers have been invited to:

1) Provide written feedback comments on the action plan report
2) Engage in workshops to discuss the actions and identify key **barriers** and **enablers** to progress actions further.

This document contains a summary of key notes and observations from the workshops. It should be used in conjunction with the original report [Carbon Emission Reduction Study for the City of Birmingham, June 2020].

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Workshop format
- The main workshop focused on 6 key sectors (Buildings, Transport, Waste, Industry, Natural Capital and Energy Supply).
- Attendees were divided into two groups and had 45 minutes to discuss three sectors.
- The workshop was conducted virtually and participants were invited to speak and comment on barriers and enablers for each recommended action. Participants were also asked to consider if any additional actions should be explored.
- A variety of sector representatives attended.
- After the workshop, attendees were also allowed to comment offline on any other sector areas they did not participate in.
- A final opportunity to provide feedback was provided in the August Task Force meeting.

Next steps
- Seek to allocate owners to further progress (in addition to actions that did not receive specific comment)
- Review feedback notes and apply a further filter to categorise actions (research, governance, policy, lobbying, local engagement etc.)

Sectoral Analysis: Buildings

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Buildings

Interventions: Commercial & Domestic Buildings

	Domestic buildings	Commercial / Institutional buildings
	a) Improve insulation b) Reduction of average temperature	f) Commercial space heating and cooling
	c) Decarbonisation of heat	g) Electrification of heat
	d) Improved appliance and lighting efficiency	h) Improved appliance and lighting efficiency
	e) Electrification of cooking	i) Electrification of cooking

Buildings

Key Recommended Next Steps

Source	Carbon Reduction Measure	Barriers	Enablers	Timing and Resource	Portfolio Responsibility
Domestic Properties -Council	a&b) Review investment plans for stock with Energy Performance Certificate (EPC) rating E,F or G (15% of social housing) to maximise Energy Company Obligation Round 3 (ECO3) funding available for wall, roof, floor insulation, glazing and first time central heating installed by April 2022. These present 'quick win' opportunities that should be taken as a priority.	• Need clarity on what has been undertaken to date across council's stock • Clarify if social housing or privately owned – All social housing will qualify – privately owned will too if the tenant can demonstrate they meet the income criteria • Funding issue is still significant beyond (Energy Company Obligation)ECO measures • New grants may be down to individual to claim in respect of COVID-19 recovery support, where council may have a promotional role (details not yet published)	• Recent COVID-19 recovery matched funding may push uptake further • BCC need to connect up with other net zero housing activity nationally • BCC could play a role in asking government to increase penalties/taxation on poor performing homes • Potential £3.2bn additional funding available if the right projects are sourced • This could enable local employment and bring people back into work. • Consider retrofit being managed by a Social Enterprise owned by the Council • This could be re-enforced with other available, or soon to be available, data like Streamlined Energy and Carbon Reporting (SECR), Display Energy Certificates (DECs) etc.	This review can be undertaken now within existing resource to ensure we are maximising access to available funding. However, significant additional funding will be required for a full retrofit of all homes and this will not be achievable without Government funding. Lobbying for increasing the penalties on poorer performing homes needs to be carefully considered to ensure that it does not have a detrimental impact on tenants who are likely to be in lower income groups.	Cllr Sharon Thompson
	a-e) Engage with social housing providers as they will have influence over a significant proportion of properties and can independently help to support the city's goal. See MHPP Case Study as an example.	• Knowing where to start; Vast quantity just within the council. Need good data/modelling. • Co-ordination is needed of various activities pre-retrofit, let along within the installation process where skills are much more specialist & lacking in supply	• If the right projects are put forward, the government may support • Opportunity to incorporate energy efficiency within social housing design guides	This would require additional staffing resource which would need to be funded.	Cllr Sharon Thompson

Buildings

Key Recommended Next Steps

Source	Carbon Reduction Measure	Barriers	Enablers	Timing and Resource	Portfolio Responsibility
	a-f) Introduce total cost of occupation approaches to procurement evaluation of new build projects to include not only the initial costs of investment but also the ongoing maintenance and the day to day running costs. These models support investing more up front to secure long-term cost savings and quality outcomes.		• Could link with an Energiesprong type methodology to enable social housing retrofits e.g. what is being developed in Nottingham	• This would require additional staffing resource which would need to be funded.	Cllr Sharon Thompson

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Buildings
Key Recommended Next Steps

Source	Carbon Reduction Measure	Barriers	Enablers	Timing and Resource	Portfolio Responsibility
	c) Contact Energy Companies Obligation ECO obligated utilities direct to secure a strategic funding partner	• Important to make visible who owns this work.	• Has the council maxed out Energy Companies Obligation (ECO) funding? If not there could be some quick wins.	This could be undertaken now within existing staffing resources.	Cllr Sharon Thompson
Domestic Properties - Council	a-e) Review asset management plans and align with zero carbon. This may involve shifting the timing of planned maintenance and calculating the just the additional cost of replacing assets with alternative technologies or performing other efficiency work (relative to what was planned to be incurred already). Stock modelling platforms may support the quantification of costs for technologies required.	• Modelling will be needed • Infrastructure challenges – Grid reinforcement may be needed if heavier electrification / hydrogen is being considered. • Planning co-ordination requires sufficient capacity and expertise.	• This will help justify net zero carbon building retrofits within existing planned maintenance budgets.	This would require additional funding and staff resource to undertake the modelling work and buy-in the necessary expertise.	Cllr Sharon Thompson
	a-e) Re-evaluate the case for solar photovoltaic (PV) given the introduction of the smart export guarantee and technological advances in home battery storage		• Smart export guarantee could be a partial funding mechanism to support community energy schemes	This would require an additional staffing resource which would need to be funded.	Cllr Sharon Thompson
	a-e) Formally adopt PassivHaus standard for new builds owned by the council within planning policy and local plan			The Council could adopt Passivehaus for its own new build stock without amendments to planning policy, however there is a cost element per home delivered and this is likely to result in a lower number of affordable homes being delivered. A trial scheme is being delivered, following that, recommendations will be made in relation to the specification of future BMHT properties.	Cllr Sharon Thompson

Buildings

Key Recommended Next Steps

Source	Carbon Reduction Measure	Barriers	Enablers	Timing and Resource	Portfolio Responsibility
Domestic properties – non Council.	a&b) Utilise powers under ECO3 Local Authority Flexible Eligibility to enable the Council to qualify private sector residents as eligible for funding and increase homes able to access funded energy efficiency improvements, working with energy companies.	• Most people who qualify for this will likely be in social housing.	• Consider retrofit being managed by a Social Enterprise owned by the Council • For on gas-grid customers there's potential for hydrogen to act as a gateway to net zero.	This would require a dedicated staff resource.	Cllr Sharon Thompson
	a&b) Continue to monitor and utilise existing EPC and fuel poverty data to develop a segmented approach to improvement, initially targeting areas of high need and high opportunity	• Requires ownership and dedicated resource		This would require a dedicated staff resource.	Cllr Sharon Thompson
	a&b) Be a trusted source of advice for deep retrofit and low carbon technologies through exemplar projects, supporting investment from home owners.	• Information on this is quite outdated – 2007 is the latest information. • There is a need to develop the supply chain further to support retrofit • The council does not have the scale of capacity to deliver this. • Skills gap • Private rental sector – landlords engagement reluctant to invest and tenants do not have ability to make changes • Finance is the issue, national funding needs to support	• Tap into advice networks (e.g. CSE, UKGBC, Connected Places Catapult, Passivhaus Trust etc) to get best practice advice – don't reinvent the wheel • Needs a dedicated task force just on this topic – such a vast challenge • Consider retrofit being managed by a Social Enterprise owned by the Council • There is potential to develop a network of SMEs to support delivery which could support local jobs and businesses, for example using a co-operative of SMEs to deliver the work e.g. https://retrofitworks.co.uk/ • Raising awareness of step-by-step retrofit approach and avoiding carbon lock-in.	An action plan could be developed for taking this forward within existing staff resources.	Cllr Sharon Thompson

Buildings
Key Recommended Next Steps

Source	Carbon Reduction Measure	Barriers	Enablers	Timing and Resource	Portfolio Responsibility
	a&b) Revisit 2007 "Extending your home" SPD through the Birmingham Design Guide to improve recommendations on insulation and energy efficiency.		• Wider opportunities for new builds and extensions/refurbishment projects within planning policy	The Birmingham Design Guide is being updated and will replace the Extending your Hoe SPD – consultation is expected to take place during 2020.	Cllr Sharon Thompson
	a&b) Subject to government consultation outcomes, require new homes to meet net zero emissions and be future-proofed against climate impacts (e.g. over-heating, floods)	• Potential regulatory issues – relaxation on housing regulation e.g. conversions do not need full planning consent	• Prepare a response to government consultation if there is the opportunity	The first steps are to await the outcome of the Government's Future Homes Standard consultation – this will clarify whether authorities will have the ability to set their own targets or whether a national approach will be taken. Following this should the Council be able to set its own targets this could be progressed through a review of the Birmingham Development Plan. The City Council will also prepare a response to the 'Planning for the Future' White Paper on planning reform by the 29th October 2020.	Cllr Sharon Thompson

Buildings
Key Recommended Next Steps

Source	Carbon Reduction Measure	Barriers	Enablers	Timing and Resource	Portfolio Responsibility
Domestic properties – non Council	a-e) Better communicate energy efficiency standards, behaviours and activities in the private rental sector by: - Offering advice and financial support to those looking to improve property energy efficiency - Effectively enforce Minimum Energy Efficiency Standards	• Requires resource to develop materials and ensure engagement is continuous • Skills gap to implement measures	• Marketing campaign on the proposed Green Home Grants and Clean Heat Grants. Encourage groups of home owners to apply so benefit is maximised and not short circuited through thermal bridging. • Use council's own as an example to lead by	This could be commenced now but staff resources would need to be made available.	Cllr Sharon Thompson
	a-e) Explore opportunities for private rental sector policies as a high priority sector for energy efficiency improvement.	• Clarify ownership • Difficult to engage with private renal sector	• Explore innovative engagement methods, e.g. webinars, competitions. Look at Bristol Green Open Doors as an example.	This would require additional staff resource.	Cllr Sharon Thompson
	a-e) Develop a Sustainable Design and Construction SPD to dispel cost misconceptions (see Passivhaus Trust case study), promote whole life cost models and support higher development standards	• Requires resource to develop materials and analysis	• Review and align with the resources from the UK Green Building Council, e.g. Retrofit for the Future	A Sustainable Design and Construction Supplementary Planning Documents (SPD) could be developed but staff resource would need to be identified. It may not be able to address whole life cost models and 'support higher development standards' as it would need to be aligned with the existing Birmingham Development Plan (BDP) policies. Changes to the BDP policies would need to be addressed through a review of the BDP.	Cllr Ian Ward

Buildings
Key Recommended Next Steps

Source	Carbon Reduction Measure	Barriers	Enablers	Timing and Resource	Portfolio Responsibility
Council buildings and estate	f) Implement standardised monitoring plus annual reporting of energy use and results of Display Energy Certificates (as applicable) at all council sites, including those not covered by centrally procured energy contracts.			Existing Council resource.	Cllr Sharon Thompson
	f-i) 3-year portfolio plans to detail achievement of reduction in line with budget and include a way of assessing and monitoring the carbon impact of actions.			Existing Council resource	Cllr Sharon Thompson
	g) Investigate the potential to decarbonise the heat supply to council offices, for example by connecting Birmingham District Energy Centre (BDEC) network to the Tyseley Energy Park and Tyseley Energy from Waste plant.	• Clarification needed on priorities – opportunities are being missed		Further staff resource would need to be identified and funded.	Cllr Sharon Thompson
	g) Investigate the potential of implementing combined heat and power networks across the city, and identify opportunities where the Council can work with both public and private sector bodies regionally to maximise Combined Heat and Power (CHP) systems.	• District heating – challenges around concessions • As the grid decarbonises Combined Heat and Power (CHP) may not work / provide low carbon solution	• This should only consider low or zero carbon heat supply options such as energy from waste or hydrogen Combined heat and Power (CHP)	Existing Council resource	Cllr Sharon Thompson
	f-i) Build climate change targets into the Property Strategy 2018/19 – 2023/24. Allocate a carbon reduction target to each portfolio matching the city's carbon budget.			Existing Council resource	Cllr Sharon Thompson
	f-i) Provide clearer detail on how property portfolios will demonstrate low environmental impact and follow good practice in sustainability.			Existing Council resource	Cllr Sharon Thompson

