

Descarbonización en buques de transporte de pasajeros



BALEARIA



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President*

Baleària
Alliance Net ZERO Mar

BALEARIA A leading shipping company



36
SHIPS

9 LNG RoPax
2 LNG Fast Ferries
1 electric ferry

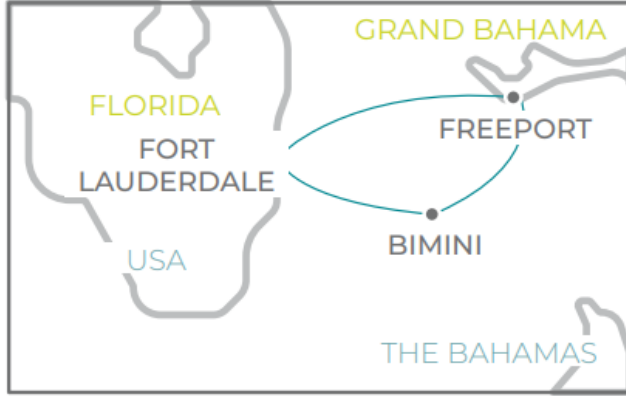
25
ROUTES

6
COUNTRIES

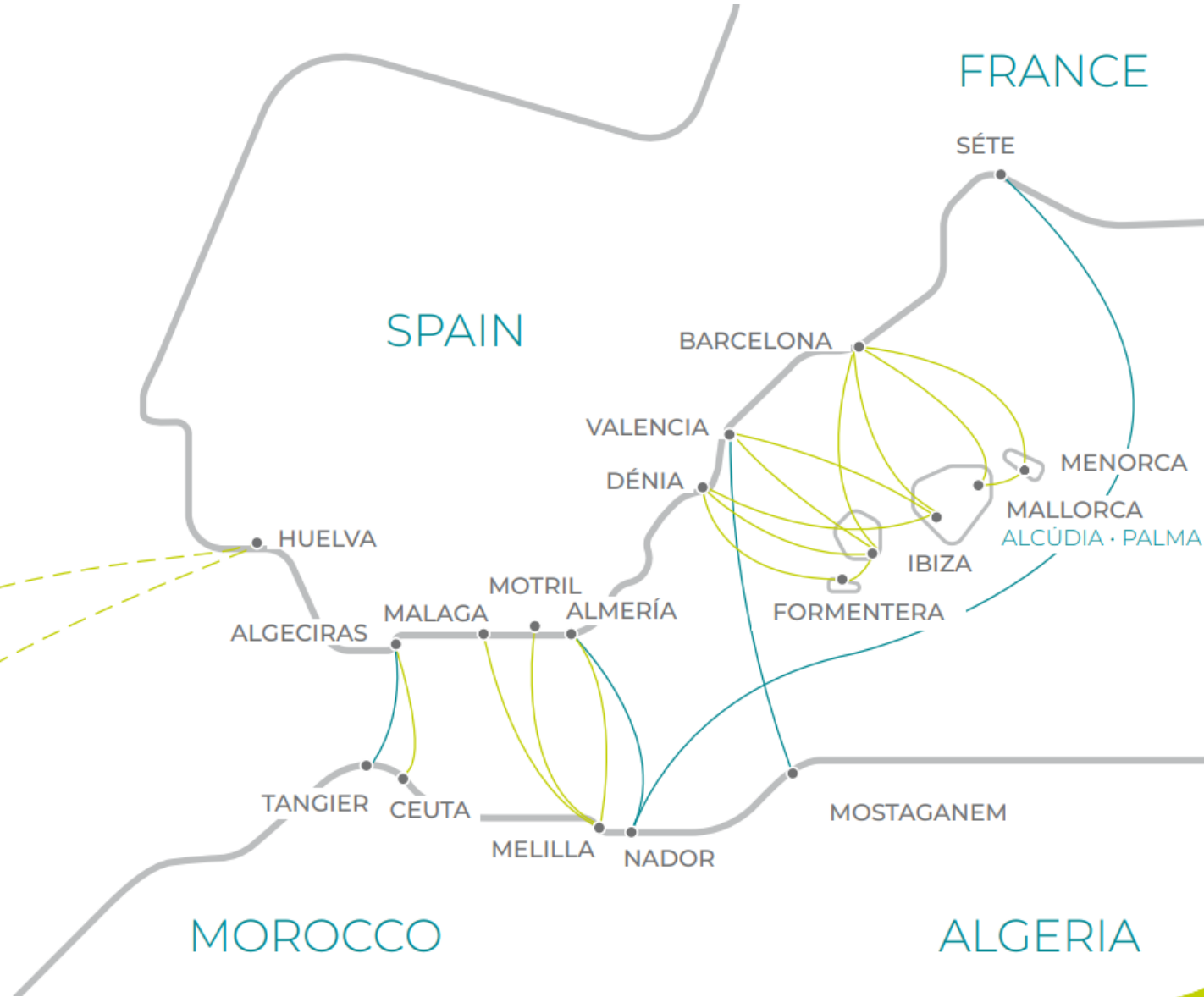
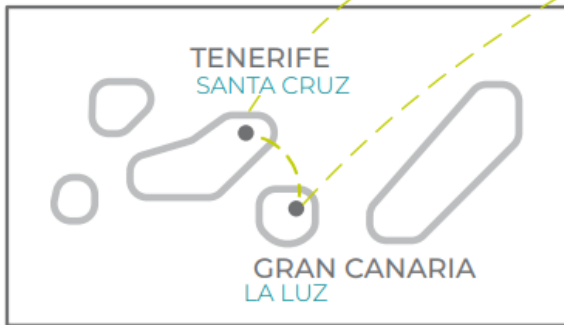
1.850
EMPLOYEES

