Department for Transport

The role of biomethane transport fuel

Update from the Department for Transport

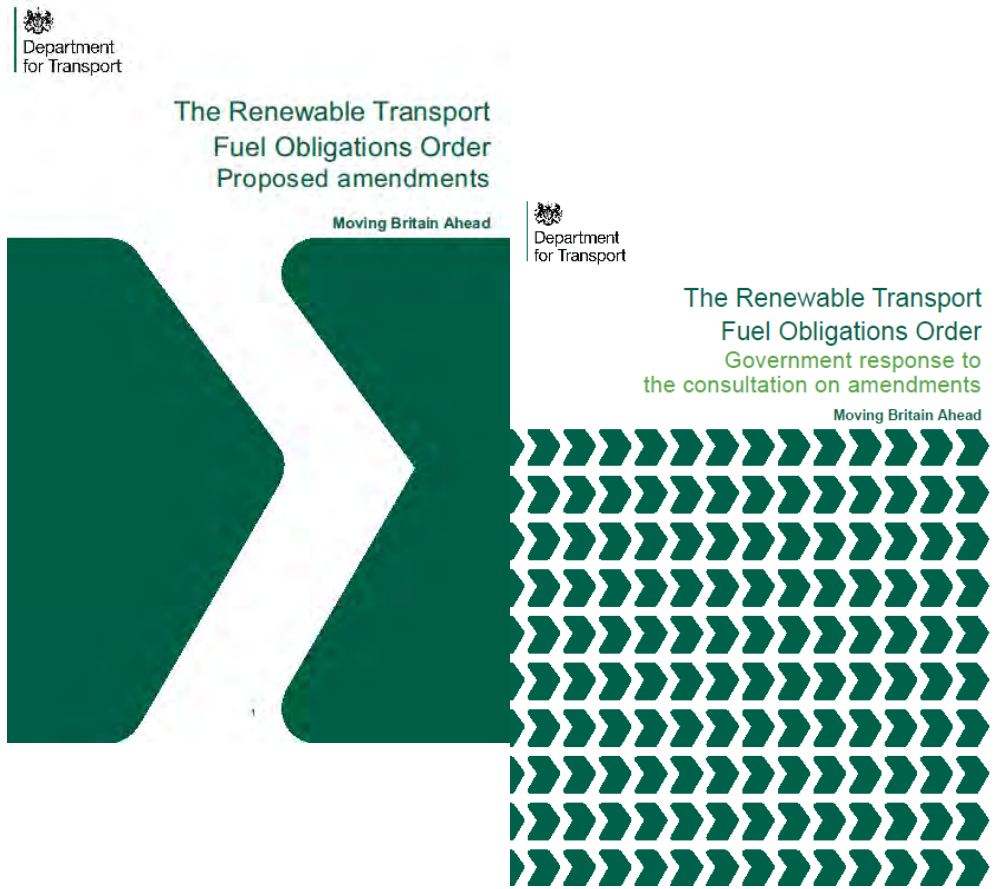
UK Biomethane Day

National motorcycle museum, Birmingham, 2 May 2018

Aaron Berry, Low Carbon Fuels, UK Department for Transport

Consultation on ILUC and GHG

- Published December 2016
- Government decision September 2017
- Guidance consultation November 2017
- Implementation April 2018



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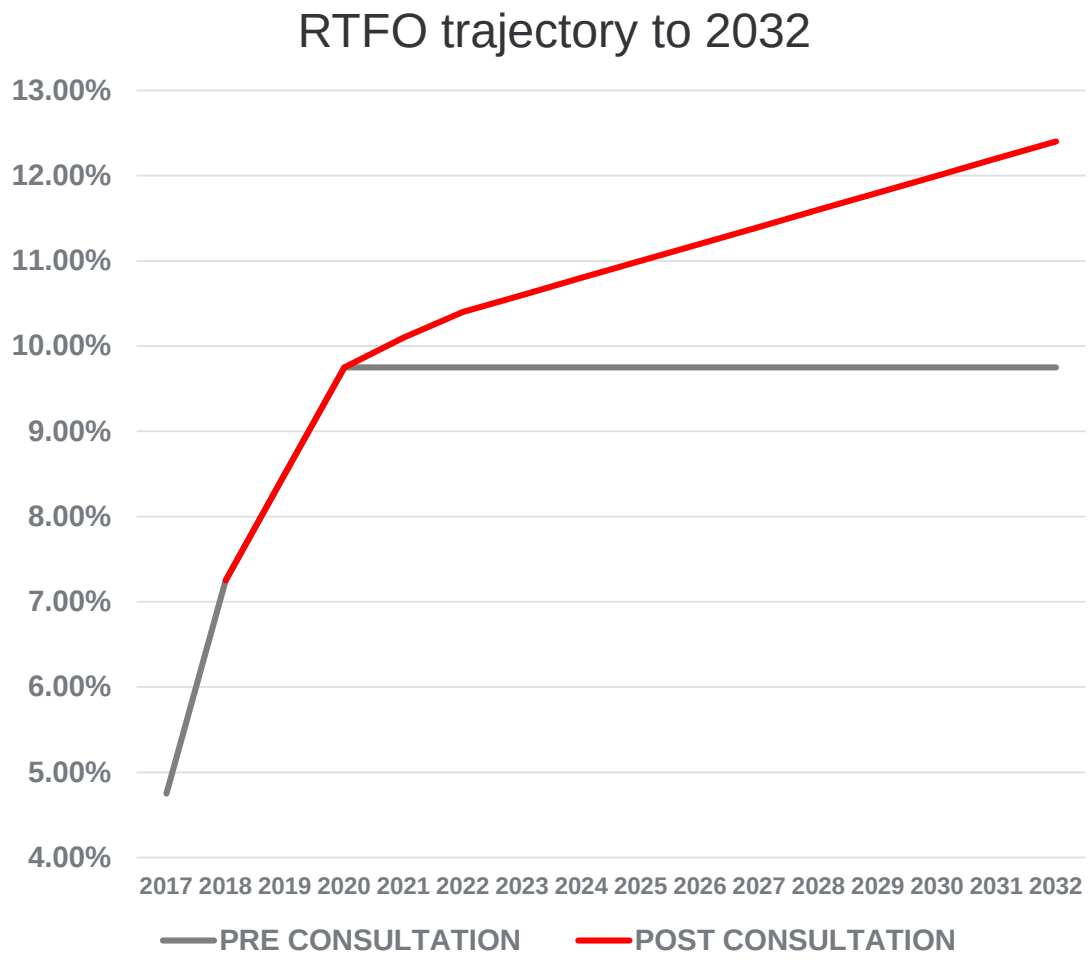
Trajectory to 2032

