

# Air Quality

Birmingham City Council Sustainability and Transport Scrutiny Committee

20 January 2021

Our values



**Chilternrailways**  
by arriva

# The problem with Diesel

- Chiltern Railways is an all-diesel railway.
- UK Government plans to eliminate diesel on rail network by 2040.
- There are no funded plans to electrify the Chiltern route in the near future.
- Stakeholders expect us to reduce the impact of diesel.



# Shutdown Policy

- Chiltern Railways has policies and procedures relating to engine shutdown. We have a specific instruction for Snow Hill which is an enclosed station.
- Where any DMU is expected to lay over for more than 10 minutes drivers are expected to shut down on arrival.
- Where any loco hauled set is to lay over for more than 25 minutes, the locomotive should be shut down on arrival and the generator used for ETS.
- These instructions are marked on driver diagrams and non-compliance is investigated.



## Introduction of Clean Air Zones at Marylebone.

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# Air Quality Monitoring

- We are working with RSSB to undertake further air quality monitoring at key Chiltern locations,
- Currently expected to be five sites, to assess current and ongoing air quality levels and to help develop further initiatives.
- Active monitoring expected to commence in Q2 2021 and will include Moor St and Snow Hill.

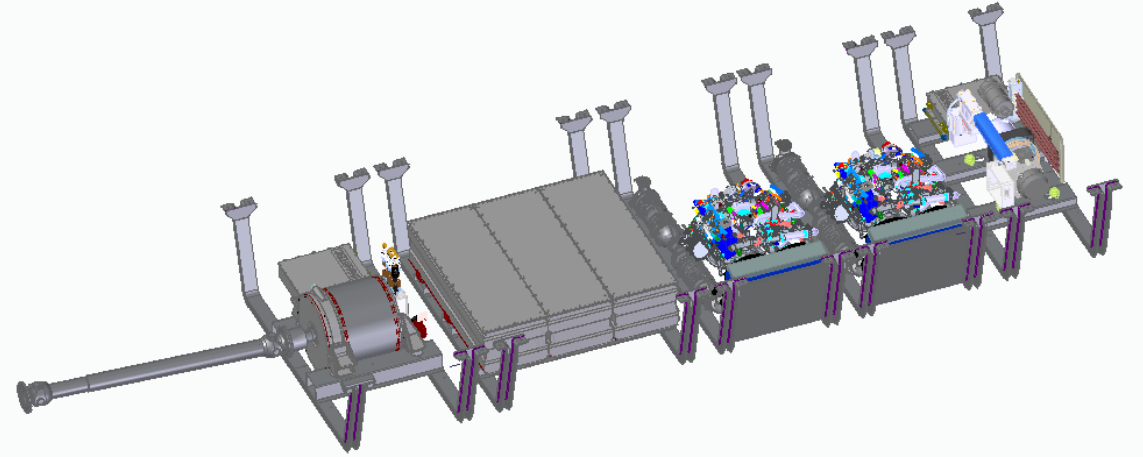
# Hybrid Trains

- Develop and trial hybrid diesel-electric engines on Chiltern Railways main fleets by end of 2021.
- No franchise requirement to do so.
- Hybrid allows train to operate on battery power in stations and depots
  - Eliminates engine noise and air emissions.
  - Improved fuel economy.
  - Can be used in known sensitive areas such as Marylebone, Birmingham Snow Hill and Kidderminster stabling facilities



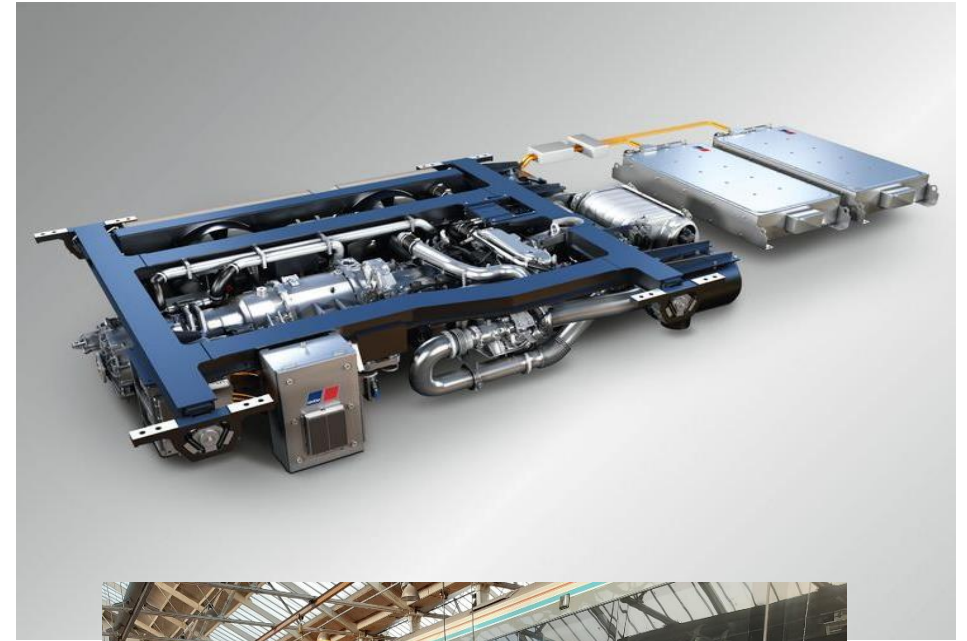
# Class 165 Trial

- Project working together with Angel Trains and Magtec.
- Trial train is being converted now.
- Expected to be running on Chiltern Railways services in Q3 2021.



# Class 168 Trial

- Project working together with Porterbrook Leasing and MTU (part of Rolls-Royce).
- Trial train is being converted now.
- Expected to be running on Chiltern Railways services in Q3 2021.



# What happens next ?

- Trials are hoped to prove the Hybrid technology. The benefits should include a reduction the local impacts of diesel train noise and fumes.
- A potential future fleet conversion to diesel-electric Hybrids before electrification of the Chiltern Railways network.



**Any questions ?**