Buildings
Key Recommended Next Steps

Source	Carbon Reduction Measure	Barriers	Enablers	Timing and Resource	Portfolio Responsibility
Commercial and industrial	f) Develop and implement a pathway for increased measurement and reporting of i) energy demand and ii) improved energy efficiency in privately owned commercial buildings.	• No legal mechanism/ statutory policy in place to require this.	• All new planning policy to report energy consumption data in a standardised format e.g. kWh/m2/year and KwhCO2/m2/year	Will require new planning policy to be developed to require measurement and reporting and this can only be done through a review of the Birmingham Development Plan (BDP).	Cllr Ian Ward
	f) Use energy monitoring and Energy performance certificate (EPC) data to drive a segmented approach, tackling those with largest impact and biggest opportunity.		• Use the council's ability to influence key organisations e.g. universities and hospitals to encourage action in the highest emitters	This would require an additional staff resource.	Cllr Waseem Zaffar
	f) Explore the potential for introducing requirements for new commercial developments to report on operational energy performance, and as part of that, on space heating demand.	• Regulatory restrictions	• This should be part of planning policy. Look into the potential for carbon buy out fund for new build e.g. Greater London Authority (GLA) policy	This would require lobbying for a Government policy change.	Cllr Sharon Thompson
	f-i) Showcase leading examples of decarbonisation from key commercial players to spread knowledge and promote ambition and joint working.		• Engage with the Local Enterprise partnership (LEP), private sector, UK GBC, Chamber of Commerce and develop mutual vehicle to promote net zero carbon retrofit/new build in the local area. • Potential to engage and communicate through WMCA with wider business network across sectors.	This could be progressed now with existing resource.	Cllr Waseem Zaffar

Buildings
Key Recommended Next Steps

Source	Carbon Reduction Measure	Barriers	Enablers	Timing and Resource	Portfolio Responsibility
	f-i) Engage with businesses and embed energy efficiency into business support programme – link to University business support programmes.	• Requires resource to manage and co-ordinate	• Private non domestic market is very interested in net zero carbon retrofit. WSP is interested in supporting. • BCU – have networks with businesses through STEAMhouse.	This could potentially be delivered now with resource from the Task Force.	Cllr Waseem Zaffar
	f-i) Explore opportunities for carbon credits scheme for local businesses to pay for local offsetting projects through net zero buildings framework.	• Resource and co-ordination required, identification of businesses and scoping of market appetite	• This could draw much needed funding into upgrading local social housing or other local carbon reduction measures.	Exploratory work can begin now subject to an additional staff resource being identified.	Cllr Waseem Zaffar
	g) Investigate feasibility of decarbonising heat supply to Cambridge and Crescent Towers by connecting Birmingham District Energy Cetnre (BDEC) network to the Tyseley Energy Park and Tyseley Energy from Waste plant	• Requires clarity on the future of Tyseley Energy Park Energy from Waste plant. Pilot projects can risk being one-offs – perhaps a different approach needed to ensure scalability.	• Steering group has been set up engaging communities around Tyseley (on Hydrogen). • Demonstration projects need definition and learnings to be shared.	This can not be progressed until the future of Tyseley Energy Park is clear. Additional resource will be required.	Cllr Waseem Zaffar
	h) Explore options for mass roll out of energy efficient lighting, the most frequent improvement recommendation in non-domestic Energy Performance Certificates (EPCs) in the city (21%).	• Requires resource to manage and co-ordinate		This would require Government policy change. The Council can only encourage businesses and provide information about the benefits.	Cllr Waseem Zaffar

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Interventions: Transport

	Measures
	a) Distance reduction
	b) Significant modal shifts
	c) Modal shift of freight and increase in efficiency
	d) Phase out of fossil fuel cars and shift to zero carbon cars
	e) Phase out of fossil fuel buses and shift to zero carbon buses
	f) Rail electrification, with a view to clean electricity use
	g) Hydrogen powered rail

Transport
Key Recommended Next Steps

Source	Carbon Reduction Measure	Barriers	Enablers	Timing and Resource	Portfolio Responsibility
Council's own transport	a) Equip all drivers of council vehicles with the necessary knowledge to more appropriately plan journeys in order to minimise disruption and maximise carbon saving.	• Current decision process for procuring vehicles, e.g. cost vs. environmental performance	• Take a more holistic approach on the most effective way to moving products/people around the city e.g. sharing vehicles across organisations • Use carbon cost of journeys to build the case to eliminate or reduce journeys. • Use GIS mapping to support low emissions alternative considerations prior to procurement of vehicles	This would require an additional resource to be identified and funding.	Cllr Waseem Zaffar
	b) Work with Council Behaviour Change task force to reduce emissions from staff commute, including encouraging car-sharing, active travel and public transport.	• Each department will work differently on this.	• Remote working is becoming more common – consider long term strategy for this. Use local office spaces to have meetings. • Ask task force to encourage standardised ways of working across all departments.	Work is on-going to look at greater agile and remote working across the Council, This work could be embedded within that project.	Cllr Waseem Zaffar
	d) Review and update fleet management plan: For each category of vehicle how Ultra-Low-Emission Vehicles (ULEV) will be used.	• Procurement changes needed	• Opportunity to influence supply chain, influence businesses	This is dependant of procurement changes.	Cllr Waseem Zaffar
	d) Develop strategic plan to introduce low emission vehicles into the HGV fleet (including waste and highways). Consider all low emissions vehicle options in terms of their CO2 emissions, impact of energy systems and potential to enable market expansion.	• Challenge is implementing route map set out by the commission. Existing plans already underway for the council to buy carbon intensive vehicles. • 'A city blueprint for low carbon refuelling infrastructure' policy document was developed in April 2015 but work stopped due to resourcing constraints.	• Work has been done at looking at green fleet. • BCC Waste department should produce a green fleet strategy for scrutiny. • Consider the potential to generate low and zero carbon transport fuels from waste • Explore hydrogen capability further	This would require additional staff resources.	Cllr Waseem Zaffar

Transport

Key Recommended Next Steps

Source	Carbon Reduction Measure	Barriers	Enablers	Timing and Resource	Portfolio Responsibility
Council's own transport	d&e) Review opportunities for the installation of Electric Vehicle (EV) charging points on council premises.	• Grid constraints	• Tyseley Energy Park could be a resource to facilitate and encourage EV use – potential to support the council's EV uptake. • Infrastructure needs to enable market expansion and wider private sector involvement. Consider lowest carbon option for vehicles including, biofuels, etc. to enable the quickest route to net zero.	The City Council are rolling out 394 EV charging points across the City over the next two years. This work is on-going.	Cllr Waseem Zaffar
	a) Equip all drivers of council vehicles with the necessary knowledge to more appropriately plan journeys in order to minimise disruption and maximise carbon saving.	• Current decision process for procuring vehicles, e.g. cost vs. environmental performance	• Take a more holistic approach on the most effective way to moving products/people around the city e.g. sharing vehicles across organisations • Use carbon cost of journeys to build the case to eliminate or reduce journeys. • Use Geographical Information Systems (GIS) mapping to support low emissions alternative considerations prior to procurement of vehicles	This would require an additional resource to be identified and funding.	Cllr Waseem Zaffar
	b) Work with Council Behaviour Change task force to reduce emissions from staff commute, including encouraging car-sharing, active travel and public transport.	• Each department will work differently on this.	• Remote working is becoming more common – consider long term strategy for this. Use local office spaces to have meetings. • Ask task force to encourage standardised ways of working across all departments.	Work is on-going to look at greater agile and remote working across the Council, This work could be embedded within that project.	Cllr Waseem Zaffar
	d) Review and update fleet management plan: For each category of vehicle how Ultra-Low-Emission Vehicles (ULEV) will be used.	• Procurement changes needed	• Opportunity to influence supply chain, influence businesses	This is dependant on procurement changes.	Cllr Waseem Zaffar

Transport
Key Recommended Next Steps

Source	Carbon Reduction Measure	Barriers	Enablers	Timing and Resource	Portfolio Responsibility
Council's own transport	d) Develop strategic plan to introduce low emission vehicles into the HGV fleet (including waste and highways). Consider all low emissions vehicle options in terms of their CO2 emissions, impact of energy systems and potential to enable market expansion.	• Challenge is implementing route map set out by the commission. Existing plans already underway for the council to buy carbon intensive vehicles. • 'A city blueprint for low carbon refuelling infrastructure' policy document was developed in April 2015 but work stopped due to resourcing constraints.	• Work has been done at looking at green fleet. • BCC Waste department should produce a green fleet strategy for scrutiny. • Consider the potential to generate low and zero carbon transport fuels from waste • Explore hydrogen capability further	This would require additional resources.	Cllr Waseem Zaffar
	a) Request developers through planning conditions (linked to policies in the Birmingham Development Plan (BDP) and Parking Supplementary Planning Document (SPD) to include charge points and incorporate infrastructure for low-carbon travel e.g. segregated cycle lanes.			This is addressed to an extent in current planning policies. Any change to the current policy approach would need to come through a review of the Birmingham Development Plan (BDP) unless national policy is implemented in this area.	Cllr Waseem Zaffar

Transport

Key Recommended Next Steps

Source	Carbon Reduction Measure	Barriers	Enablers	Timing and Resource	Portfolio Responsibility
City-wide transport	b) Further encourage cycling through expanding and increasing strategic high-quality walking and cycle routes	• Badly planned or not connected routes • Access to bikes for all – build on the work on free bikes that has been done • Storage issues with smaller homes and parking constraints • Varied street/cycle path lighting	• Re-allocation of space also improves safety and air quality • Look at innovative bike/bus solutions to combine modes • E-scooter trials, e-cargo bikes are under way • Opportunity to work with planning on bike storage space • Consider low speed traffic zones to improve cycle / walking safety	Work is already underway on this and will continue.	Cllr Waseem Zaffar
	b) Further roll out of emissions-based parking permits & charges for most polluting vehicles			This would require additional resources.	Cllr Waseem Zaffar
	b) Active campaign to limit short trips to discourage people driving for commute and school run		• Trial out different metro pass offers for shorter durations • Park & ride • Public engagement program to understand how people move around the city before decisions are made	There is already work on going in this area, further work would require additional resources.	Cllr Waseem Zaffar
	d) Encourage taxi companies to move to low emission vehicles by supporting grants and by providing incentives			This would require additional resources.	Cllr Waseem Zaffar
	e) Enable the rapid shift to electric vehicles through increased Electric vehicle (EV) charging and facilitate through bus fleet, and LGV/HGV licensing		• Facilitate knowledge sharing amongst businesses on Electric Vehicle (EV) uptake • Review potential for a vehicle scrappage schemes to encourage EV take up	BCC are rolling our 394 EV charging points over the next two years.	Cllr Waseem Zaffar
	a-e) Analyse different journeys to determine patterns for improving Public transport use, infrastructure and policy		• Opportunity to tackle socioeconomic inequality for travel, consider fare free public transport • Consider impact on modal shift of future technology such as self driving cars • Investigate the potential to increase the provision and use of car clubs within the City.	This would require additional resources.	Cllr Waseem Zaffar

Sectoral Analysis: Waste

DRAF

Anthesis

Waste

Interventions: Waste

	Measures
	a) Waste reduction
	b) Increased recycling

Waste
Key Recommended Next Steps

Source	Carbon Reduction Measure	Barriers	Enablers		Portfolio Responsibility
Council Waste	a&b) Lead by example and report on waste and recycling and develop a council's own strategy.	• Need clear vision on what the city could achieve. • Need to get more value out of the waste stream by better segregation • Vision should be for zero waste • Food waste collection regulations are still uncertain – awaiting central government confirmation. BCC has not been proactive due to the infrastructure cost. • Resident communications may currently be confusing – needs to be super simple • Need to consider specific measures to manage construction waste	• Behaviour and cultural change – need to rely on expert recommendations if capacity is limited	This would require additional staffing resources.	Cllr John O' Shea
City-wide waste	a) Develop continued community engagement strategy on waste reduction in the home		• Communications of waste/climate change – platforms and mediums can help to engage • Need more discussion to highlight the challenge of the journey • High cost to deliver a weekly service. Explore different options for waste collection frequency, while balancing the emotional impact – the financial savings of lower frequency offer incentives. Need a consensus on how to move away from this but requires political leadership. Make the link to climate change clear. • Opportunity to work with other councils. • Consider what can be offered in return if reducing frequency (people will expect to see something tangible) • Community engagement, involve schools and families on issues of fly tipping etc. analysis of different recycling rates in different areas and target outreach. Look for testimonials where fortnightly approach is working well.	This would require additional resources.	Cllr John O' Shea
	a) Work with businesses on eliminating or reducing single use packaging and encouraging sustainable packaging options.		• There is potential for STEAMhouse involvement and creating some case study examples that would positively promote Birmingham businesses.	This would require additional resources.	Cllr John O' Shea

Waste
Key Recommended Next Steps

Source	Carbon Reduction Measure	Barriers	Enablers	Timing and Resource	Portfolio Responsibilty
City-wide waste	a) Develop a 'waste heroes' competition to highlight best practice from local businesses reducing waste.	• Need to think responsibly around Tyseley Energy from Waste (EfW) carbon impact • EfW incineration locations have a disproportionate impact on lower socioeconomic areas of the community • Timing of waste contracts is long (c. 10 years) so hard to affect change rapidly • Capacity challenges • Since 2014 there has been no dedicated/specialist expertise – hard to challenge the waste provider during contract renegotiation • COVID-19 shortfall – emphasises need for innovative funding • Political will needed • Incineration needs to be justified from a commercial perspective and carbon perspective – need to demonstrate that a more efficient plant addresses other areas of the climate challenge		This would require additional resources.	Cllr John O' Shea
	b) Develop a waste strategy in line with WMCA and improve recycling reporting for the city.		• Procurement of waste contract negotiation is a critical opportunity to pilot low carbon action • Innovation in finance could help • More joined up thinking – can be built into a climate emergency approach • Need for simplicity is key • Waste flows analysis & modelling is being done by Aston Uni for policy commission on EfW – further work could be done with this. • BCC could work with 2022 Games to develop a strategy for long term shift in waste avoidance e.g. single use plastic.	This would require additional resources.	Cllr John O' Shea
	b) Utilise road-level data (logging degree of contamination from last 12 months) to launch communication/educational campaign on recycling with support of community leaders.			This would require additional resources.	Cllr John O' Shea
	b) Develop anaerobic digestion (AD) plants to treat food waste which is likely to be segregated in the future.		• (In vessel Composting) IVC may allow garden waste to be free – can be creative, therefore anaerobic digestion (AD) may not be optimal	This would require additional resources.	Cllr Jon O' Shea