Increasing target to 2032

- Set to 2032 - Carbon Budget 5
- Clear investment signal.
- 12.4% target in 2032
- Providing around 7.2% by energy in 2032)



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The targets set a long term direction for industry

Focus increasingly on sectors difficult to electrify

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And should encourage UK investment

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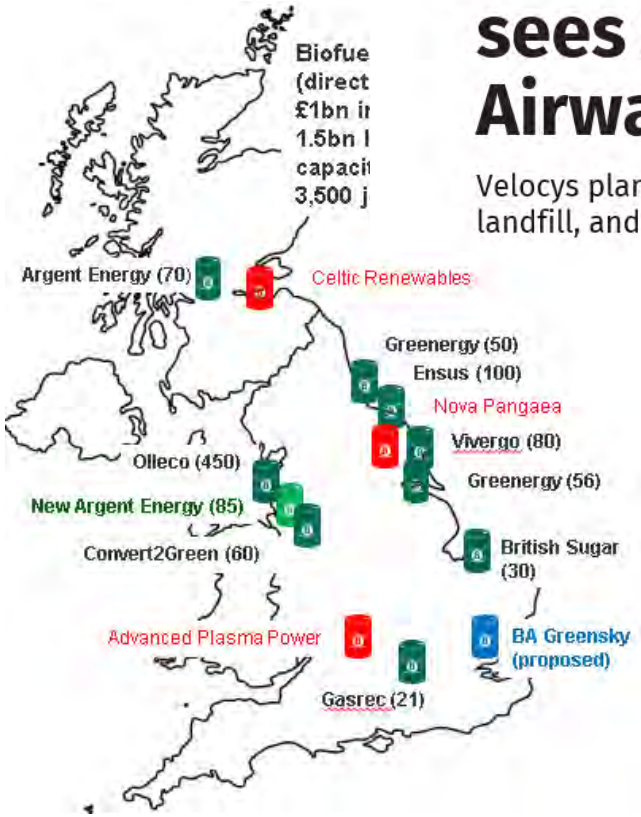
Renewable jet fuel company Velocys sees shares jump 40% after British Airways deal

Velocys plans to take hundreds of thousands of tonnes of post-recycled waste, destined for landfill, and convert it into clean-burning, sustainable fuels



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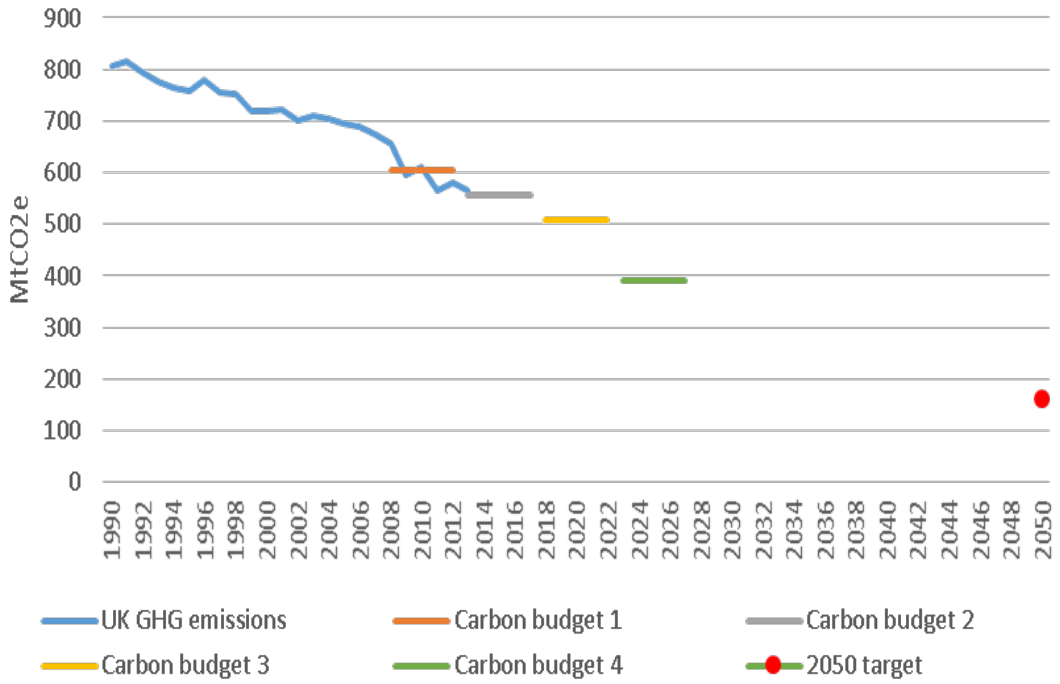
Where we are now

Strategic case for biomethane transport fuel

- **Limited options to decarbonise HGVs**
- **Carbon Budgets**



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Where we are now
Support for biomethane transport fuel

- Renewable Transport Fuel Obligation (RTFO)
- Duty incentive
- Advanced biofuels demonstration competition
- Amendments to General Circulation Directive (Weights and Dimensions) (transposition in train)
- Driving licence derogation

