

# Alternative Propulsion

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# 2019 - New government focus on clean air

Clean Air Strategy

Emissions from Transport - Maritime

 Government Objective is for 0% Net emissions by 2050





# Changes for the future fleet

Clean Maritime Plan - By 2025 its expected that:

- All vessels operating in UK waters are maximising the use of energy efficiency options.
- All new vessels being ordered for use in UK waters are being designed with zero emission propulsion <u>capability.</u>
- Zero emission commercial vessels are in operation in UK waters.





# Size of the existing/retrofitting market

Boats last a **long** time

The average age of a vehicle on the road is 7.8 years.

The average age of a boat is between 40 – 50 years. Canal boats have no end of life yet....

The 0% NET emissions levels by 2050 mean all boats built since 2000 may need retrofitting.



#### **Current Alternatives**

Alternative propulsion is more than just "Electric"

- Alternative fuels, GTL, Bio, etc ......
- Traditional Hybrid (Diesel or Petrol generated)
- Pure Electric
- Alternative Hybrid (Fuel Cell, LPG, .....)



### What are we doing?

Environmental Impact is not only Emissions.

Asking for Life Cycle Analysis to be considered with any regulatory changes. Not just exhaust emissions, everything from mine to hull.

Asking for regulatory framework that allows use of alternative power generation

Asking for the standardisation of alternative systems to enable uptake.

Supporting R&D funding of alternative systems. Hydrogen, Electrification.

Keeping an open mind on the solution and the steps to achieve it.