Sectoral Analysis: Industry

DRAF

Anthesis

Industry

Interventions: Industry

	Measures
	a) Industry efficiency
	b) Electrification of industry
	c) Carbon Capture and Storage (CCS) on industry
	d) Oil production

Industry

Key Recommended Next Steps

Source	Carbon Reduction Measure	Barriers	Enablers	Timing and Resource	Portfolio Responsibility
City-wide Industry	a) Through WMCA industrial strategy and Chamber of commerce: encourage industry to report emissions, risks and opportunities, and develop a strategy.	• European Union Emissions trading System (EU ETS) is not effective • Difficult to transition to more progressive steps on energy (despite collaborations with Universities/access to Uni e.g. Mondelez) • Is Corporate Social responsibility (CSR) the best route? • Carbon focus of Industrial Strategy may be possible to strengthen? Could be centralised.	• Need to incentivize more or reward and celebrate good achievements. Many smaller businesses are in crisis mode – this can help reduce energy bills. • Need to appeal to the customer base – consumers can apply pressure to businesses. • Reporting under Streamlined Energy and carbon reporting (SECR) will be mandatory • Collaborate or seek advice from other advisers e.g. Chamber of commerce and other related bodies/accounting bodies	This would require additional resources.	Cllr Brigid Jones/ Cllr John Cotton
	a) Support the setting up of forum for industry and consider existing forums as a platform for engagement on carbon reduction action.	• Just transition – needs to be 'sold' to smaller businesses, must be something in it for them • Need to have a reason for businesses to engage • Too broad at the moment, don't have the focus to deliver projects • Buildings could be a vehicle to take this forward	• Access to innovation / knowledge there are many smaller family businesses in the city • Raise awareness of funding pots to help industries in transition • Universities in the region can support • Holistic engagement with businesses across a number of topics will be key • Use 'cluster' model so that this engagement has a practical edge • Link with STEAMhouse work – this includes relevant organisations and business networks already • Opportunity to develop circular economy frameworks for industrial organisations to embed broader sustainability • Trade unions have an opportunity to engage with the workforce to engage with just transition	This would require additional resources.	Cllr Brigid Jones/ Cllr John Cotton

Industry

Key Recommended Next Steps

Source	Carbon Reduction Measure	Barriers	Enablers	Timing and Resource	Portfolio Responsibility
	a) A requirement to pursue clean growth should be written into guidance on local industrial strategy to identify opportunities for low carbon investment.	• Diversity in business types/sizes	• Simplicity needed to encourage access • Co-ordination with energy strategy will benefit this • Knowledge sharing opportunity – quick wins and learnings of bigger companies may not be known by smaller businesses, bigger may posses greater expertise	Work would need to be undertaken with the LEP to progress this.	Cllr Brigid Jones/ Cllr John Cotton
	b) Set guidance and provide training for promoting zero and low-carbon infrastructure when assessing industrial/commercial planning applications.	• Real-time monitoring is both a challenge and an opportunity		An element of this is already happening however, we can only implement the current policy requirements unless applicants are willing to achieve higher standards of energy efficiency and carbon reduction.	Cllr Brigid Jones/ Cllr John Cotton

Sectoral Analysis: The Natural Environment

DRAF

Anthesis

Interventions: Natural Environment

	Measures
	a) Managing existing tree stock
	b) New tree planting

The Natural Environment
Key Recommended Next Steps

Source	Carbon Reduction Measure	Barriers	Enablers		Portfolio Responsibility
City Council Land	a) Protect and manage existing trees and woodland.	• Planning and development e.g. new developments requiring removal of trees • Allotments are not currently being considered, some are owned by the council	• Ensure protection of mature trees • Tap into local experts to explore best practice • Communication with communities is needed from a biodiversity perspective • Tree protection policy could be enhanced • Potential to change roadside verge and other green space management which could help improve biodiversity	Protection of trees within BCC control easy and deliverable. Those outside of BCC ownership restricted by Tree preservation Order (TPO) / Conservation Area (CA) regs. If TPO protection is to be expanded greater staffing resource needed – needs Government change to legislation. Allotments have their own regulations restricting tree planting. Unless permaculture is pushed / required unlikely to get take up Change of roadside verges needs reductions in private car ownership to halt / reverse loss of verges plus additional financial resource to manage additional space. Changes could result in good biodiversity gains.	Cllr John O'Shea/Cllr Waseem Zaffar
	a&b) Manage Green Waste Effectively for Carbon Sequestration.			Investigation of Biochar is in place - better than open windrow composting but needs partner organizations to deliver as requires capital investment	Cllr John O'Shea

The Natural Environment
Key Recommended Next Steps

Source	Carbon Reduction Measure	Barriers	Enablers		Portfolio Responsibility
	b) Identify and cost opportunities for new tree planting.	• Lowest tree cover areas correlate with social deprivation and health inequalities • Important to consider what type of trees are being planted – short life span vs. longer	• Ensure longer life tree-planting is encouraged • Revising tree canopy policy – there is a big disparity in tree cover across the city • Enforce a minimum 25% coverage for every ward in Birmingham. • Tree planting can protect against surface water flooding to support from adaptation and drainage perspective • Explore opportunities through the NUS tree planting program for universities connecting with landowners. • Opportunity to work with River Trust and other orgs part of Greener Birmingham. Voluntary and third sector have many people who are involved in this.	Right tree right place is required not based on life expectancy. Shorter lived trees generally quicker growing while longer lived slower growing could get 2 or 3 rotations of quicker growing if needed (not advocating this everywhere but there will be situations where this is needed) Ok to have ideal target levels but not practical to have "enforced" minimum canopy cover for every ward. Will probably take 75 year plus development cycle to establish this in some locations. Birmingham Tree board still to be set up and that group will guide and advise on tree planting (R20 Tree policy review) Staffing resource to deliver is an issue	Cllr John O'Shea/Cllr Waseem Zaffar
	b) Further develop plans for wider green space management		• Opportunity to tackle climate adaptation e.g. risks around surface water run off.	Ongoing as part of R20 and Future Parks Accelerator (FPA) works. Natural Capital mapping and 25 year natural environment plan – needs additional staff resource	Cllr John O'Shea/Cllr Waseem Zaffar

The Natural Environment
Key Recommended Next Steps

Source	Carbon Reduction Measure	Barriers	Enablers	Timing and Resource	Portfolio Responsibility
Private land	a) Carry out ongoing inventory and report on tree abundance, diversity and cover statistics.	• Not enough resource in the council, large tree asset • Private allotments	• Existing tree cover analysis could go deeper • Birmingham's 'World tree city' status • Regular reporting of tree statistics • Eco record project which encourages people to record tree & flora • Aston University tree surveys. • Ask private land owners for data	Staffing resource needed. Skills and knowledge within existing staff resource available Volunteers available through Birmingham Tree People –I tree eco survey - cost to train them and cost for equipment (need a sperate budget for this type of work). This would collect some private landowner data.	Cllr John O'Shea/Cllr Waseem Zaffar
	a) Expand Enforcement of Tree Preservation Orders.			Staff resource and legislative changes needed	Cllr John O'Shea/Cllr Waseem Zaffar
	a) Ensure that existing guidance on protection and enhancement of natural capital is communicated effectively in the context of the Environment Bill and Biodiversity Net Gain.	• Not enough clarity on public spaces and the process for new tree planting	• Opportunity to improve communication on this	Work being done with WMCA on Virtual Forest. Cost involved in long term adoption of new trees on public land – often this is the funding that is missed in all tree planting projects. Additional staff resource required for effective working	Cllr John O'Shea/Cllr Waseem Zaffar

The Natural Environment
Key Recommended Next Steps

Source	Carbon Reduction Measure	Barriers	Enablers	Timing and Resource	Portfolio Responsibility
	a&b) Develop a city-wide Emergency Tree Plan.	• Not enough cohesion across departments within the council	• Workshops were conducted to create a tree plan for the city, this could be expanded on • Look to world tree city standards and ensure this is maintained	Ideally need a single person with responsibility and authority over tree management / policy direction across departments although formation of Tree Board will overcome some of these issues. Already meet Tree Cities of The World standards. BCC is a Pioneer city	Cllr John O'Shea/Cllr Waseem Zaffar
	a&b) Work with other landholders including developers to maximise the potential for tree planting and land management.	• Limited green land, densely populated neighbourhoods	• Can we enhance the policy and protect green space in the city?	Policy change in Development Management in Birmingham Development Plan Document (DMBDPD)	Cllr John O'Shea/Cllr Waseem Zaffar

The Natural Environment

Key Recommended Next Steps

Source	Carbon Reduction Measure	Barriers	Enablers	Timing and Resource	Portfolio Responsibility
Private land	b) Develop a Natural Capital Investment Plan including plans for a Tree Bank and Green Bonds.	• Prioritising clean air zone funds between natural capital investment and public transport infrastructure	• Using clean air zone revenue and workplace parking levvy as income streams to improve air quality • Look into repurposing the canals network to make the most of its biodiversity and transport potential.	Canals outside of BCC ownership but joint plans for Biodiversity enhancements/ public realm in progress. Additional staff resource required to manage/ liaise. Investigate the potential to use Community Infrastructure levy (CIL)/S106 or Clean Air Zone (CAZ) income.	Cllr Waseem Zaffar
	b) Facilitate community sequestration schemes.		• Community land ownership – make growing spaces for redundant land owned by the community	Community land ownership needs careful consideration. Millenium greens are an example of that allocation / transfer. Would require staff resource to ensure good liaison	Cllr Waseem Zaffar
	b) Mandate that developers include within all developments either a minimum of 30% tree canopy cover; or a minimum 50% coverer of 'soft landscape' (incl. trees, green roofs, green walls, etc.).	• Tree cover mandate may be too ambitious • Different levels of potential depending on the size and scale of developments	• Engage with developers/planning officers on what is practical, this needs to be considered holistically • Consider soft measures inside buildings where large scale tree cover is not possible. • Work with organisations to encourage offices to consider green rooves	Partly within the development management policy changes and will be part of design code and presumable Green Infrastructure (GI) section of Big City Plan. Exploration of a Greening Factor may be a way forward – being explored as part of Future Parks Accelerator (FPA). Monitoring of delivery would require additional staff resource	Cllr Waseem Zaffar

The Natural Environment

Key Recommended Next Steps

Source	Carbon Reduction Measure	Barriers	Enablers	Timing and Resource	Portfolio Responsibility
Beyond Birmingham	b) Work with the WMCA to identify opportunities for investment on new woodland/ tree planting that retain benefits for the people of Birmingham.	• There isn't a regional specialist and resource within WMCA to own this.	• Consider bringing in the Wildlife Trust to support and work with other local councils • The West Midlands National Park is a key strategic project in the region: https://www.greaterbirminghamchambers.com/latest-news/news/2019/10/25/west-midlands-national-park-receives-green-light/	The virtual forest group is working with the WMCA on this – the group are the specialists with that knowledge, Wildlife trust (B&BC) is part of that group but Solihull and Coventry covered by Warwickshire Wildlife Trust. Requires additional staff resource to give effective liaison/ input	Cllr Waseem Zaffar
	b) Explore how offsetting any residual emissions from Birmingham's in regions beyond the combined authority can realise benefits for the people of Birmingham. This may include looking at UK national schemes such as the Woodland Carbon Code and the Peatland Code and estimating costs and timing of such initiatives. We advise strong caution in exploring offsetting more generally, as these should not displace or compensate for any 'lower ambition' actions.		• Aston University bioenergy research institute are looking into the potential for biochar • 2022 Games are looking into carbon offset surcharge to attendees. This could fund visible offsetting projects around the city and help engage the community. • Insetting vs. offsetting – local projects are more attractive in terms of co-benefits such as job creation.	Working with Energy and Biochar Research Institute (EBRI) on Biochar	Cllr Waseem Zaffar

Sectoral Analysis: Energy Supply

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Energy Supply

Interventions: Renewable Energy Supply

	Measure
	a) Solar PV
	b) Onshore wind
	c) Bioenergy supply (heat & electricity)
	d) Solar thermal
	e) Hydro power
	f) Wave, tidal and tidal stream
	g) Sewage gas and Municipal Solid Waste (MSW)
	h) Storage

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Energy Supply
Key Recommended Next Steps