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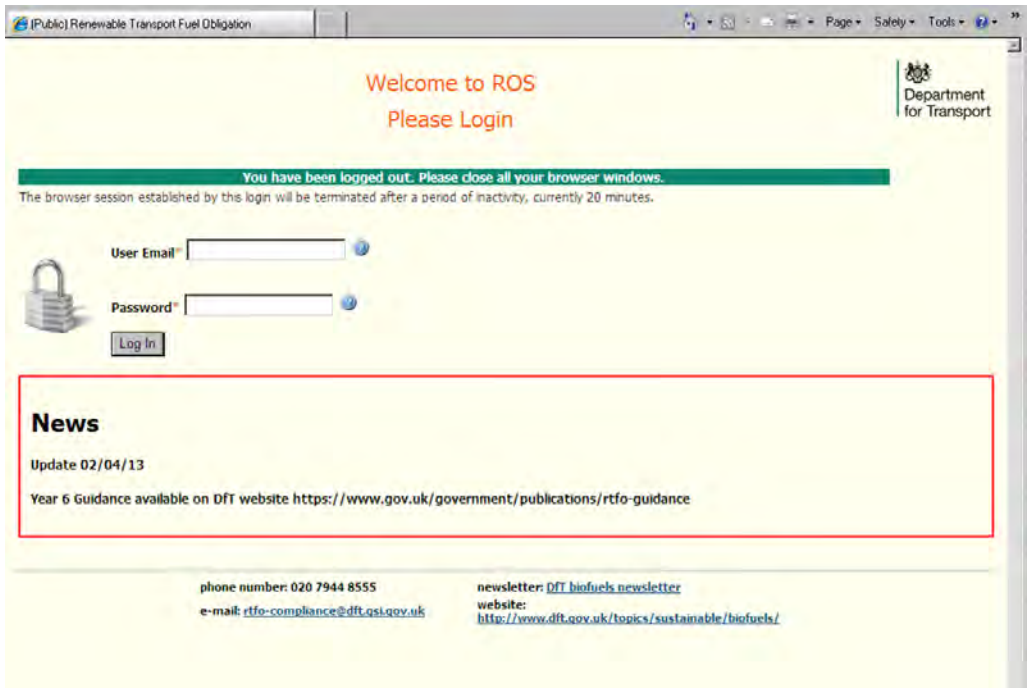
Where we are now
Recent developments

- Increase in interest following guidance that DfT will reward gas injected to the grid

- May be possible for gas producers currently receiving RHI payments to switch to claim RTFCs



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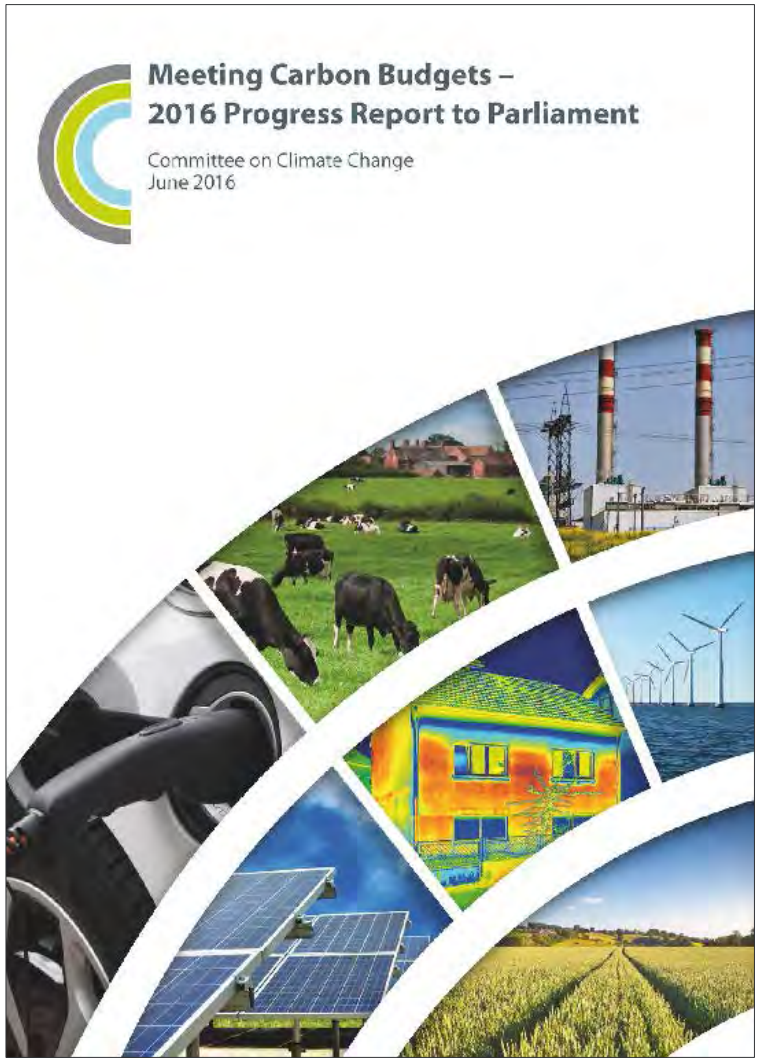
Where we're going

Evidence-base for gas vehicles is mixed



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Where we're going

Our forthcoming zero emission road transport strategy

INDUSTRIAL STRATEGY

We are aiming for almost every car and van on UK roads to be zero emission by 2050 and will end the sales of new conventional petrol and diesel cars and vans by 2040.

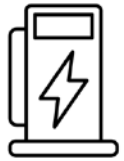
Driving uptake of ultra low emission cars and vans

Setting a pathway to reduce and remove emissions from HGVs

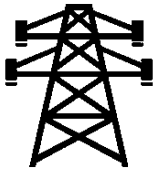
Positioning the UK as the best place to manufacture ULEVs

Government's view on the environmental performance of different fuels and powertrains

Reducing emissions from 38m existing conventional vehicles



Supporting the deployment of one of the best infrastructure networks in the world.



