



Department  
for Transport

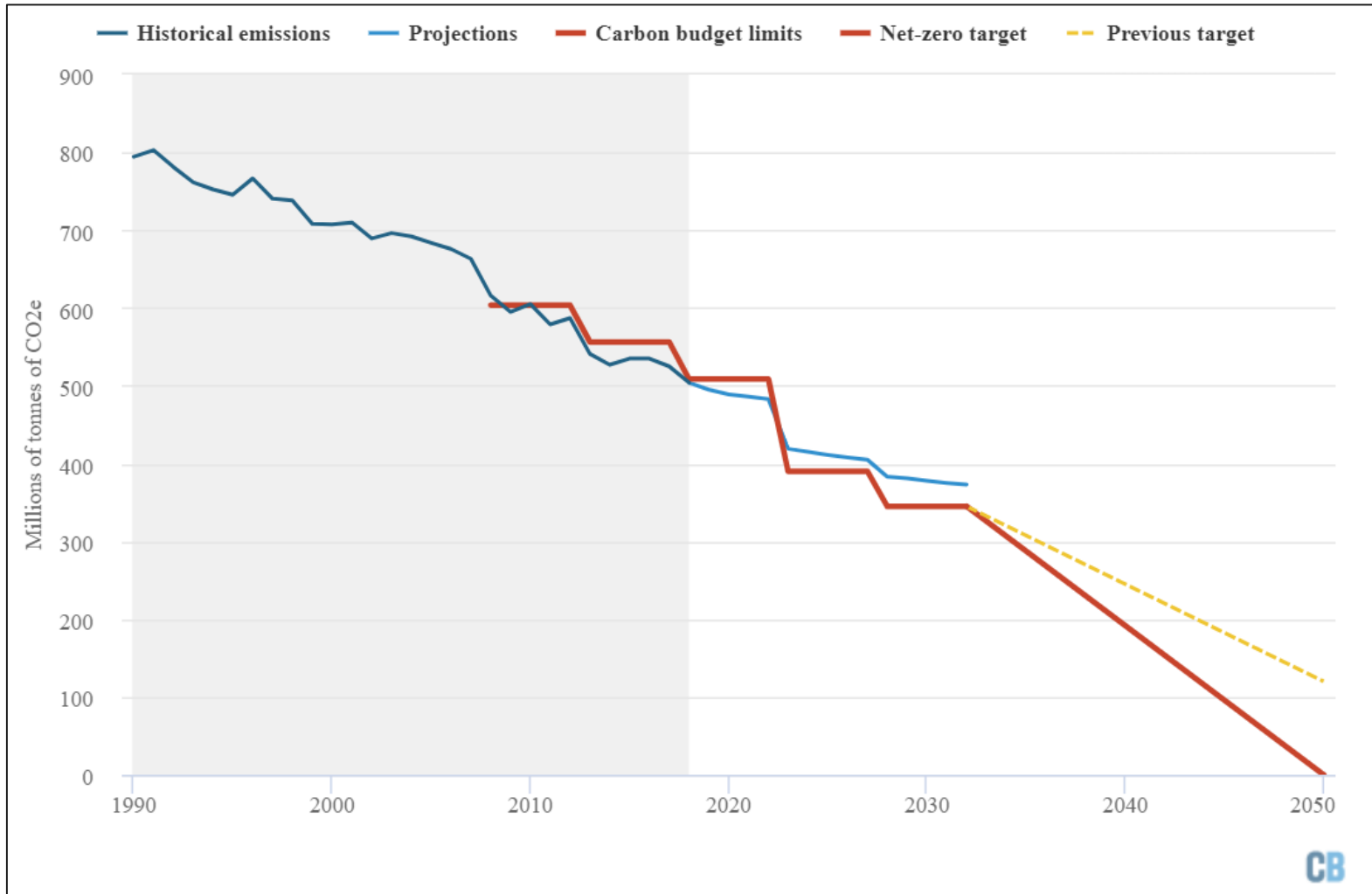
# Clean Maritime Demonstration Competition