Source	Carbon Reduction Measure	Barriers	Enablers	Tinming and Resource	Portfolio Responsibility
Council energy supply	a-e) Develop an investment plan for renewables to 'self supply' electricity (as well as heat network) to council buildings, estate and assets.	• Feasibility studies of council buildings are needed. There is a lack of support from government on renewables and a high investment needed. Legal implications and barriers to lots of smaller onsite renewables.	• The council has the possibility of using its influence within procurement. • Consider working with local stakeholders to assess their potential for renewables. • A renewable energy Power Purchase Agreement (PPA) agreement could facilitate 100% renewable energy for the Council Estate and perhaps aspects of the social housing were the Council control or bought the energy for the buildings and would continue to do so in the future. • Local Energy Bill is being lobbied at national government level to remove barriers to renewables at the local level. Local smart grids to use surplus energy locally rather than back to the grid.	This would require additional staffing resources and funding.	Cllr Waseem Zaffar
	a-e) Ensure any excess demand not met by council owned renewables is from (3rd party) purchased renewables. • Challenge the 'quality' (i.e. how additional) of green energy • Explore the potential of a Power Purchase Agreement (PPA) with other local organisations	• Prioritisation against local renewables and carbon reduction measures.	• Consider whole energy systems such as an energy innovation zone to develop distributed energy or energy clusters to have centralised management. • Working with organisations and community groups will help scale this. • Consider further low carbon potential for the council's Combined Heat and Power (CHP) scheme which is already linked to a lot of council buildings.	This would require additional staffing resources and funding.	Cllr Waseem Zaffar

Energy Supply
Key Recommended Next Steps

Source	Carbon Reduction Measure	Barriers	Enablers	Timing and Resource	Portfolio Responsibility
City-wide energy supply	a-e) Deliver community energy projects and provide guidance to local residents and schools	• Make sure to reach influential voices and not just traditional routes for communication. • Fuel poor households will need different engagement – the council has a role in making the funding connection.	• Combined heat and Power (CHP) scheme could connect to more buildings • Tyseley Energy Park has strong connections with local schools through STEM outreach which could be mobilised • There are community energy enablers such as https://communityenergyengland.org/pages/what-is-community-energy who can assist.	This would require additional staff resources.	Cllr Jayne Francis and Cllr Waseem Zaffar
	a-d) Incorporate renewable energy and heat network opportunities into the local plan and provide guidance to developers. Request installation in commercial building upgrades through the planning approval process	• Building Research Establishment Environmental Assessment Method (BREEAM) uses planning requirements that don't meet net zero by 2030 goals. • Changes to planning take much longer to implement	• Consider local specifications 'Building Physics' to assess each building. Integrate renewable energy with the build rather than as a bolt on. Review the local plan with this in mind. Push for environmental considerations in the local plan. Regional energy systems operator research project with universities could support this.	Will need to be developed in line with future Birmingham Development Plan (BDP) update	Cllr Ian Ward
	Engage with domestic and commercial building owners on the potential for incorporating solar PV			This would require additional staff resources.	Cllr Waseem Zaffar

Energy Supply
Key Recommended Next Steps

Source	Carbon Reduction Measure	Barriers	Enablers	Timing and Resource	Portfolio Responsibility
	a-d) Work to align the energy strategy and spatial strategy to ensure energy policies can be implemented.	• Waste strategy needs to be defined to help underpin district heating • There are some areas with significant infrastructure constraints	• Review Tyseley Energy Park 'Energy Strategy Report' to assess the best sources. A city-wide view on what the costs for upgrading are could help.	This would need to be addressed through a review of Birmingham Development Plan (BDP).	Cllr Waseem Zaffar
	a-d) Conduct up to date feasibility study into the potential for alternative renewable sources.	• A more holistic approach is needed.	• It will be important to understand the capacity of local networks and the limits of infrastructure before we make decisions.	This would require additional staff resources and funding.	Cllr Waseem Zaffar
	a-d) Deliver support for (Small and Medium Enterprises (SMEs) to access funding and skills for energy projects.	• COVID-19 has stopped companies engaging, funding is key to unlock action.	• Aston University has a low carbon SME project, EU funded, which connects to local SMEs. • Tyseley Energy Park has an incubator for local energy and waste businesses which could be engaged. • Green recovery funding – engage with key local partners to make the most of the available funding.	This would require additional staff resources and funding.	Cllr Waseem Zaffar

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Home to School Transport Inquiry

Education and Children's Social Care O&S Committee

1 Preface from Councillor Kath Scott, Chair

1.1 I am pleased to be able to present this report to Full Council following an extensive piece of work conducted earlier in the year that put the parents, carers and users of the Travel Assist services at the forefront of its Inquiry. The report was due to be presented to Full Council in April 2020 but the original response from Cabinet, under the 8 day rule, coincided with lock-down and emergency / business critical work was, quite rightly, being prioritised. I therefore communicated to Cabinet that the report should wait until September.

1.2 Since then the Executive and officers have worked hard on the service and I welcome the many improvements that have been made up until now and look forward to the future improvements that are in the plan going forward. The point of the Inquiry was to bring about a better service for children, parents and carers; as set out in the Executive response to this report – we are well on the way to achieving that.

There are still matters that the committee will be keen to keep an eye on, including the commitment made in the motion to Full Council on the 4th February 2020, where the Cabinet Member for Children's Wellbeing committed to supporting Scrutiny's role and acting upon contributions made:

> **The Executive remains committed to its relationship with Scrutiny and Audit Committees by being open and proactive in sharing issues in advance, however challenging, and genuinely reflecting and acting upon their contributions and recommendations.**

1.3 I'd like to thank the members of the committee for their commitment and enthusiasm, and the Cabinet Member and officers for their support in conducting this review. Scrutiny always works best when members of all parties work together for the benefit of our citizens, and it is satisfying to see the results in this case, and tangible improvements in a service which has been problematic for users and their carers for too long.

2 Background

2.1 This inquiry came about following repeated concerns expressed by parents and schools to scrutiny and councillors which led to the issue being raised at City Council. An undertaking was given in September 2019 that the Education and Children's Social Care O&S Committee would look at the impact of the service on the parents, carers and children involved and how that fits with the aspiration for Birmingham to become a child friendly city.

2.2 This follows many well documented and high profile problems with the services, including budget issues, the collapse of the previous contractor, and an Audit report that identified many failings in the service. The Education and Children's Social Care O&S Committee (the committee) has received a number of updates and spent a considerable amount of time on home to school transport over the last few years and highlighted a number of concerns in meetings. This included two 'request for call in' meetings on the 0-25 Home to School Transport Policy in January and May 2019.

3 Our Approach

3.1 Much of what has been discussed in Audit, Full Council and in other committees focused on budget, contractual or governance issues. Therefore, members of the committee set out to put the experience and voice of parents, carers, children, young people and families involved firmly at the centre of this inquiry throughout. This was done through an evidence gathering session on the 22nd January 2020 with representatives from the Parent Carer Forum, City of Birmingham School (COBS); Special Educational Needs and Disability Information, Advice and Support Service (SENDIASS); special schools; Cabinet Member and senior officers (please see Appendix 1).

3.2 Prior to the evidence gathering session in January 2020, the committee put out a call for evidence that included: an e-mail to all elected members; details on the schools noticeboard; a survey on BeHeard and information on social media and the council's website. There was also an article about the launch of the inquiry in the Birmingham Mail. As a result, there were several face to face meetings with a number of parents; written evidence from schools and parents and responses to the survey.

3.3 Members would like to thank those who provided evidence to the committee and an evidence pack is available.

Key Messages

3.4 Some of the findings in this report will make uncomfortable reading for the council. That is not the intention, but the evidence presented to the committee made clear that the service was still failing vulnerable young people, their parents, carers and families and that relationships with service users and schools involved are damaged as a result.

3.5 Whilst acknowledging that some of the matters referred to are national issues, this report focuses on the concerns raised by parents, carers, families and schools in our evidence gathering session, and the response from the Executive. We also acknowledge that those who are happy with the service are less likely to come forward to give evidence and the evidence in this report reflects that. However, any service failure needs to be taken seriously and addressed, particularly where those failures relate to statutory requirements, safeguarding or an unsatisfactory customer journey.

3.6 We emphasise that relationships and trust need to be rebuilt by putting the experience, views and needs of the families and schools concerned at the centre of decision-making. It is our hope that in doing so, we can start to draw a line under what has gone before and help shape an effective and responsive service.

4 Context

Financial Matters

4.1 The national context is illustrated in a new analysis by the Local Government Association (LGA) which revealed that unsustainable costs and demand pressures are set to push councils' bill for providing free home to school transport to £1.2 billion a year by 2024. The LGA is calling on the Government to use its review of SEND provision to understand and fully fund the pressures driving the scheme to breaking point and incentivise more mainstream schools to include local children with SEND so they are not having to travel so far to attend special schools.[1]

4.2 In recognition of this, a resolution passed at City Council on the 2nd April 2019 requested that:

> **Leader of the Council and the Cabinet Member for Children's Wellbeing write to the Secretary of State for Education Damian Hind MP and the Chancellor of the Exchequer Phillip Hammond MP, urging them to ensure that our City's education budget is sufficient to cover increasing SEND demands to call for the Notional Funding Formulae be adjusted so that allocations can be determined by the City Council; to ensure that this Council is able to allocate funds (above 0.5%) from other Schools funding blocks.**

4.3 There are also more local concerns about the deliverability of the budget for home to school transport, and these have been well rehearsed at the Resources O&S Committee and previously in Education O&S meetings. In January 2017 it became clear there was a huge level of uncertainty about the current baseline budget and members were informed that the agreed savings for the 2016+ budget had been scrapped. More recently changes were made to the budget including in The Financial Plan 2020-2024 agreed at City Council on 25th February 2020:

> **School Transport remains an area of significant expenditure for the Council. It is a vital and statutory service that provides transport to some of the most vulnerable children and young people in the city. In 2019, in recognition of additional demand and costs arising from provider failure the service was allocated £2.9m of one-off resources from Policy Contingency to address the reported overspending. In 2020/21, the service has been rebased with £3.9m of additional resources and reductions in assumed savings of £0.8m.**

[1] https://www.local.gov.uk/school-transport-under-threat-bill-set-rise-ps12-billion-2024

Audit Report, January 2020

4.4 A report was presented to the Audit Committee on the 28th January 2020 outlining the findings of the internal audit of home to school transport, summarising the actions taken by the Education and Skills Directorate and outlining progress made since the audit was completed.

4.5 This audit was requested by the Education and Skills Directorate following concerns in relation to safeguarding, commissioning, contract management and quality assurance within Travel Assist – the statutory home to school transport service. The initial work quickly confirmed the Education and Skills Directorate's concerns, in particular the extent of the cross cutting concerns across the Council in relation to safeguarding and safer recruitment practice, specifically the management of Disclosure and Barring Scheme (DBS) checks. The work identified some very significant cross-council concerns in a range of areas.

4.6 Following this report, a resolution passed at City Council on the 4th February 2020 stated:

> **'That the Council apologises unreservedly to the children, young people and their families of the Home to School Transport Service for the failings identified in the Audit report… The recommendations of the audit report be actioned by the Directorate, with progress to be tracked by Audit Committee.'[2]**

5 Findings

5.1 As noted above, the report focuses on the concerns raised by parents, carers and families, and the response from the Executive. These are set out in the section below.

Policy

5.2 Section 508B of the Education Act 1996 says councils must provide free home to school transport for eligible children of statutory school age to qualifying schools.

5.3 The statutory responsibility for transport for 16-19 year olds (who have started a course before their 19th birthday) rests with local authorities. Local authorities have a duty to prepare and publish an annual transport policy statement specifying the arrangements for the provision of transport, or otherwise that the authority considers necessary, to make to facilitate the attendance of all persons of sixth form age receiving education or training (Section 509AA of the Education Act 1996).

5.4 The section 509F and 508G duties apply to all local authorities in England in respect of arrangements for adults aged 19 and over, who started their programme of learning after their 19th birthday. The legislation recognises that it is important that decisions on whether local authority arranged transport for this age group is necessary, sits at a local level and, as with

[2] https://bit.ly/2I0QDMU and https://bit.ly/394qrwV

the previous duty, the flexibility of the extent of an individual policy lies with individual local authorities. Where local authorities do decide that it is necessary for them to provide transport, this must be provided free of charge, however, the legislation also gives local authorities the flexibility to contribute to, fund or charge for other transport solutions where it wishes.

5.5 The Upper Tribunal (Administrative Appeal Chamber) has considered transport for post 19 learners with an Education and Health Care Plan (EHCP) (section 508F). The Tribunal commented that:

> **"The local authority has a duty to make transport arrangements for [a post 19 learner] if they consider that to be 'necessary' having regard to all the relevant circumstances. This is not a pure discretion. Although the question of what is necessary is a matter for them, in deciding that question they must exercise their judgment judiciously and in good faith. If they come to the conclusion that it is necessary, they must make the necessary arrangement and the transportation must be free of charge" (Staffordshire County Council v JM, 2016).**

5.6 Local authorities must prepare a transport policy statement by the end of May each year setting out any transport or other arrangements that it proposes to make for that academic year in respect of adults aged under 25 with an EHCP under the 508F duty.