Preparing the energy system for the transition and opportunities for a smart and flexible energy system

Working closely with local authorities and Devolved Administrations to develop locally driven solutions

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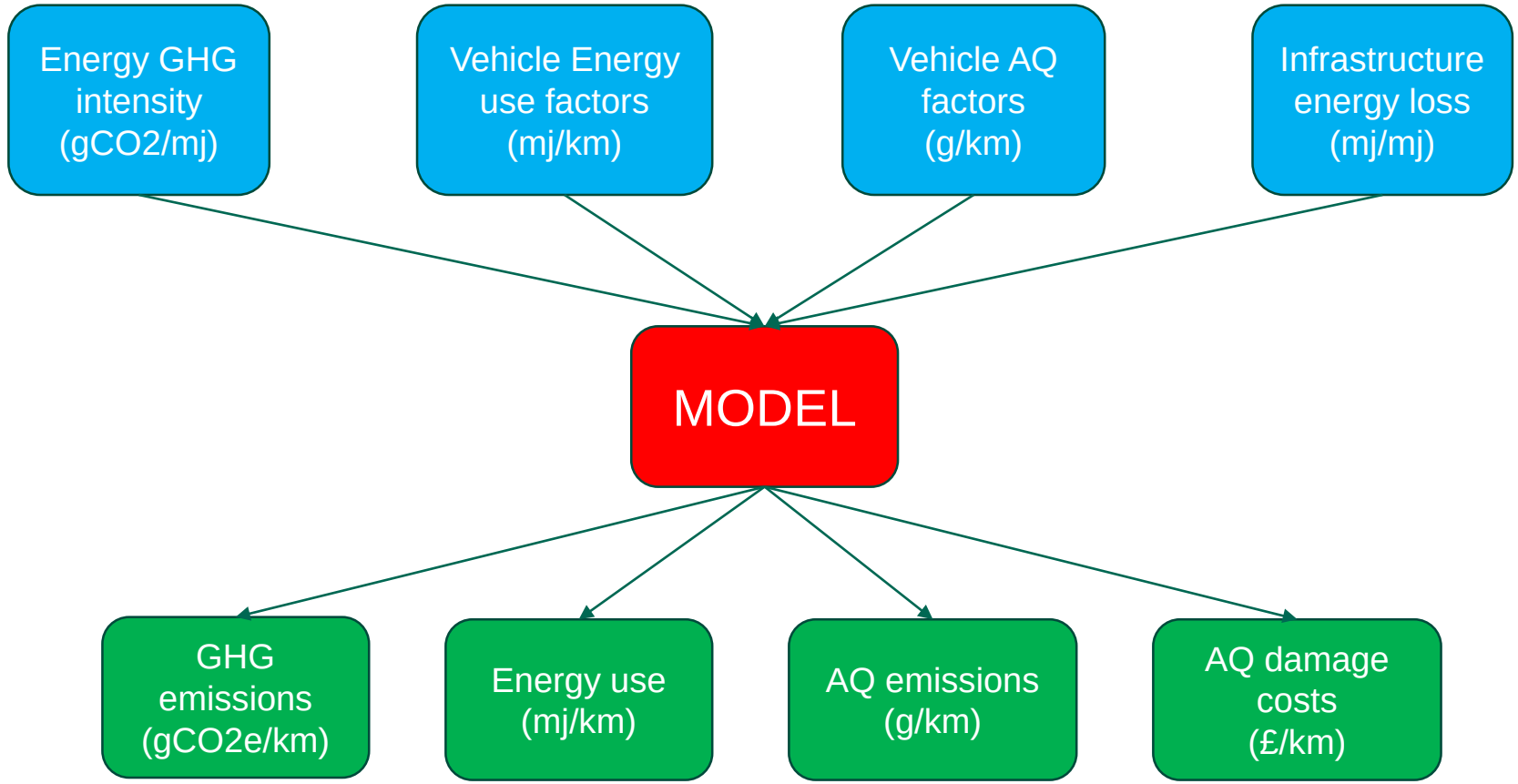
Where we're going

Transport energy model has informed the Road to Zero work



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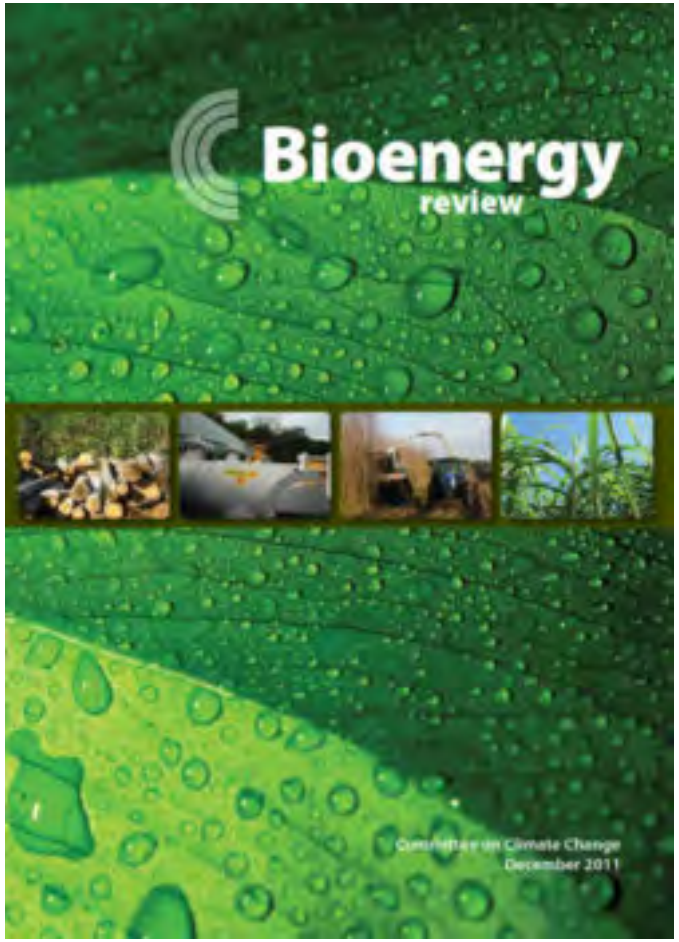
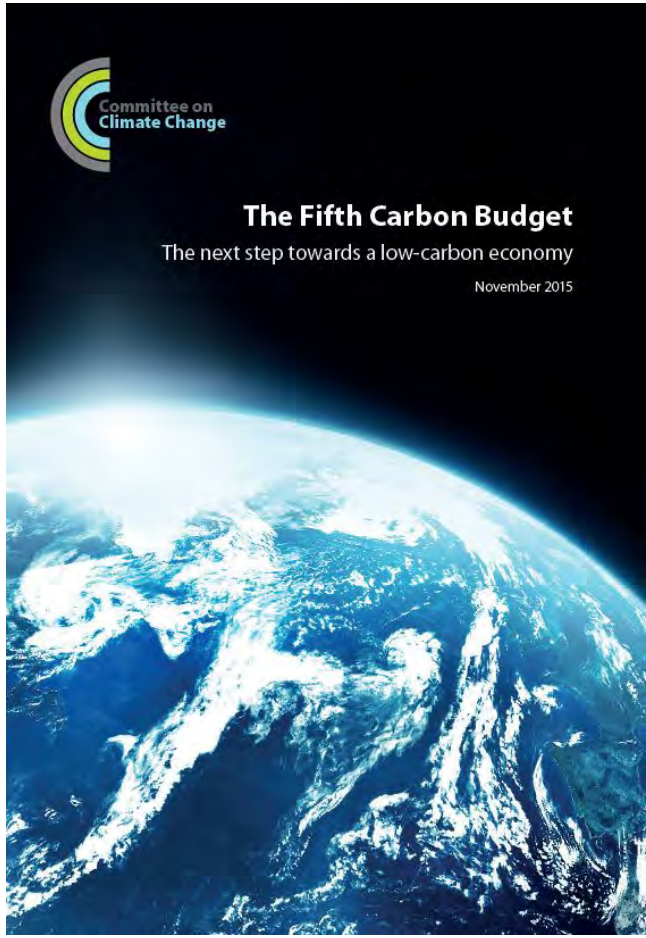
Where we're going

