



Department
for Transport

IMO Symposium on Alternative Fuels

Zero Carbon Fuels in the Clean Maritime Plan
9 Feb 2021

Morna Cannon, Deputy Divisional Manager, UK Department for Transport
Ashley Stehr, Assistant Director, Maritime Future Technologies, UK Maritime & Coastguard Agency
Gwilym Stone, Assistant Director, Ship Standards, UK Maritime & Coastguard Agency

connecting
people &
places

OFFICIAL SENSITIVE COMMERCIAL

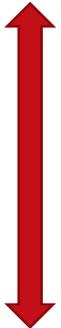
Agenda

1. How DfT & MCA fit together
2. Policy Landscape for alternative fuels
3. Clean Maritime Demonstration Competition
4. COP26
5. MCA's role
6. The challenge
7. What have we done

How DfT & MCA fit together



Department
for Transport



Executive Agency,
sponsorship



Maritime and
Coastguard Agency

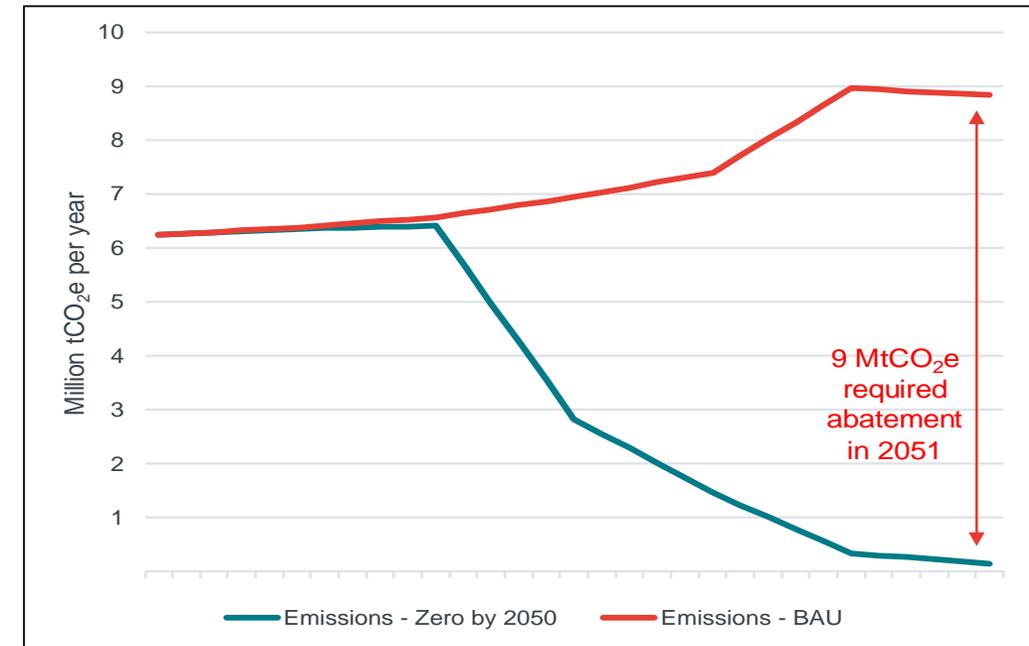
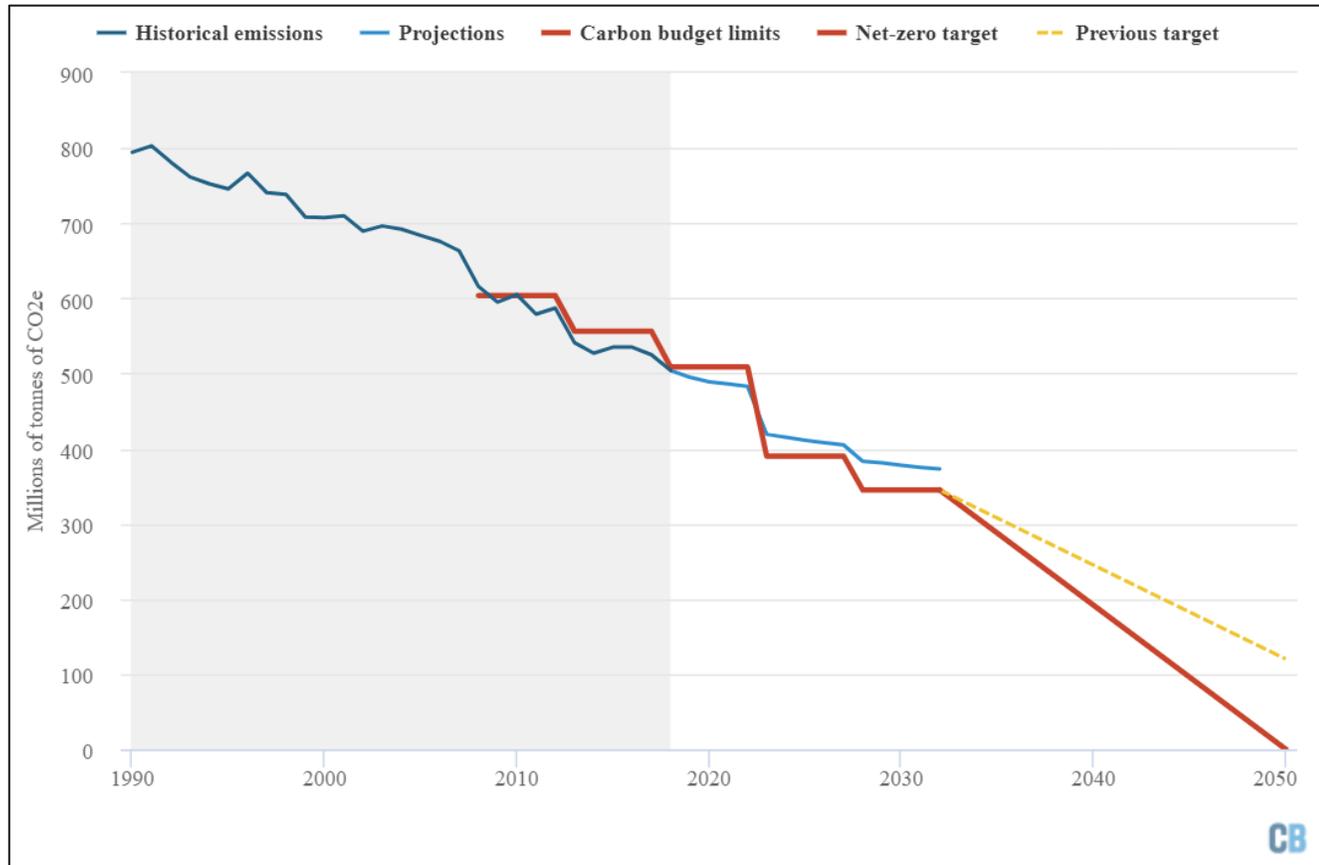
- UK's ministry for all transport policy, including maritime: shipping, ports and harbours, security, safety at sea, crew training and certifications, sea passengers and vessel registration.
- Leads development of strategy & policy on shipping emissions (GHG & air quality), including development of alternative fuels
- The UK's maritime regulator.
 - Subject matter experts for UK at the IMO
 - Development of domestic regulation and translation of international obligations into UK law.
 - Survey and Inspection activity and enforcement.
 - UK Ship Register.
- Separate dedicated team with no regulatory approval capacity (Maritime Future Technologies) created.