5.7 SENDIASS told members that they believed, with regards to the statutory responsibilities set out above, the council's decision making did not always follow those requirements. This included:

- that there is no expectation in legislation on parents to transport a child to college once they are 18 years old and therefore this is not grounds for the City Council to refuse transport.
- the legislation does not expect parents to accompany SEND children to school if the school is miles away.

5.8 There is a gap in the legislation for travel support in relation to one aspect of eligibility for young persons between 16-18 years old and for children under 5 with SEND. Currently this leaves an area where discretion can be applied by the local authority in deciding whether to award travel assistance in 'exceptional circumstances'. Concerns were raised by several parents responding directly to the call for evidence, and to SENDIASS, over children who were previously in receipt of transport subsequently being refused on the grounds of lack of 'exceptional circumstances' with parents and carers not knowing what constitutes 'exceptional circumstances'. The lack of clarity of the term for eligibility for post 16 and under 5s travel support and the way 'exceptional circumstances' are assessed for children in these categories and the lack of examples contained in the council guidance which would help to clarify how the phrase is being interpreted by the local authority, were repeatedly raised by contributors to the inquiry. This issue was also

previously raised by members when they 'called-in' the Travel Assistance Policy for 0-25 Year Olds in Education in May 2019.

5.9 In response to this, written evidence received from officers stated: '*in line with training and advice given from a specialist barrister, "exceptional Circumstances" wording relates directly to necessity and is done on a reasonable and practicable approach. It is difficult establish a subjective measure, and the service consider necessity when making decisions. This is in line with the guidance from Legal Services. Every Stage 2 [appeal] case is viewed through the lenses of eligibility and necessity relevant to individual and family's circumstances/situation linked to the evidence supplied before and at the hearing'.*

5.10 Members had previously raised the issue that although the **Travel Assistance Policy for 0-25 year olds in education policy** was consulted on, it was not amended to adequately reflect feedback from the consultation and this was again raised in evidence by the Parent Carer Forum and SENDIASS. Concerns were raised in evidence over having a single 0-25 policy covering all children and a proposal was made from SENDIASS that there should be a separate policy for children with SEND and for those attending COBS.

5.11 The Director for Education and Skills stated at the January 2020 meeting that "*they would actively want to look at whether the policy is working for children and families on the ground and how they can improve that moving forward".*

5.12 Concerns were raised in evidence about **personal transport budgets** and how these were used in the past and the possible impact of transporting students in multiple vehicles as opposed to one single vehicle.

5.13 There were also concerns raised about **drop off points** lacking coherence, with a vehicle passing the home of a child on the way to the pick-up point and parents needing to fight the system to get reasonable adjustments.

Communication

5.14 The evidence showed that communication with the service is clearly a major issue. Parents and schools consistently and repeatedly raised the frustration they experienced on an ongoing basis in contacting the service and this includes phones and emails not being answered.

5.15 Special schools' representatives commented on parents saying they lack confidence in whether their child will be picked up and being unable to get a response from the service.

5.16 Also, members were told about routes being cancelled and changes made to transport provision without consulting parents / schools and this was sometimes done at very short notice. An example was given of the short notice of changes where 17 routes were changed. It was suggested that it would be better if parents were able to contact the service provider directly and members were informed this is currently being piloted. The impression was that parents have a better experience when they contact the contractor directly.

5.17 Officers acknowledged that there have been gaps in communication for home to school transport and SEND as a whole and they have a communication plan. At the time of writing the report the committee was awaiting the communication plan and concerns remain. The scrutiny committee will monitor how the communication plan is working.

Safety

5.18 The main three issues raised were:

- Suitability and safety of vehicles.
- Suspension of service due to a child's behaviour whilst travelling.
- Suitability of guides and drivers.

5.19 The suitability and safety of vehicles was raised and members requested details of the contract requirements with the providers and the committee will follow this up. Examples raised at the evidence gathering session included a fire escape access being blocked where children are being transported together in a minibus, seat belts, safety equipment and length of journeys. The committee was informed that the poor quality of service had contributed to a breakdown in trust with parents. There is now a new provider in place and it is essential that lessons are learnt about how the contract is being managed.

5.20 Concern was raised by SENDIASS and the special schools regarding transport being suspended because of a child's behaviour. In response to this, members received written information stating: *'suspension of a child from a transport route is only done as a result of a specific incident which places the child/children on transport or others on the transport at risk. We endeavour to keep these to a minimum and only suspend if the child or others transported are at risk of injury if we continue to transport without an intervention to manage the risk. If there are regular behaviours or actions which relate to the child's everyday behaviours, a risk assessment is completed in partnership with the school. The actions are then implemented relevant to the level of needs as part of their special requirements for transport. If the situation is complex, or specific activity management or behavioural strategy/plan is needed a referral to Occupational Therapy to assess and make recommendations to reduce the risk to all parties is made and implemented. Appropriate equipment, activity adjustments or plan is individually tailored to the child's needs and the transport provided'.*

5.21 Issues regarding the guides and drivers not always being adequately trained and / or not made aware of children's background / conditions were raised by a number of parents during the 'call for evidence' and also by the Parent Carer Forum and special schools. Special schools' representatives spoke of "gross mismanagement" and an increase in journey times and there are significant safeguarding risks if guides are not adequately trained to deal with children's conditions e.g. children with epilepsy, asthma, autism and anxiety. It was suggested that schools should recruit, train and arrange guides locally.

5.22 Members were informed that *'all guides receive training when they start in the role. If guides need further training as part of their role i.e. fitting of buckle guides or harnesses, this training is provided as required. It is recognised that the training to the guides needs to be strengthened and consistency improved. The Service has therefore increased the capacity and has a specialised project underway to address the training requirements of guides starting in mid-February 2020. The focus of this project is to upskill, modernise the delivery and management of the guides. The Dynamic Purchasing System (DPS) which is being implemented has a clear expectation on the providers that all members of their staff working on transport (including drivers) are trained and monitored to a high standard. The expectation of the drivers is in line with what is being required by the service and the policy'.*

The issues regarding guides were also raised when discussing the 22 routes that had been cancelled due to guide sickness (between September – December 2019). Members were informed that additional capacity will be in place from the end of January 2020 to review and improve performance in this area.

Safeguarding Risk

5.23 Safeguarding issues were raised both at Full Council and at the Audit Committee in relation to home to school transport.

5.24 More specifically, members were concerned about safeguarding for children not in education and this was discussed with the Birmingham Safeguarding Children Partnership (BSCP) in September 2019. At that meeting the Chair of the Partnership stated "*There is an extra vulnerability for children who are not in education and they [Birmingham Safeguarding Children Partnership] support schools. Almost inevitably safeguarding is more challenging when children are out of education and there are escalation processes if there are concerns".*[3]

5.25 The number of children being out of school because of unsuitable or lack of transport was raised by COBS and the special schools' representatives.

5.26 Members were informed by COBS that '*47% of pupils that attend a Pupil Referral Unit (PRU) have SEND. There are children who are still awaiting their travel assistance to attend COBS and the service needs to take into account that some pupils cannot travel on a bus that goes through certain postcodes as this is a safeguarding issue'*. Members were subsequently informed by officers that *'Home to School Transport recognise the complex issues relating to children attending COBS and the challenges around transportation for these children. We have six outstanding applications for transport for pupils to COBS (as at 7th February 2020), with one of these incomplete in the application which is being actively pursued to be completed before we can process the request. Of the five complete applications that have been received, the oldest*

[3] 11th September 2019 Action Notes

case of this group being received to the service on the 21st January 2020. These cases are due to be heard in the panel on 13th February 2020'.

Assessments (including Appeals)

5.27 Problems regarding the assessments taking too long and delays regarding appeals were raised by a number of parents, Parent Carer Forum, SENDIASS, COBS and special schools' representatives.

5.28 What was felt to be inappropriate provision was at times offered, such as bus passes, pick up points and Personal Transport Budgets (PTBs). Members were informed by the Occupational Therapist at the evidence gathering session that "*pick up and drop off points were introduced a year ago and have not been very successful and are disliked by the parents and they are now looking at a more graded approach and having better consultation with parents*".

5.29 The issue regarding the policy and eligibility criteria not being clear was raised by SENDIASS, for instance assessments to establish whether there are 'exceptional circumstances' and this is discussed above.

5.30 Members queried at the meeting whether assessments should be in consultation with schools, as the service is relying on a council occupational therapist assessment rather than speaking to the school who have a better understanding of the children.

Impact on Children, Families and Schools

5.31 Members were provided with some information from special schools highlighting the scale and impact, both on the children involved and the schools and of children missing school as a result of problems with transport. For instance, between September and December 2019: 11 pupils had missed 316 school days at Mayfield School and Dame Ellen Pinsent School estimated that half a term's worth of days had been lost.

5.32 It is clear from the evidence provided that children missing school because of transport problems has a significant impact on both the educational achievement of the children involved and in terms of the resources in schools which are being diverted to trying to resolve these issues, which should be being utilised elsewhere.

5.33 A written question at City Council on the 25th February 2020 asked '*please provide a breakdown of the number of pupils not attending school due to Home to School transport issues, including those awaiting outcome of Home to School Transport Appeals.'* The answer provided was that '*the new dashboard which is under development will also hold the information regarding the number of pupils not attending school due to Home to School Transport issues. However, please note these pupils may be getting into school by other means'. There are currently 20 outstanding stage 1 and 2 appeals.*

Mainstream	Special	People Referral Unit (PRU)
14	13	3
Secondary	Primary	
13	7	

5.34 Members were informed by the Parent Carer Forum that the service is affecting both parents' and children's mental health. As per the guidance, to be suitable, travel arrangements must be safe and reasonably stress-free to enable the children to arrive at school ready for a day of study. Evidence provided by Hamilton School:

> **'The buses have been late multiple times this term. This is lateness at the start of the day but also at the end of the day when the children are ready to leave. We are not informed that the bus will be late and therefore have had multiple behaviours at the end of the day where students are anxious and have gone into crisis. This then has a significant knock on at home too.**
>
> **There have been times where the minibuses have broken down, either outside a child's house en route to school or on the school premises waiting to go home. We have had to coordinate getting jump leads and another minibus to help start a bus for them to continue. When it has broken en route to school this has resulted in a bus being late to pick up the other children on the route. The children that were already on the bus struggled to cope with the situation as waiting is a big issue for our students, which resulted in challenging behaviours. Also the minibus was very late to school, therefore having a negative impact on the children's learning.**

5.35 Children being out of education because of transport issues has been discussed above in relation to a potential safeguarding risk. However, members were also informed by the special schools about the significant adverse impact both on the attainment of the children involved and on the attendance figures of the school involved (all schools have a statutory requirement to report attendance to the DfE).

5.36 The Parent Carer Forum highlighted the impact of service failures (this includes awaiting assessments, cancellation of routes, changes to routes at short notice etc.,) on vulnerable children, parents, families and staff in schools which has a major impact due to the ripple effect that is created. Members were informed that this affects and impacts on vulnerable children, families and staff in school.

5.37 The special schools echoed this and stated that '*the time spent in schools supporting people is huge*' and includes the impact on staff time and teaching time with designated staff required to

manage transport, complaints, missing guides, parent calls etc., with this now becoming "the norm" when it should be the exception. The safe and well checks they are obliged to undertake also add to the burden on schools.

5.38 Also special schools stated that "*parents are losing faith in schools as they think the schools are responsible"* for the transport provision. In addition "*parents cannot rely on the service as to whether their child will be taken to and from school"* and "*the daily devastation due to the issues should not be underestimated*".

6 Executive Response to Issues Raised

6.1 The Committee welcomed the commitment from the Cabinet Member and the Director that they are open to changing the approach and listening both through the Parent Carer Forum and more widely, to consider where they can make changes in the medium term in the context of the statutory duty about making sure they use the budget wisely for all the children in the city.

6.2 The Cabinet Member made a welcome statement at City Council on 4th February 2020:

> **"It is a huge problem to transport over 4,000 children every single day across this city – 350 minibuses for that purpose. It is an enormous task and continues to be an enormous task to review that service and ensure that we have for our children and young people and their families a service which is fit for the 21st century. It is tough going, we've got new people in place in the directorate, it's an absolute focus of mine and I will be doing my absolute best and I will not flinch until we have the kind of service I would expect for any of my grandchildren, so you have my absolute assurance that I will stick with this one and we will turn it around, it cannot be rushed, it has to be done properly and we really need to crack on and modernise this service. I've got the people in place, I'm in place, we will carry on, we will do our best, it will happen".**

6.3 They also noted, in the evidence gathering session that: "*it had been frustrating that there have been a number of historical issues that have been brought up and they are very well aware of these and they have made huge moves forward in the service since the consultation. The context being that over 4,000 children are transported per day. Although, there was recognition of the profound concerns from a number of families and some schools, the point was made that there are a lot of parents and children using the service who are not finding those issues".*

6.4 However, on the evidence provided, the committee thought that it was important to note that children and families are still being failed and have been for a number of years. Some of these may be related to the provider failure last year, and members requested further information on issues with the provider failure.