The model focusses on the fuel/vehicle options

- Insufficient availability of sustainable biofuels means 100% replacement across sectors is not realistic
- Additional gas demand for transport increases overall (fossil) gas use
- Committee on climate change bioenergy review - Autumn 2018.
- Heat options
- More vehicle testing





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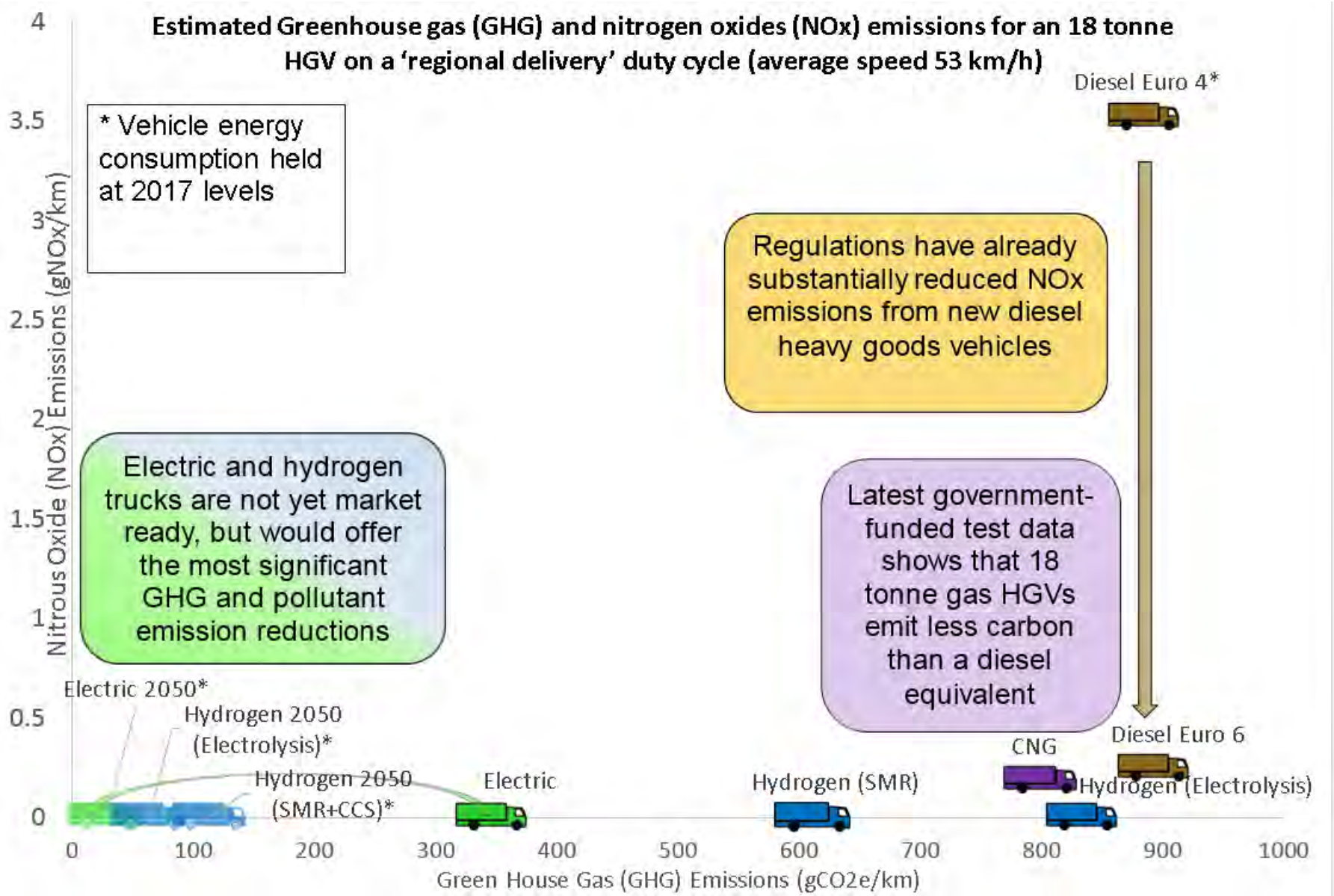
Where we're going