Maritim

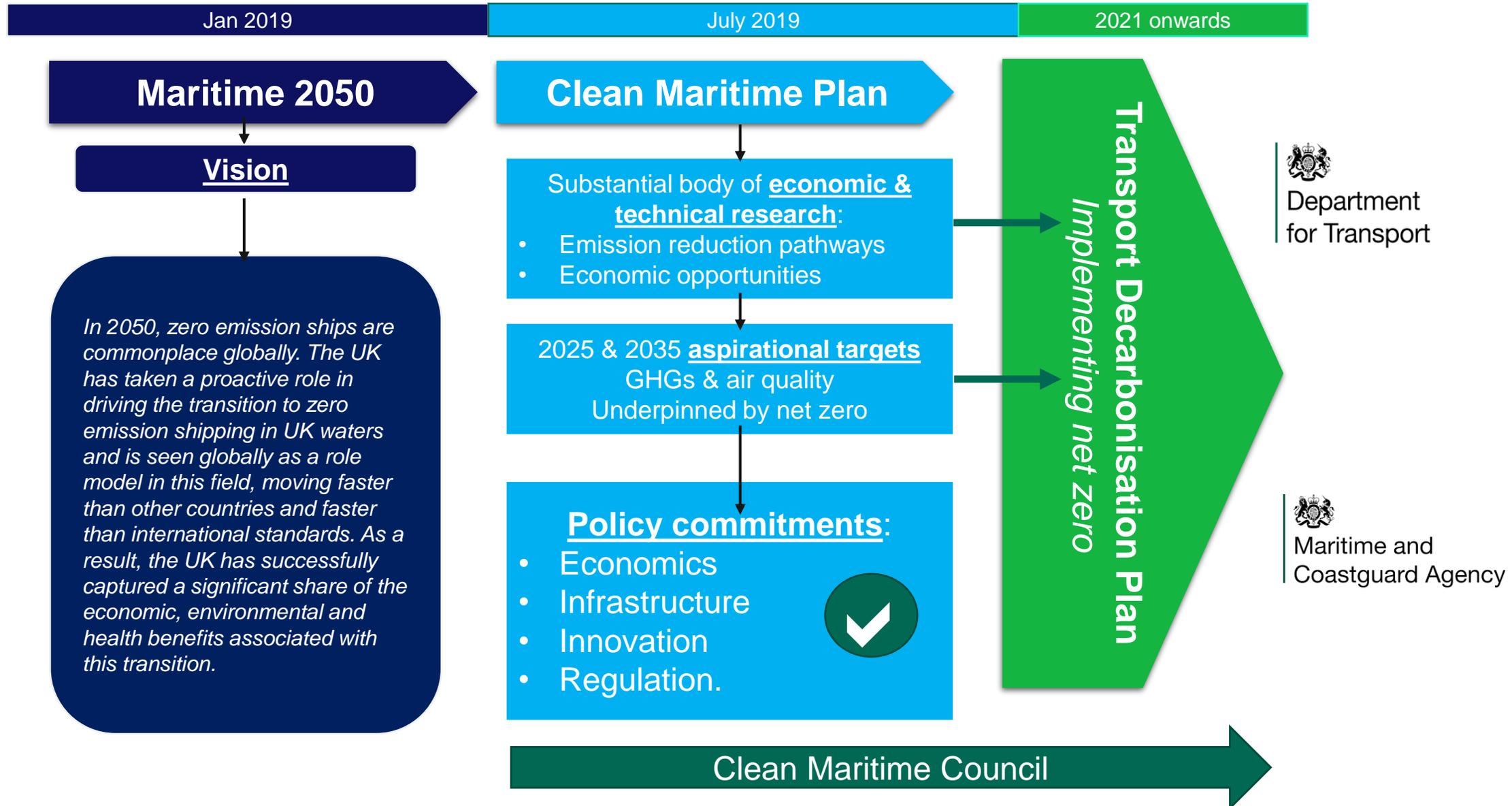
connecting
people & places

Net zero by 2050: need a propulsion revolution



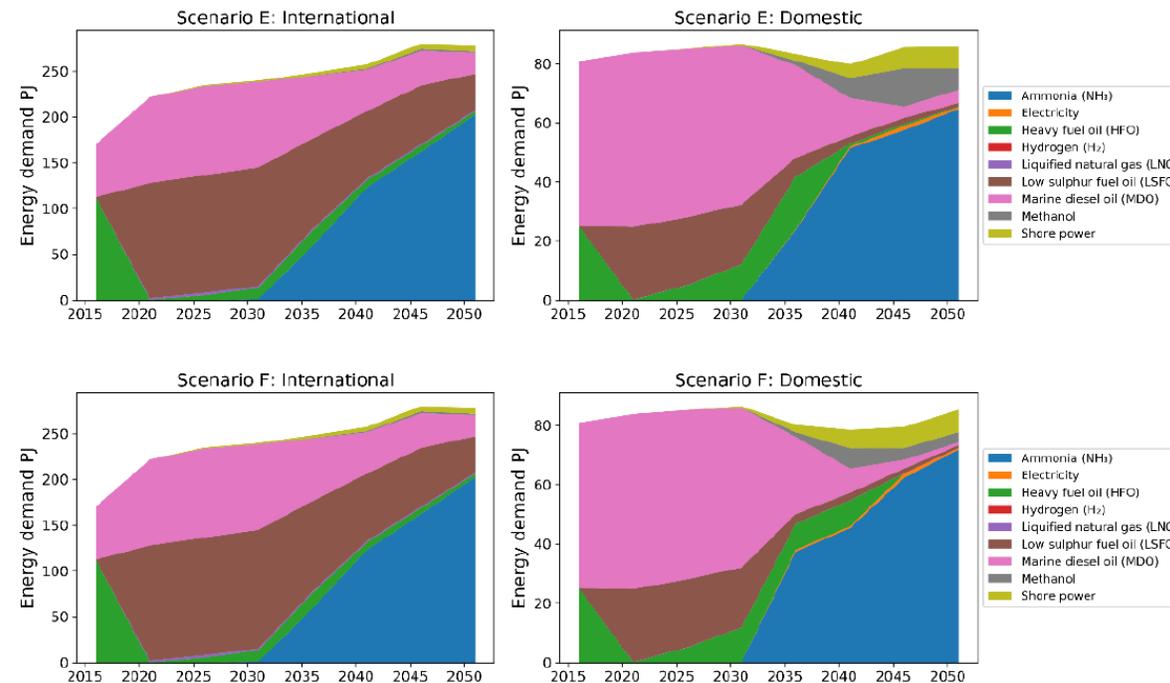
Source: Frontier, Scenario analysis: take-up of emissions reduction options and their impacts on emissions and costs: report, 2019