6.5 Members also expressed frustration that the Council seems to be in the same position as it was in 2015 and scrutiny has heard this again and again and there was concern that the Council will still be in this position in two years' time. This was illustrated by the July 2017 report of the Improvement Quartet to City Council and to the Committee, where it stated:

> **'The service was the subject of a root and branch review in Autumn 2016. Since then great progress has been made to modernise the service and address previous issues. A Strategic Steering Group has been established which oversees these improvements. Changes include a full benchmarking review of delivery against other Local Authorities, greater contract management to make providers more accountable, re-establishing relationships with headteachers and key stakeholders such as SENDIASS, Elected Members and the Parent Carer Forum. In addition, an Independent Travel Training Programme has been introduced. A new Head of Service has been appointed and a staffing redesign has been completed. The service has also just purchased a routing system that will reduce costs and the time children spend on transport. Complaints have dramatically reduced, and the team are working hard to meet with parents and headteachers to talk through options for the Autumn term 2017/18'.**

6.6 Concerns were raised by parents prior to the January 2020 evidence gathering session and by the Parent Carer Forum on behalf of parents and families involved. The presence of and strength of representations made by special schools and COBS and the Parent Carer Forum reinforced and legitimised the concerns raised by scrutiny and councillors and this urgently requires an effective response.

7 Next Steps – The Executive

7.1 The range of issues raised in this inquiry, and the fact that work is on-going to bring about improvement, means that the committee agreed not to make specific recommendations. However, we will be following the improvement journey closely and set out below some key areas that we ask are incorporated into the Directorate action plan to be monitored by scrutiny going forward.

7.2 **Safeguarding**

Safeguarding our children has to be our primary concern and responsibility. Some of the safeguarding risks, for example in relation to ensuring that all drivers and guides have DBS checks, will be addressed through the actions following on from the Audit Report but there are other issues, mainly relating to driver and guide training, which should be addressed in the Directorate action plan. These include:

- Measures to address driver training as well as progress with the specialised project which members were told is already underway to address the training requirements of guides.
- Involving and working with the special schools utilising their knowledge of the needs, conditions and disabilities of the children involved, to facilitate relationship building and a better understanding of the range of conditions and disabilities of the children together with techniques for handling and managing challenging behaviours.
- Subcontracting of the service to other providers can also give rise to safeguarding concerns and needs to be reviewed, improved and monitored in partnership with the Business Improvement Team.

7.3 **Safety**

The suitability and safety of vehicles was raised in evidence (as noted above).

Safety is an issue which is often related to safeguarding and it was noted during the evidence gathering that some of the safeguarding risks also impact on the safety of children using the service.

The incidence of the service being suspended due to behavioural issues and safety issues arising from the inadequate training of drivers and guides should be improved by the actions noted in 7.2.

7.4 **Monitoring of the Service/Key Performance Indicators (KPIs)**

There needs to be clear benchmarking and robust performance monitoring of the service from this point forward. This should include:

- agreed KPIs developed in conjunction with Business Improvement which are reported through a dashboard or scorecard that is monitored on a regular basis by scrutiny;
- measures around response times, management of and robust monitoring of complaints about the service; and
- reviewing the incident log systems which are maintained by schools to log issues with the Travel Assist Service, using a system provided by the council, to strengthen them with particular reference to capturing data on children who are 'out of school' due to home to school transport issues and the subsequent impact on the schools and their reporting to the DfE on absence and exclusion figures.

7.5 **Parent Carer Forum**

The Cabinet Member has already committed to strengthening engagement and input to the Parent Carer Forum. A plan needs to be developed to provide a suitable structure and support and to develop the growth of a wider parent network beyond the Parent Carer Forum, which can provide genuine city-wide involvement, feedback and input to the service with a view to

fostering improved relationships and re-building trust. Consideration should also be given to the possibility of including Parent Carer Forum representation on the Schools Forum.

7.6 **Communication**

Gaps in and instances of poor communication were acknowledged by the executive during the evidence gathering and members were told that there is already a Communication Plan which can be shared with the committee. This needs to be shared with the committee so that progress can be monitored by scrutiny. The plan should include:

- Clarity around how timely communication will be maintained with schools and parents/carers.
- Clarity around how emergency protocols/arrangements are communicated to parents and carers and about what will happen when routes are cancelled or changes made to pick up times, which can sometimes happen at short notice, and details of who to contact in these situations. Compliance should be monitored through the KPI process.
- Clear communication with parents when communicating decisions about home to school transport applications clearly setting out the legal basis on which the decision was made.

7.7 **Policy**

Some areas of policy which need to be addressed emerged from the evidence provided to the committee. Specifically these included:

- A proposal by both SENDIASS and COBS about having a separate policy for children with SEND, children attending special schools and children attending COBS.
- There was also a suggestion that COBS should have a separate application process; with additional exceptional circumstances to be considered as part of the application process. This related to the fact that some children cannot travel through certain parts of the City. This should be built into the DPS process.
- Clarification about the policy where an emergency home to school transport application is made as a result of a change in circumstances.
- Clarification is needed about the interpretation of the meaning of 'exceptional circumstances' with examples included in guidance so that parents and carers can better understand how the term is being interpreted and implemented in relation to young people aged between 16-18.
- Clarification of the role/responsibility of the local authority where home to school transport is managed by the users, including schools or parents or carers.

8 How will this be Followed up by Scrutiny?

8.1 Having considered the impact of the Home to School transport service on the parents, carers and children involved, the committee have set out above a number of detailed asks. The aim is to support two key outcomes:

- To ensure an effective and efficient service that fits with the aspiration for Birmingham to become a child friendly city; that keeps children safe and that transports them to school ready to learn;
- To rebuild trust across the different stakeholders; in doing so the City Council must pay particular regard to safeguarding and statutory requirements in all service delivery.

8.2 The committee received an update on home to school transport in July 2020 and intends to follow this up in future meetings; those who have given evidence to the inquiry at the 22nd January 2020 meeting will be invited to attend – representatives from the Parent Carer Forum, special schools, COBS and SENDIASS.

8.3 Committee members will also receive an update on the 4th February City Council motion:

> **'The Council will build on the ongoing work of the Directorate and Scrutiny to produce and comprehensively monitor KPIs which cover waiting times for referrals and appeals; route cancellations by the supplier/lateness/length of journey; route cancellations because of the guide and quality assurance checks.' (Motion to Full Council, 4th February 2020)**

9 Motion to Full Council

9.1 The Committee asks Full Council to agree the following motion:

> **That the Executive provide an assessment of progress against the outcomes set out above, and the key areas listed in Section 7 in this report, to the Education & Children's Social Care Overview & Scrutiny Committee in March 2021.**

Appendix 1 – 22nd January 2020 evidence gathering session

- Councillor Kate Booth, Cabinet Member for Children's Wellbeing
- Sabiha Aziz, Chair, Parent Carer Forum
- Carolyn Bird, Forum Secretary and Transport Lead, Parent Carer Forum
- Barry Bowles, Chair of the Management Board, COBS and Member of the Management Board of SENDIASS
- Denise Fountain, Head Teacher, Dame Ellen Pinsent
- Jon Harris, Head Teacher, Hamilton School and Chair, Special Schools Forum
- Simon Harris, Interim Headteacher, Mayfield School
- Steve Hughes, Executive Head Teacher, Wilson Stuart School
- Nasreen Hussain, Head of Service, SEND Information, Advice and Support Service (SENDIASS)
- Lisa Richards, Independent Travel Trainer / Learning Mentor, Queensbury School
- Mary Riddell, Parent Carer Forum
- Nicholas Taynton, Deputy Head of Service, SENDIASS
- Colin Jones, Head of Occupational Therapy and Team Manager, Home to School Transport
- Nichola Jones, AD, Inclusion and SEND
- Dr Tim O'Neill, Director for Education and Skills
- Katie Williams, Deputy Head Teacher, Hamilton School

Home to School Transport Inquiry - *Executive Commentary*

I would like to thank the Chair and all the members of the Education and Children's Social Care Overview and Scrutiny Committee. This has been a very thorough review of the key areas in the Home to School transport service that we have had to come to grips with and invested a great deal of time to improve over the past year.

There have been delays in presenting this report to Full Council, as the Council, Birmingham and the world responded to the challenges of COVID-19. Many of the issues raised have been identified and were already in progress as part of our SEND improvement and transformation journey, which has been developed at pace over the past year.

In responding to COVID-19 our priority was supporting our most vulnerable citizens and our schools have done a phenomenal job in ensuring they remained open for those children with SEND who were able to attend school safely. And for those who were not able to attend school that they were supported appropriately remotely at home.

The Transport Policy Statement for 0-25-year olds has been actively progressed and monitored and appears to be working well, although this has been difficult to gauge during lockdown with fewer children attending school since March this year. However, during this time we have been able to focus on improving online access to transport policy and applications.

In the report communication was highlighted as an issue and this is at the heart of our transformation approach, as through improved communications we are rebuilding the confidence of all our stakeholders, our children, young people and their families. Our summer communications plan, alongside our service improvement plan, has been implemented and is being progressed. COVID-19 has changed our approach around this key issue especially as staff work from home, and this has been reflected in the way we plan our work. Dedicated telephone numbers and email addresses have been provided; this has significantly improved communications with families and has been welcomed. On-line applications for transport can now be made and a corporate review is under way on future communications approaches, especially for those providing frontline services. The service has had regular communications with parents during the COVID-19 period via letters and newsletters. A communications plan for the whole of the SEND service has now been completed. This is being achieved through the local offer and online applications which significantly streamlines the process and delivers early decisions on placements and transport.

The Parent Carer Forum is working very closely with the service area and meets regularly with the Assistant Director and myself as Cabinet Member to ensure there are effective and robust working arrangements and communication channels in place to ensure parents' and carers' voices are heard and embedded in service improvement. The Parent Carer Forum is part of the Home to School Stakeholder Group and has a representative on the SEND improvement board. There have been areas where the PCF have been instrumental in supporting the service area and in the Autumn term we will be undertaking joint parent surveys to capture areas that need to be further improved.

Safety and issues regarding guides and driver training were raised in the report. Over recent months additional guide capacity has been provided to improve service delivery in this area, and some of our transport operators themselves are now able to supply guides when a guide goes off sick at short notice. The additional guides are subject to the full DBS process. The service is being restructured and new training officer posts will provide future training for the guides, which will commence in the Autumn Term 2020. The transport operators provide the necessary training for their drivers as part of the contract arrangements.

In order to improve performance in this area at pace, interim additional senior management support has been put in place to deliver the service improvement program around safety, safeguarding, IT and contract management.

Another key issue raised in this report was in connection with the number of children being out of school because of a lack of or unsuitable transport. This included children attending our Pupil Referral Units who have SEND. At this current time all applications have been processed and all new applications will consider each individual pupil's circumstances.

Our new IT system will enable the service to work much closer with schools and their incident logs regarding children out of school due to transport issues. The data and record keeping will enable the service to also respond to identified issues and to resolve any transport issues promptly.

KPI's have been developed for the service which are linked to the improvement plan. The KPI's are reported through a weekly dashboard. For example, KPI 4 requires complaints to be processed and responded to within 10 working days. This is extended to 30 working days for more complex cases. A copy of the dashboard is appended to this report.

In terms of assessments, our performance has been strengthened and performance is now measured on a weekly basis. Assessments are now carried out in liaison with schools and the Occupational Therapy service is used for those pupils with very complex needs. The new process has reduced stage 1 appeals from 18 in February to nil since July and stage 2 appeals from 11 to 1 over the same period.

All the transport contracts (excluding National Express Assisted Transport Services) were renewed in January/February 2020, so that new terms and conditions could be implemented, which included performance criteria. The operators submit monthly performance information, which enables the service to continuously monitor performance. In addition, we have tripled the number of vehicle inspections from 3 to 9 a month during 2020/21 to check the condition of vehicles. A new compliance team will work in the field monitoring the services as they are operated and at schools.

We have also purchased new software which will significantly improve the delivery of the service and when fully rolled out will enable schools and parents to monitor the exact location of vehicles via an app.

Safeguarding is crucial and the most fundamental issue for all local authorities and one which has been at the heart of our improvement journey. The new contracts introduced in February this year ensured that there is a robust process in place to check the suitability of all drivers and guides via the DBS checking process. We will be enhancing this process further during the Autumn Term when we will be signing up to the online update service. The new process ensures that no driver who has a positive DBS is employed on our routes until the reasons for the positive DBS have been considered by the Council and permission given to drive. Through our improved procurement processes, training is a key element as well as ensuring that there is a specific process in place to deal with any subcontracting, including a declaration by the operator that a subcontractor meets all our terms and conditions. We are working closely with the vehicle licensing authorities, Traffic Commissioner and VOSA to continue to improve safety and safeguarding.

We have put in place a robust performance monitoring system linked to seven key performance indicators these are reported on weekly and through the monthly management information returns from the operators.

The application process is generic and any extra necessary circumstances that need to be considered can be provided on the form. Where an emergency home to school transport application is made as a result of a change in circumstances, these applications can be fast tracked to ensure that we protect our most vulnerable children during difficult times, as happened on numerous occasions during lockdown.