Gas HGVs marginally outperform 18t EURO VI diesel trucks on regional cycle



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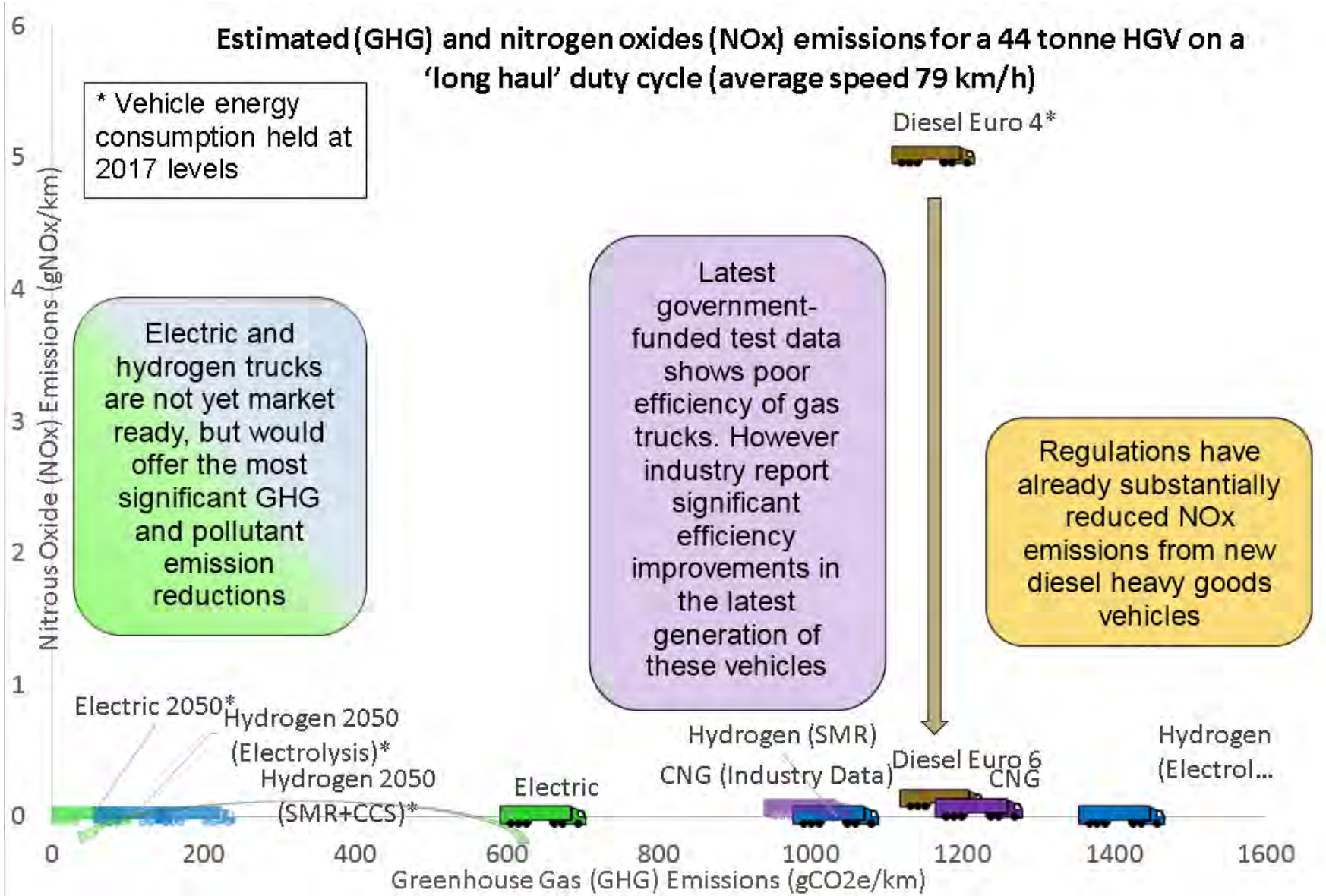
Where we're going

But larger gas trucks are slightly worse than 44t EURO VI diesel trucks on long haul