Maritime Enterprise Working Group Presentation

04/02/2021

connecting  
people &  
places

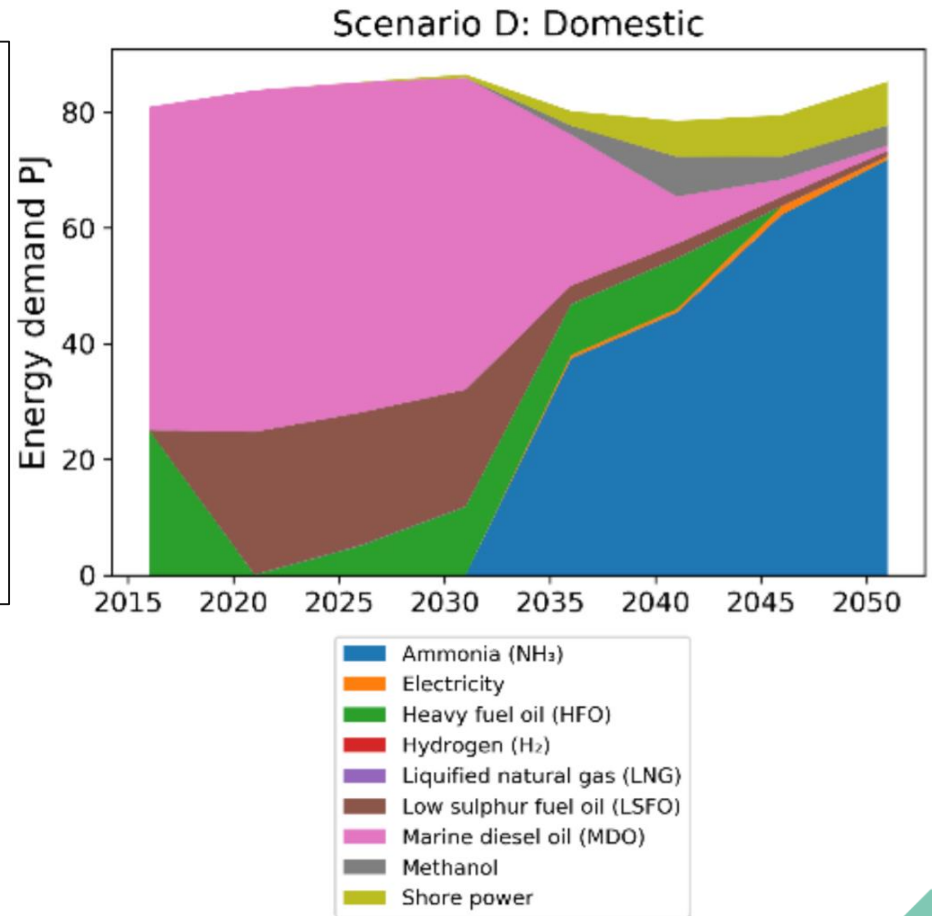
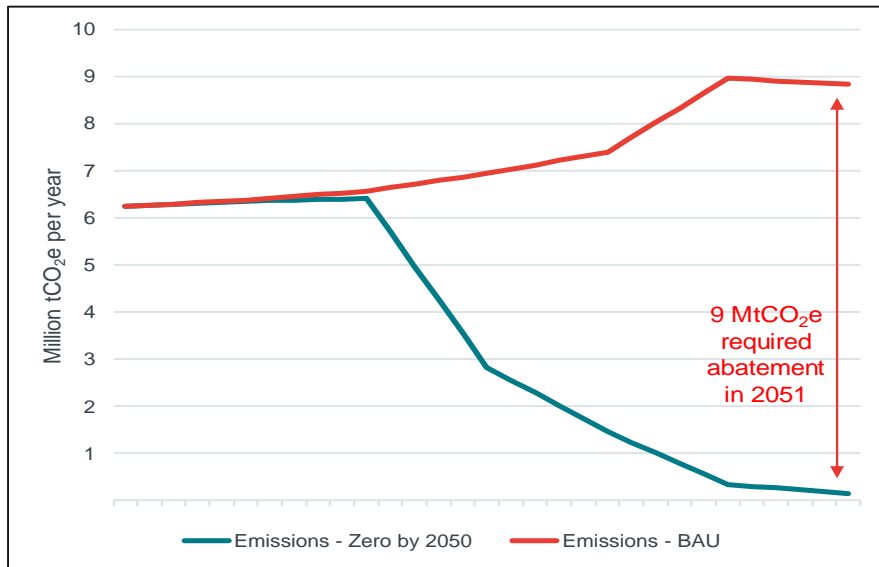
# UK & Net Zero: the Challenge



# UK & Net Zero: the Challenge

- **Transport is the largest emitter of Greenhouse Gases (GHGs) across the UK economy**, responsible for 28% of domestic emissions in 2018. Since 1990, total emissions have dropped by 43%, whilst transport only 3%.
- **Decarbonising shipping is critical to meet Net Zero.** This is the CCC recommendation in line with their Net Zero advice.
- **Domestic shipping emissions continue to grow**, accounting in 2018 for more GHGs than buses and rail combined (5% against 3% and 1%). Intervention is needed now.