The issue on clarification on the meaning of the term 'exceptional circumstances' within the form has been raised a number of times. We have been advised by our legal officers that it is unhelpful to provide a definitive list because it depends on the specific facts of each individual case and the nature and extent of the circumstances for the individual child and family concerned. This would cover situations such as family circumstances, emergency housing, and change in health conditions which necessitates the provision of transport to ensure school attendance and where all other options have been considered.

The service has a robust improvement programme in place as was reported to the Committee in July. The work to improve the service continues, and this together with a new service structure and IT system will see the service improve over the forthcoming months.

I am absolutely committed to our aspiration for Birmingham to be a child friendly city; a city that keeps our children safe and provides them with the opportunities to fulfil and realise their potential.

Councillor Kate Booth
Cabinet Member Children's Wellbeing

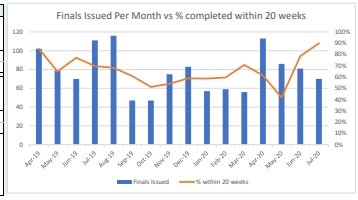
Summary Report for Board

Finals Issued

	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
Finals Issued				102	79	70	111	116	47	47	75	83
% within 20 weeks				85%	65%	77%	70%	68%	61%	51%	54%	59%

Month	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20
Finals Issued	57	59	56	113	86	81	70					
% within 20 weeks	59%	60%	71%	62%	42%	79%	90%					

Narrative: The recovery team are now managing EHC requests using clearly strutured pathways and sharing tasks. This has resulted in the t improving timeliness to its highest point for some years. All cases are processed within clear pre-planned work allocations which are completed to strict deadlines.



EHCP Quality Assurance

	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20
Quality Assurance of new EHCPs				41%	65%	80%	74%					
				17%	18%	0%	6%					
				42%	17%	20%	20%					

Narrative: There is an upward trend in the quality and relevance of the content for plans prodcued. The Quality Assurance Framework now assists the team while writing plans, which is having a significant impact. Health colleagues have introduced QA of plans prior to issue since July before issue.

EHCP Reviews - 2020/21

	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21
Reviews expected												
Reviews received												
Reviews completed												
Year 6 Reviews expected												
Year 6 Reviews received												
Year 6 Reviews completed												
Year 11 Reviews expected												
Year 11 Reviews received												
Year 11 Reviews completed												

Narrative: Since March 2020, the paperwork for 5,793 EHCPs has now been completed at the stage of beinwith the plans at the stage of having been or being issued. Work has taken place to implement new processes to ensure the timliness for undertaking an EHCP review is embedded going forward. Link professionals have been allocated to all EHCP plans and targeted work is taking place to ensure all children transitioning or undertaking a year 9 review are prioritised for an autumn review meeting.

Mediations

Monthly Summary	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20
Mediations Pending		22	24	1	12	14	8					
Mediations resolved before meeting				1	0	0	8					
Costs for Mediations		£11,541.00	£8,271.00	£0.00	£5,760.00	£8,640.00	£0.00					

Narrative: As the implementation of the link professional has been established across the service there has been a significant reduction in the number of mediations taking place. In July all 8 requests were resolved without the need for a formal mediation with parents. The approach has proved highly productive removing the need for parents to engage in a lengthy processes. The continued work of the parent link officer has further strengthened the early help support for families.

Parent Link Service Call Log

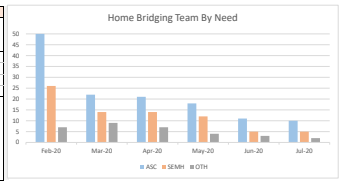
Monthly Summary	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20
New Referrals	24	44	32	66	76	93	182					
Ongoing Referrals	1	2	4	8	28	30	50					
Closed Cases	23	42	28	58	48	63	132					
Call Logs	0	28	103	68	41	132	200					
Total												

Narrative: Parent Link Officers work alongside all agencies to seek a resolution, improving the outcomes for the child/young person. The team consists of one team coordinator, and 4 Parent Link Officers, The themes for the referrals received are primarily linked to requests for an EHCP assessment, school placements, communication breakdown and advice and guidance.

Children home tutored (by number)

Monthly Summary	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20
ASC		50	22	21	18	11	10					
SEMH		26	14	14	12	5	5					
OTH		7	9	7	4	3	2					
Total		**83**	**45**	**42**	**34**	**19**	**17**					

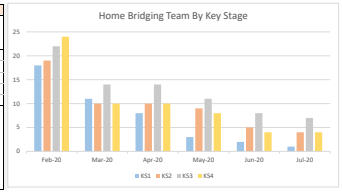
Narrative: **Children in receipt of home tuition has reduced from 83 to 17 since February this year. The Home Bridging Team have** continued to work with professionals and families to help secure appropriate provision for the next academic year.



Children hoem tutored (by key stsage)

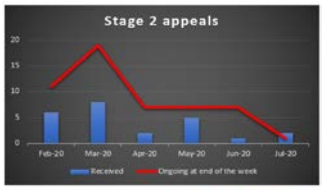
Monthly Summary	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20
KS1		18	11	8	3	2	1					
KS2		19	10	10	9	5	4					
KS3		22	14	14	11	8	7					
KS4		24	10	10	8	4	4					
Total		**83**	**45**	**42**	**31**	**19**	**17**					

Narrative: From September, the Home Bridging Team will be working in locality areas to support families and schools. Additonal resource is beign provided to assist specfically in the return to school post Covid-19. The team will beworkign closely with schools as it develops early intervention approaches with schools and more bespoke provision for students linked to their local community and school.



Home To School Transport Appeals

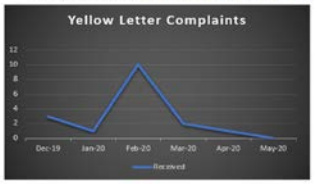
Stage 1 appeals have reduced from **18 in Feb 20 to 0 in July 20.** There are currently **no ongoing** Stage 1 appeals



Stage 2 appeals have reduced from **11 in Feb 20 to 1 in July 20.** All ongoing Appeals are being prioritised for completion

Yellow Letter complaints

We have received **16 Yellow Letter and 11 ICASE Complaints** in the last 6 months.



We currently have **no on-going Yellow Letter complaints**

We currently have **no iCASE complaints** ongoing.

Birmingham City Council

City Council

15 September 2020

Subject:	**Annual Report of the Independent Remuneration Panel 2019-20**
Report of:	Council Business Management Committee
Report author:	Emma Williamson, Head of Scrutiny Services

Does the report contain confidential or exempt information? ☐ Yes ☒ No

If relevant, state which appendix is exempt, and provide exempt information paragraph number or reason if confidential :

1 Executive Summary

1.1 The Annual Report of the Independent Remuneration Panel was discussed at the Council Business Management Committee meeting of 23 March 2020 and a copy of the Panel's Report is attached as an Appendix to this Report.

1.2 The Panel has worked consistently within the requirements of the Local Government Act 2000 and the accompanying Statutory Guidance and Regulations on Councillors' allowances.

1.3 The City Council must have regard to the recommendations of an Independent Remuneration Panel before it can set up or amend its Members' Allowances Scheme. The Council is, of course, free to accept the Panel's recommendations in full, in part, or not all.

2 Motion

2.1 The Recommendations made by the Independent Remuneration Panel on page 4 of its Annual Report be accepted and implemented with effect from 19 May 2020.

3 2019/20 Report and Recommendations

3.1 Last year the Panel committed to re-establish the link to the comparator agreed in 2013, after several years of no increases, with the intention to bring the basic allowance back to parity with ASHE over the remaining years of this four year electoral term. In this year's report, the Panel confirms its recommendation to incrementally increase the basic and special responsibility allowances to "catch up"

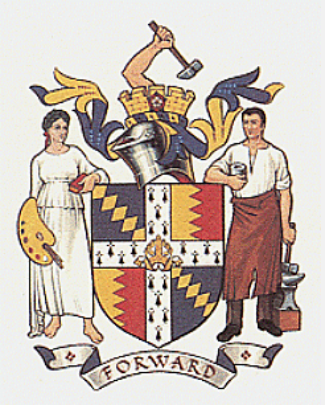
with the ASHE comparator. This results in a recommended 4.4% increase for basic and special responsibility allowances for the 2020 municipal year.

3.2 In addition, the City Council asked the Panel to look at a number of specific issues including the role of Licensing Sub Committee Chairs, and the level of special responsibility allowances paid to Opposition Leaders and Deputies, Group Secretaries and Whips. The report includes recommendations on these.

3.3 As in previous years, and before coming to a conclusion for the 2020/21 year, the Panel invited evidence from a number of sources, including face to face meetings with the Leader and Deputy Leader of Labour, Leader of the Conservatives and Deputy Leader of the Liberal Democrats, written submissions and face to face meetings with Councillors, including those from single and two member wards. The Panel also reviewed allowances paid by other local authorities including other core city allowances.

4 Appendices

4.1 Appendix 1: Annual Report of the Birmingham Independent Remuneration Panel 2019-2020



COUNCILLORS' ALLOWANCES

Annual Report of the Birmingham Independent Remuneration Panel 2019-2020

MARCH 2020

ANNUAL REPORT OF THE INDEPENDENT REMUNERATION PANEL

2019-2020

BIRMINGHAM CITY COUNCIL

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FOREWORD

Birmingham City Council continues to be responsible for a range of vital services for people, communities and businesses across the city. Many of those services are statutory, such as social services, planning, pest control and licensing. Others are undertaken with partners to provide enhanced services which benefit not only Birmingham and the West Midlands but impact nationally and internationally, such as staging the Commonwealth Games in 2022. The 101 City Councillors all have a significant role to play in governing the city as well as working at a ward level to help communities deliver local priorities.

The principal purpose of the Independent Remuneration Panel is to make recommendations to the City Council on the basic and special responsibilities allowances paid to Councillors – our recommendations are on page 4 of this report. Before making the final recommendations set out in this report the Panel reviewed a significant amount of evidence on a range of relevant matters, including comparator allowances paid by the other six metropolitan authorities in the West Midlands, Core Cities and a representative sample of other local authorities. We also noted reviews undertaken to the Constitution last year, together with the development of the Assurance Framework (July 2019) and its first Review which was shared with the Secretary of State for Housing, Communities and Local Government in October 2019. The Framework addresses the challenges identified by Sir Bob Kerslake in 2014 and the improvement and transformational changes the Council is committed to implementing. The Panel also invited all Councillors to meet with us on a confidential basis to discuss matters relating to our work programme and/or submit written information.

Whilst the basic allowance paid to Councillors in Birmingham does not and should not represent a wage, the Panel believes that it should keep pace with increases in local income levels. Whilst very mindful of the financial pressures the Council is dealing with, we are recommending that the basic allowance and special responsibility allowance is increased in line with the Annual Survey of Hours and Earnings (ASHE, the measure/comparator adopted by the Panel in 2013). Last year the Panel committed to re-establish the link to the comparator, after several years of no increases, with the intention to bring the basic allowance back to parity with ASHE over the remaining years of this four year electoral term. The Panel confirms its recommendation to incrementally increase the basic and special responsibility allowances to “catch up” with the ASHE comparator. This results in a recommended 4.4% increase for basic and special responsibility allowances for the 2020 municipal year.

In addition, the City Council at its meeting on 2nd April 2019 asked the Panel to look at a number of specific issues including the role of Licensing Sub Committee Chairs, the role of Opposition Parties, and the level of special responsibility allowances paid to Opposition Leaders and Deputies, Group Secretaries and Whips. Our report includes recommendations on all these matters, plus a note of related matters which arose during our review of the evidence.

I would like to thank all those Councillors and officers who gave evidence for their valuable contributions; and to Emma Williamson, Head of Scrutiny Services and Ingrid Whyte, Senior Finance & Purchasing Officer (Democratic Services) for their help in producing this report.

Rose Poulter, Chair – Independent Remuneration Panel

March 2020

RECOMMENDATIONS

1. The Basic Allowance increases by 4.4% to £17,954.

2. The Special Responsibility Allowances increase by 4.4% (as shown in Appendix 1).

3. The level of responsibility assigned to each of the following Special Responsibility Allowances are increased as follows:

   - Leader of the Opposition: increase from 25% to 30% of the Leader's responsibility;
   - Deputy Leader of the Opposition: increase from 14% to 17% of the Leader's responsibility;
   - Leader of the Other Qualifying Opposition Groups: increase from 10% to 14% of the Leader's responsibility;
   - Lead Opposition Spokesperson: increase from 5% to 10% of the Leader's responsibility;
   - Deputy Leader of the Other Qualifying Opposition Groups increase from 5% to 7% of the Leader's responsibility;
   - Group Secretaries: increase from 5% to 7% of the Leader's responsibility.

4. A new Special Responsibility Allowance is created for Chairs of Licensing Sub-Committees and is set at 10% of the Leader's responsibility.

5. The co-optee allowances increase by 2% (as shown in Appendix 1).

6. The independent carers' allowance (hourly rate) continues to be raised in line with the Living Wage, currently at £9.30 per hour, and that this allowance remains linked to the Living Wage in future years.

7. The professional care allowance (hourly rate) continues to be raised in line with the Council's rate for a Care Assistant (Grade 2 post) taking the mid-range spinal point, currently at £9.87 (at time of writing).