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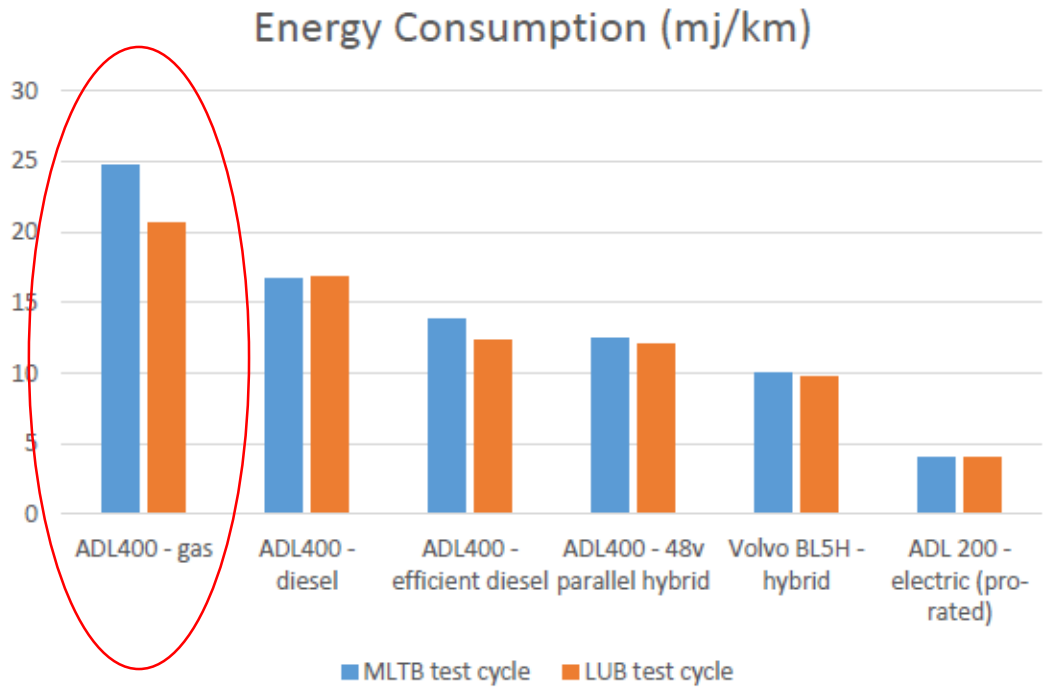
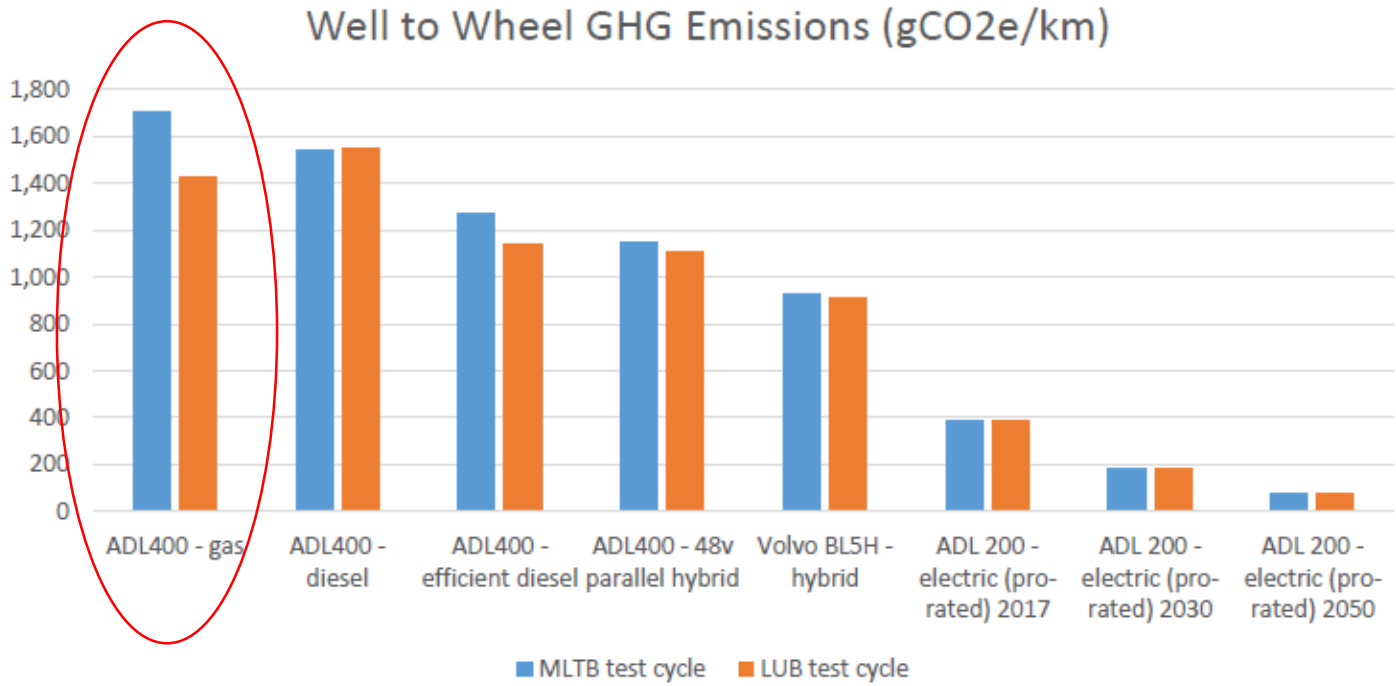
Where we're going

Transport energy model – Gas buses especially suffer from poor low speed engine efficiency

Buses options compared





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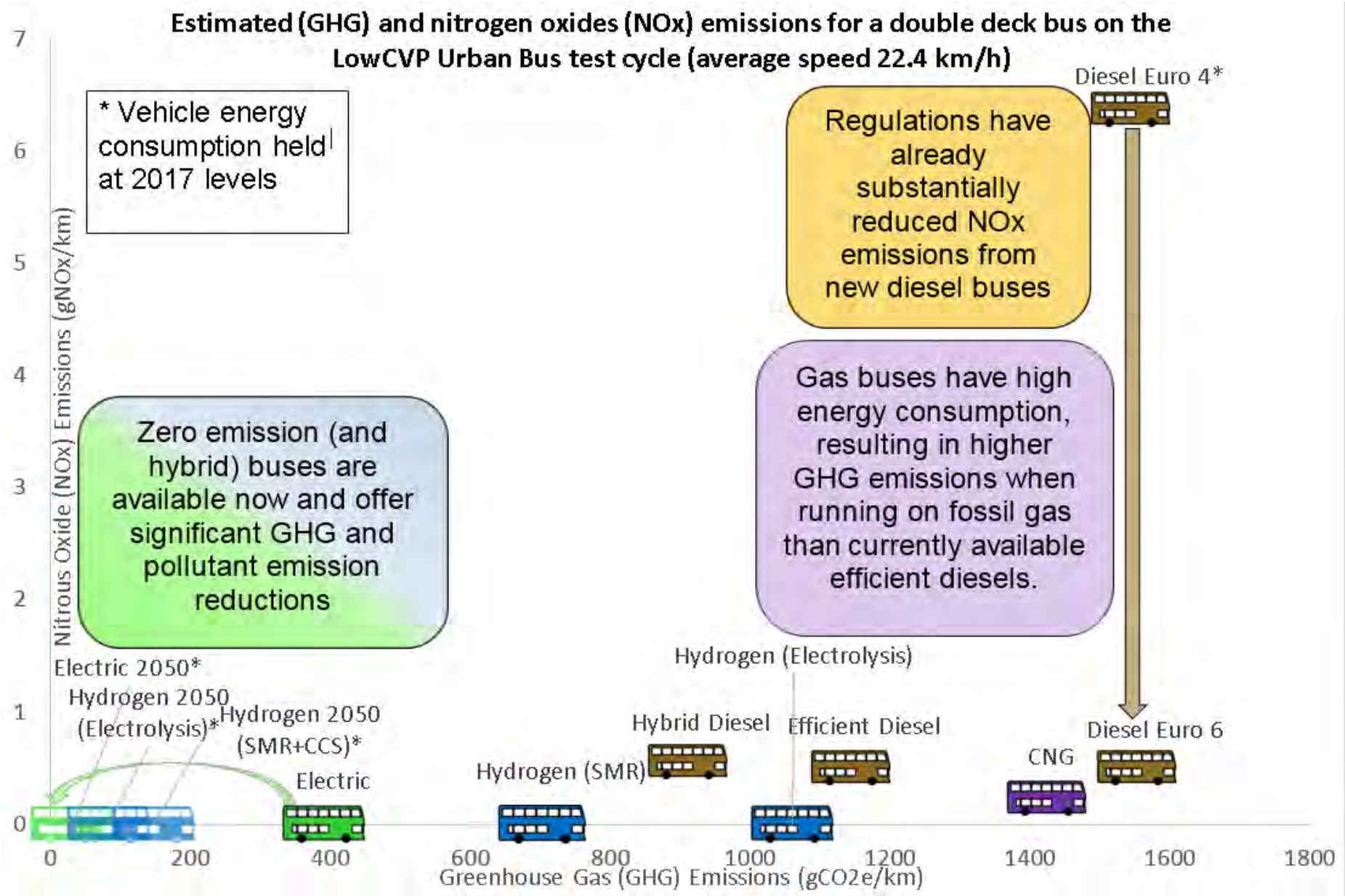
Where we're going