# A propulsion revolution is needed



Source: Frontier, Scenario analysis: take-up of emissions reduction options and their impacts on emissions and costs: report, 2019

# Policy ambitions

## By 2025

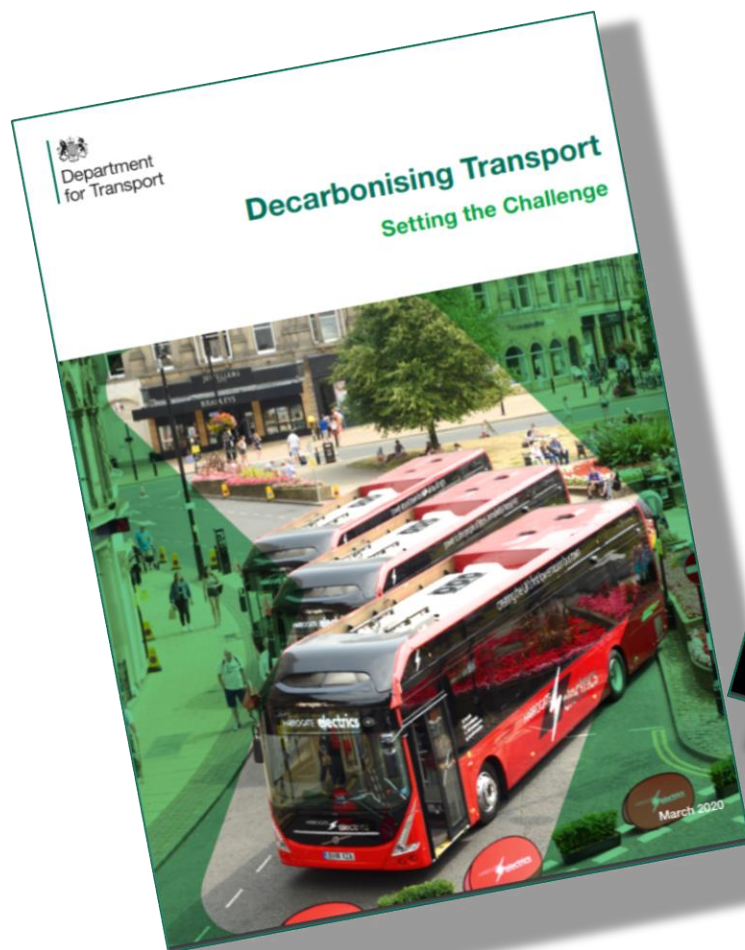
All new vessels operating in UK waters are being designed with zero emission propulsion capability. Zero emission commercial vessels are operating in UK waters. The UK is building clean maritime clusters with infrastructure associated to zero emissions, including fuel bunkering.

## By 2035

Low or zero emission fuel bunkering options are readily available across the UK. The UK is home to a world leading zero emission maritime sector with a strong export industry, cutting-edge R&D activities and a global centre for investment in clean maritime growth.



# Going further...



# Clean Maritime Demonstration Competition (CMDC)

- Announced in November 2020 as part of Prime Ministers 10 Point Plan for a Green Industrial Revolution
- £20m grant funding competition to enable the development and commercialisation of mid-TRL clean maritime technologies
- One-year programme to support a raft of feasibility studies and demonstrations which will set out investment-ready projects for future government or private sector investment.
- The competition will be modelled on the successful DfT Future Fuels for Flight and Freight Competition (F4C).
- CMDC funding will be reserved to UK-based organisations and will welcome UK-wide applications, supporting projects from across the country.

# Competition Aims

- Promote deployment of clean maritime technologies and zero emission vessels – putting UK maritime sector at forefront of a global green industrial revolution.
- Support feasibility studies to provide blueprint for a network of projects/places ready for future investment
- Identifying which technologies are best suited to different operational scenarios, to support market and policy development



# Timescales

(subject to change)

## Phase 1 – Initialisation: January to mid-March 2021

Reviewing and finalising draft specifications and drafting guidance for business

## Phase 2 – Competition: mid-March to mid-July 2021

Competition expected to run from mid-March to mid-May

Winners to be announced mid-July

## Phase 3 – Implementation: August to December 2021

Projects to be showcased at COP26 in November

# Competition Scope – Technology Framework

## The CMDC will particularly seek to encourage applications from projects:

- identifying a strong emphasis on integration with local energy systems
- Investigating technologies that are relevant to maritime decarbonisation for certain vessels and journey types (e.g. hybrid diesel/electric and battery technology)
- Both desk-based feasibility and more 'shovel-ready' demonstrators
- Green shipbuilding projects – small, specialist vessels or vessel components

## Technology pathways considered

Clear appetite for:

- Battery and electrification
- Hydrogen and ammonia

Seek views on support for:

- Energy efficiency (operational & technical)
- Biofuels
- Nuclear
- Electro-fuels
- Natural gas



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# Thank you

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