8. Travel expenses and Subsistence Allowances continue to reflect the Council's Scheme for officers.

MEMBERS' ALLOWANCES

1. Background

The City Council has an Independent Remuneration Panel which is made up of people independent from the Council. The City Council may only pay allowances and expenses after first considering a report from its Independent Remuneration Panel. It is for the Council to decide on the Members' Allowances Scheme that is put in place, having regard to the Panel's recommendations.

The Panel is well-established, having been formed by the City Council at its meeting on 3 July 2001. It has made a number of recommendations to the City Council over the years on Members' Allowances and Expenses. In 2012/13 it carried out a "root and branch" review of allowances and, in recent years, has also made reports to the New Frankley in Birmingham Parish Council and the Royal Sutton Coldfield Town Council.

The Panel has eight members, four of which are citizen representatives, two are appointed and two are co-opted, non-voting, members drawn from former Councillors of the City Council.

2. 2019/20 Annual Report

This report is the Panel's annual report for the allowance scheme for 2020/21. The Panel met on a regular basis between September 2019 and February 2020 to consider evidence for the 2020/21 allowance scheme, and based the recommendations on fairness, from the information received.

3. Basic Allowance

As in previous years, the Panel has worked within the requirements of the Local Government Act 2000 and the accompanying Guidance and Regulations on members' allowances in making its recommendations for 2020/21.

The Panel reaffirms the principles of the Birmingham Members' Allowances Scheme set out in previous reports. The key factors which the Panel takes into account remain:

1. The promotion of a healthy democracy by reducing financial disadvantage as a barrier to people from a wide range of backgrounds and a wide range of skills standing for election or serving as Councillors.

2. The maintenance of an ethic of voluntary public service and the need to reflect this within the Basic Allowance (BA) paid to all Councillors.

3. Councillors should not expect nor receive a full-time salary.

The Basic Allowance covers the following range of activities

- Representative role including acting as an advocate for the interests of the ward, dealing with constituents' enquiries or representations, active participation in the shaping and management of services devolved to a local level and attendance at meetings of local organisations.
- City Council and Committee work including preparation for and attendance at meetings, interview panels, appeals, visits, seminars and conferences, service on or chairing ward forums and participation on other bodies relating to the work of the City Council.

- Service as the representative of the City Council or its Committees on outside bodies for which no separate remuneration is made.
- The time element of the Basic Allowance based on a gross commitment of no more than 3 days per week with a public service discount of 25%.

Our deliberations have been informed by the definition of the role of the Councillor as set out in the Constitution and we have given this due regard in adopting it as a framework, while retaining the above.

4. Setting the 2020/2021 Basic Allowance

In last year's report, the Panel set out its rationale for recommending an increase in the basic allowance to re-establish the link to the comparator agreed as part of the "root and branch" review of 2013. To move straight to the ASHE 2018 figure would have resulted in a 10% rise on the 2017/18 basic allowance. The Panel's intention there was to bring the basic allowance back to parity with ASHE over the remaining years of this four year electoral term.

As in previous years and before coming to a conclusion for the 2020/21 year, the Panel invited evidence from a number of sources, including face to face meetings with the Leader and Deputy Leader of Labour, Leader of the Conservatives and Deputy Leader of the Liberal Democrats, written submissions and face to face meetings with Councillors, including those from single and two member wards. The Panel also reviewed allowances paid by other local authorities including other core city allowances.

The evidence received confirmed the Panel's approach to remuneration. In addition, the Panel also noted the following comments:

- A number of Councillors raised concerns about the lack of central support for members, particularly for those in single member wards;
- Comments were also made regarding additional pressures on those in two-member wards where one of the two members held a position of additional responsibility, or is off sick for a significant time, which put extra demands on their time;
- The changes to how the Council undertakes democratic and governance functions following Kerslake continue to impact on a range of roles and responsibilities. The improvement journey has influenced levels of responsibility as have changes to wards

Therefore, the Panel recommends:

That for the next municipal year (May 2020 to May 2021) the basic allowance increases by 4.4%, with future years increases to be determined by the Panel on an annual basis. This figure is in line with the 2.2% increase in the ASHE figures (between 2018 and 2019 the ASHE figures increased by 2.3%) plus a 2.2% step-up to start to bring the allowance in line with the ASHE figure. This is a reasonable move this year, all other factors being taken into account, with future years increases to be determined by the Panel on an annual basis.

Table 1: Basic Allowance and ASHE

	CURRENT RATE	*ASHE 2019*	*PROPOSED RATE*	
Gross min. time (3 days x 52 weeks)	*156.00*	156.00	*156.00*	*days p.a.*
x Baseline per day	*141.13*	153.58	*147.34*	
Gross Rate	*22,016.28*	23,958.48	*22,985.04*	
Less public service discount 25%	*5.504.07*	5,989.62	*5,746.26*	
TIME ELEMENT	***16,512.21***	**17,968.86**	***17,238.78***	
ADDITIONAL EXPENSES ELEMENT	*715.00*	*715.00*	*715.00*	
BASIC ALLOWANCE	***17.227.00***	***18,684.00***	***17,954.00***	*Rounded*

5. Special Responsibility Allowances (SRA)

In April 2015, City Council accepted the Panel's recommended new approach for calculating Special Responsibility Allowances. The Panel recognised that the Leader's role takes the most responsibility assessed at 100% and all the other roles are then taken as a relative percentage of the Leader's role (see Table 2).

City Council also accepted the Panel's recommendation that "the ASHE 2013 for all Industries and Services Male Full Time (top 10%) table 4.1a for the United Kingdom would be the most appropriate comparator to be used for the Leader's role in order to reflect the transferable skills of the role".

Following evidence received this year, the Panel examined the percentage level of responsibility assigned to six roles and recommends that each receive an increase in that percentage level this year, as set out below:

- Leader of the Opposition: increase from 25% to 30% of the Leader's responsibility;
- Deputy Leader of the Opposition: increase from 14% to 17% of the Leader's responsibility;
- Leader of the Other Qualifying Opposition Groups: increase from 10% to 14% of the Leader's responsibility;
- Lead Opposition Spokesperson: increase from 5% to 10% of the Leader's responsibility;
- Deputy Leader: of the Other Qualifying Opposition Groups increase from 5% to 7% of the Leader's responsibility;
- Group Secretaries: increase from 5% to 7% of the Leader's responsibility;

For each of these, it was recognised that recent changes in how the Council undertakes democratic and governance functions has had an impact on the range of roles and responsibilities undertaken by these postholders, resulting in a greater level of responsibility held. The Panel considered evidence in relation to Party Whips, but did not feel that a strong enough case was made.

In addition, a new Special Responsibility Allowance is recommended for the Chair of Licensing Sub-Committees. This is the first time the Panel has looked in detail at this role and believes that the level of responsibility taken in practice by the two Chairs (the third being chaired by the Chair of the Licensing and Public Protection Committee) in chairing significant licensing meetings and dealing with subsequent actions of appeals merits some recognition.

However, the Panel notes that this is not reflected in the Constitution, and the Council Business Management Committee should consider formalising this role alongside the introduction of the Special Responsibility Allowance.

The Panel therefore recommends that the two Chairs of Licensing Sub-Committee receive a Special Responsibility Allowance equivalent to 10% of the Leader's responsibility.

In line with the recommendations last year, and the approach to the Basic Allowance set out above, the Panel further recommends an increase of 4.4% within the current banding (as set out in Appendix 1) for all Special Responsibility Allowances.

Table 2

Bands	Level Of Responsibility	Title/Description
1	75% to 100%	Strategic Leadership with overall responsibility for decision making for the direction and running of Council Services
2	50% to 74%	Strategic responsibility within Cabinet and also individual responsibility as delegated by the Constitution
3	15% to 49%	Responsibility for Chairing key Regulatory and Overview and Scrutiny Committees in order to meet regulatory requirements and where required hold the Executive to account
4	5% to 14%	Other roles with Special Responsibilities

6. Co-optees' Allowances

The Panel took no new evidence on co-optee allowances and was of the view that a 2% rise would be reasonable, and in line with the increase to basic allowance (minus the step-up element).

Therefore, the Panel recommends an increase of 2% on co-optee allowances (as set out in Appendix 1).

7. Carers' Allowances

In 2012, the City Council agreed to adopt the Living Wage for all its employees, and subsequently extended this to externally-contracted care sector workers from October 2014.

In 2015, the Panel recommended that the Independent Carers' Allowance adopt the change from the National Minimum Wage to the Living Wage, currently at £9.30 per hour.

The Panel therefore recommends that this continues for 2020/21 and that this continues to track the Living Wage in line with the Council.

The professional care allowance (hourly rate) continues to be based on the Council's rate for a Care Assistant, Grade 2 post, mid-range spinal point at £9.87 per hour (at time of writing).

8. Travel expenses and Subsistence Allowances

The Panel took no new evidence on travel or subsistence expenses and recommends that these continue to reflect the Council's Scheme for officers.

The Panel emphasised the need to ensure that the list of approved duties for which such expenses can be claimed is kept up to date and in accordance with all relevant legislation.

9. Parental Leave

The Panel took some partial information on the Parental Leave Policy and undertakes to keep under review the detail of the Parental Leave Policy to take account of implementation experience and legal advice taken and shared by other relevant parties.

10. Work Programme in 2020/21

During the evidence gathering undertaken this year, some issues were raised where the Panel felt that there was not enough evidence to make recommendations this year but would warrant further consideration next year. Therefore, next year's work programme will include:

- A review of the banding (table 2)
- Review the detail of the Parental Leave Policy to take account of experience and legal advice taken and shared by other relevant parties.
- Review the time commitment of participation on the Appeals Panel

Appendix 1: Proposed Members' Allowances Rates (from May 2020)

BASIC ALLOWANCE (per annum unless otherwise stated)

	£
Baseline per Day Rate	147.34
Basic Allowance	**17,954.00**
Time Element	17,238.78
Additional Expenses Element	715.00

SPECIAL RESPONSIBILITY ALLOWANCE (per annum unless otherwise stated)

Baseline per week (£1,228.23 discounted by 15%)	1,044.00
STRATEGIC LEADERSHIP	
Leader of the Council	54,288.00
Deputy Leader of the Council	43,430.00
STRATEGIC SHARED RESPONSIBILITY	
Cabinet Member	27,144.00
RESPONSIBILITY FOR CHAIRING KEY REGULATORY, OVERVIEW & SCRUTINY COMMITTEES	
Chair of the Planning Committee	16,286.00
Chair of Licensing & Public Protection Committee	16,286.00
Leader of the Largest Qualifying Opposition Group	16,286.00
Chair of an Overview & Scrutiny Committee	13,572.00
OTHER ROLES WITH SPECIAL RESPONSIBILITY	
Deputy Leader of the Largest Qualifying Group	9,229.00
Chair of the Audit Committee	5,429.00
Chair of the Trusts and Charities Committee	5,429.00
Chairs of the Licensing Sub Committees	5,429.00
Leader of Other Qualifying Opposition Groups	7,600.00
Deputy Leader of Other Qualifying Opposition Groups	3,800.00
Lead Opposition Spokesperson (Shadow Cabinet)	5,429.00
Political Group Secretaries	3,800.00

(A Qualifying Opposition Group is one with a minimum of 6 Members)

CO-OPTEE ALLOWANCES *(per annum)*	*£*
Chair of the Standards Committee	1,061.00
Member of an Overview & Scrutiny Committee	882.00
Member of the Standards Committee	590.00

CARERS' ALLOWANCES	
Independent care – hourly rate	9.30
Professional care with supporting documentation – hourly rate	9.87

Where applicable figures have been rounded.

TRAVEL EXPENSES AND SUBSISTENCE ALLOWANCES

Car, Motorcycle and Bicycle Allowance Rates are set in line with those paid to officers of the authority.

Subsistence Allowances are set in line with those paid to officers of the authority or the inflation factor in the council's budget.

Car Mileage Rates

First 10,000 business miles in tax year	45p per mile
Each business mile over 10,000 in tax year	25p per mile
Supplement for official passenger	5p per mile

If car mileage is claimed for travel outside the West Midlands area, the payment will be the lesser of the value of the actual mileage claimed or the peak time standard rail fare.

Motorcycle Mileage Rates *24p per mile* ***Bicycle***

Mileage Rates *20p per mile* ***Other Travel Expenses***

Rail Travel (supporting receipt required)	Standard Class Fare
Taxi, Tube and Bus Fares, Car Parking, Toll Charges (Supporting receipts if possible)	Actual Cost

If a travel pass is provided by the Council the recipient must make a contribution of 40% towards the total cost met by the Council. The recipient also forgoes the right to claim for travel allowances or expenses for duties undertaken in the area covered by the pass or to make use of transport services provided directly by the Council, unless the relevant travel service is not available, or there are health and safety reasons.

Appendix 2: Membership of the Independent Remuneration Panel

Chair of the Panel

Rose Poulter (Chair)

Council Appointees

David Grainger

Sajid Shaikh

Citizen Representatives

Sandra Cooper

Veronica Docherty

Jacqui Francis (Deputy Chair)

Co-opted Members

Honorary Alderman Fergus Robinson

Honorary Alderman Stewart Stacey