CNG buses perform worse than currently available efficient diesel buses



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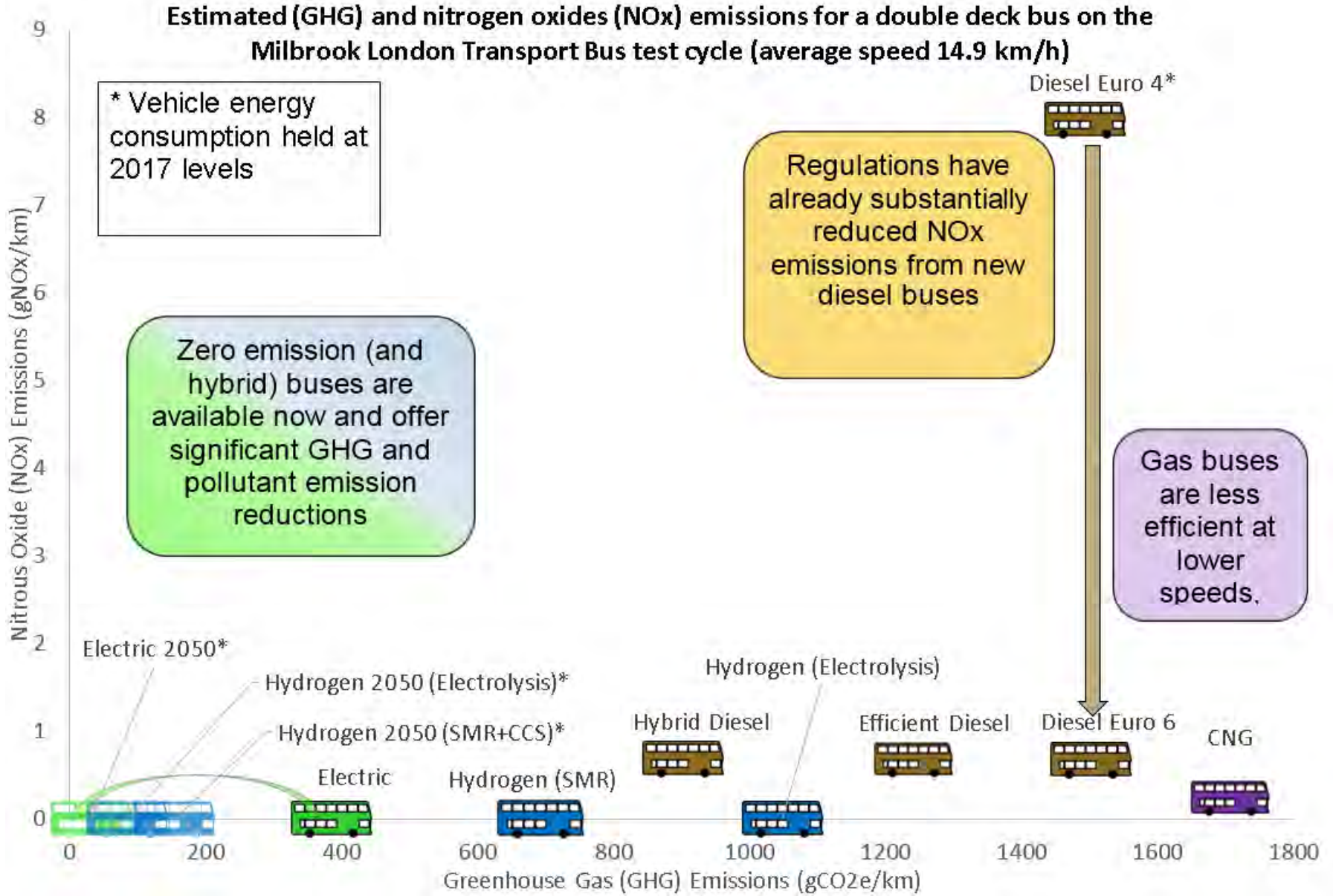
Where we're going

Differences are even more pronounced on slower speed test cycles



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Where we're going
Work in progress

- OLEV currently supporting LEFT
- Two winning bidders will be carrying out testing of new vehicles using biogas

News story

Low emission freight and logistics trial competition winners announced

From: Department for Transport, Office for Low Emission Vehicles, Innovate UK, and The Rt Hon John Hayes CBE MP
Part of: Transport emissions
Published: 11 January 2017

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Key Messages

- Recognise *potential* GHG benefits of biomethane as a transport fuel.
- Wider issue around availability of biomethane and decarbonisation of heat challenge
- Further testing is ongoing – Low Emission Freight Trial
- Policy likely to follow the evidence

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Thank you

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