UK Policy on zero emission shipping



Alternative fuel scenarios for the UK

Figure 30 Fuel mix for UK shipping in Scenarios E, F and G



- Indicative alternative fuel scenarios published to support ongoing policy development as part of the Clean Maritime Plan:

<https://www.gov.uk/government/publications/clean-maritime-plan-maritime-2050-environment-route-map>

- Need for ongoing refinement of this work as we learn about technology & costs, in combination with further development of policy to steer towards trajectory for net zero by 2050

Clean Maritime Demonstration Competition

What?

- £20m grant funding competition, open to applications across the UK, to enable the development and commercialisation of mid-TRL clean maritime technologies
- Announced in November 2020 as part of Prime Ministers 10 Point Plan for a Green Industrial Revolution
- 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.
- Open to range of different fuel types

Why?

- 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

When?

- Aim to launch in mid-March, and award funding mid summer 2021
- Landmark opportunities at COP26



COP26

Operation Zero

Coalition of industry leaders across the North Sea's offshore wind sector, working together towards having decarbonised vessels operating within the North Sea's offshore windfarms by 2025.

Supported by DfT Technology Roadmap for decarbonising O&M vessels, to be published in coming months. Will consider fuels.



Clydebank Declaration

Ambitious global initiative encouraging Governments to form Clydebank Partnerships, in which two or more signatory members pledge to working toward decarbonising a shared maritime route forming a Green Corridor, considering the need to stimulate investment in fuels.






Maritime &
Coastguard
Agency

IMO Symposium on Alternative Fuels

MCA & the Maritime Future Technologies Team

Version 1.0

Gwilym Stone (MCA), Ashley Stehr (MCA), Morna Cannon (DfT)
February 2021

MCA's regulatory responsibility

- Primary legislation Merchant Shipping Act 1995.
- Branches of the MCA are responsible for developing and updating most of the secondary legislation that falls under the MSA, on behalf of the "Shipping" Minister and Secretary of State for Transport.
- This includes the development and updating of legislation which implements international instruments like SOLAS, MARPOL, STCW and MLC but also includes domestic and some inland waterway legislation.
- We also enforce merchant shipping legislation through our Maritime Investigations Branch.



- Age old challenge that regulation is not able to keep pace with innovation in industry (primarily around Digitisation and Environmental) – emphasised by the prescriptive nature.
- We either become an enabler to the implementation of technologies without adequately understanding the risks or more likely become a blocker.
- We are entering a time where there needs to be a rapid change in technology (especially in the Emission Reduction space) compared to a relatively steady state.
- Divergence in technical solutions and a need for an un-bias holistic perspective to bring it all together and drive change.

The Challenge



What have we done?



Formation of a dedicated team – Maritime Future Technologies.



Building internal technical capacity and structure to manage input from external support as required.



No regulatory approval function – this is key.



Structured to enable us to be dynamic, fast paced, and collaborative, reflecting the pace of change in industry.



Focus is on Emission Reduction and Autonomy.



What will the team do?

An aerial photograph of a container ship's deck, showing rows of colorful shipping containers (red, blue, yellow, orange) stacked on the deck. The ship is moving through dark blue water, leaving a white wake. The deck is equipped with various machinery and equipment.

- Facilitate the implementation of Projects
- Support Regulatory Change
- Influence Change