Routes

CARIBBEAN



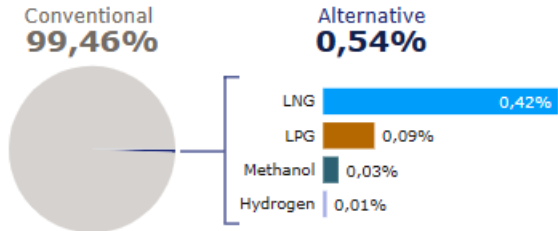
CANARY ISLANDS



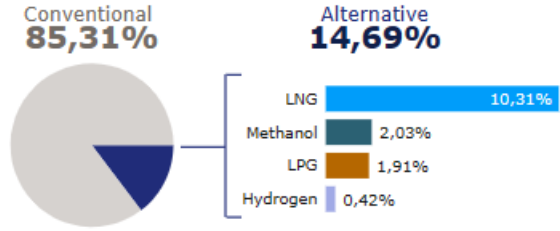
Maritime challenge decarbonisation pathway

Fleet

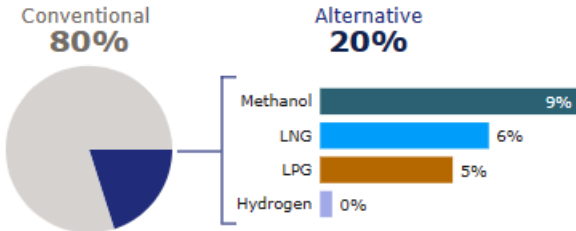
In operation



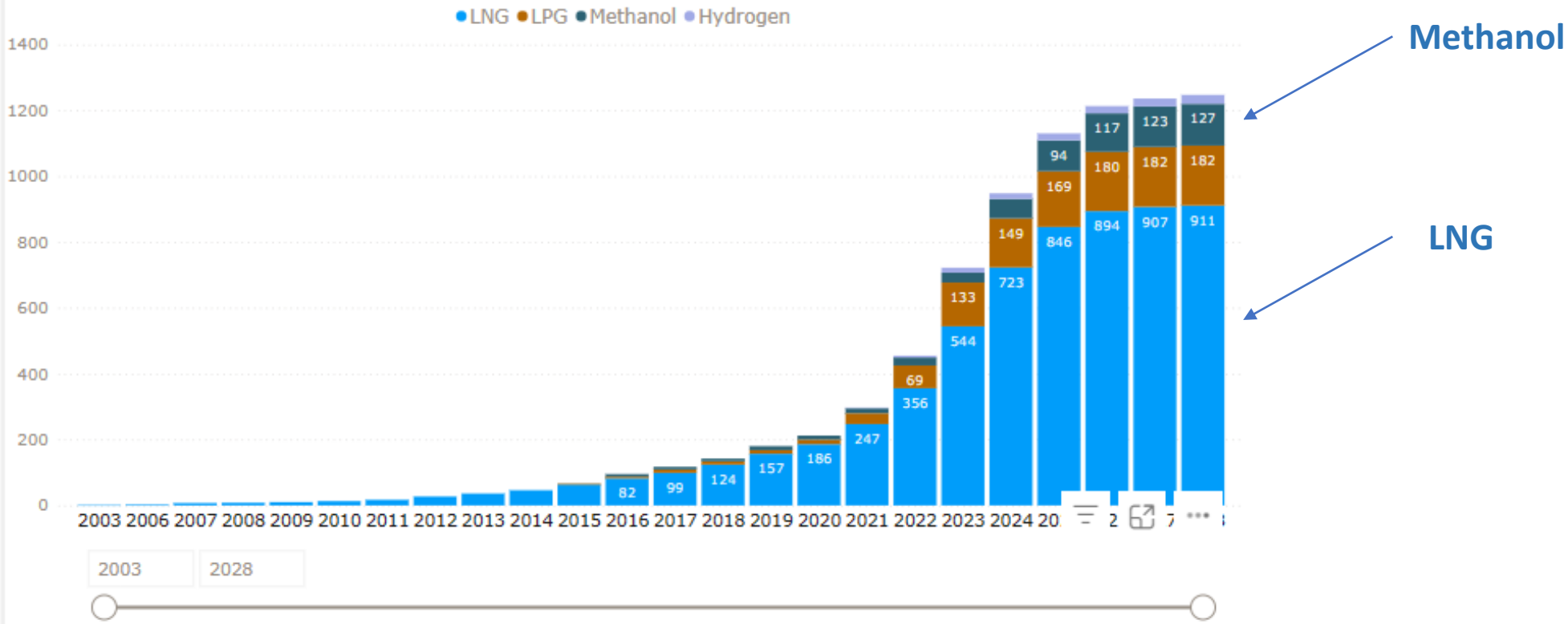
On order



New contracts in 2023

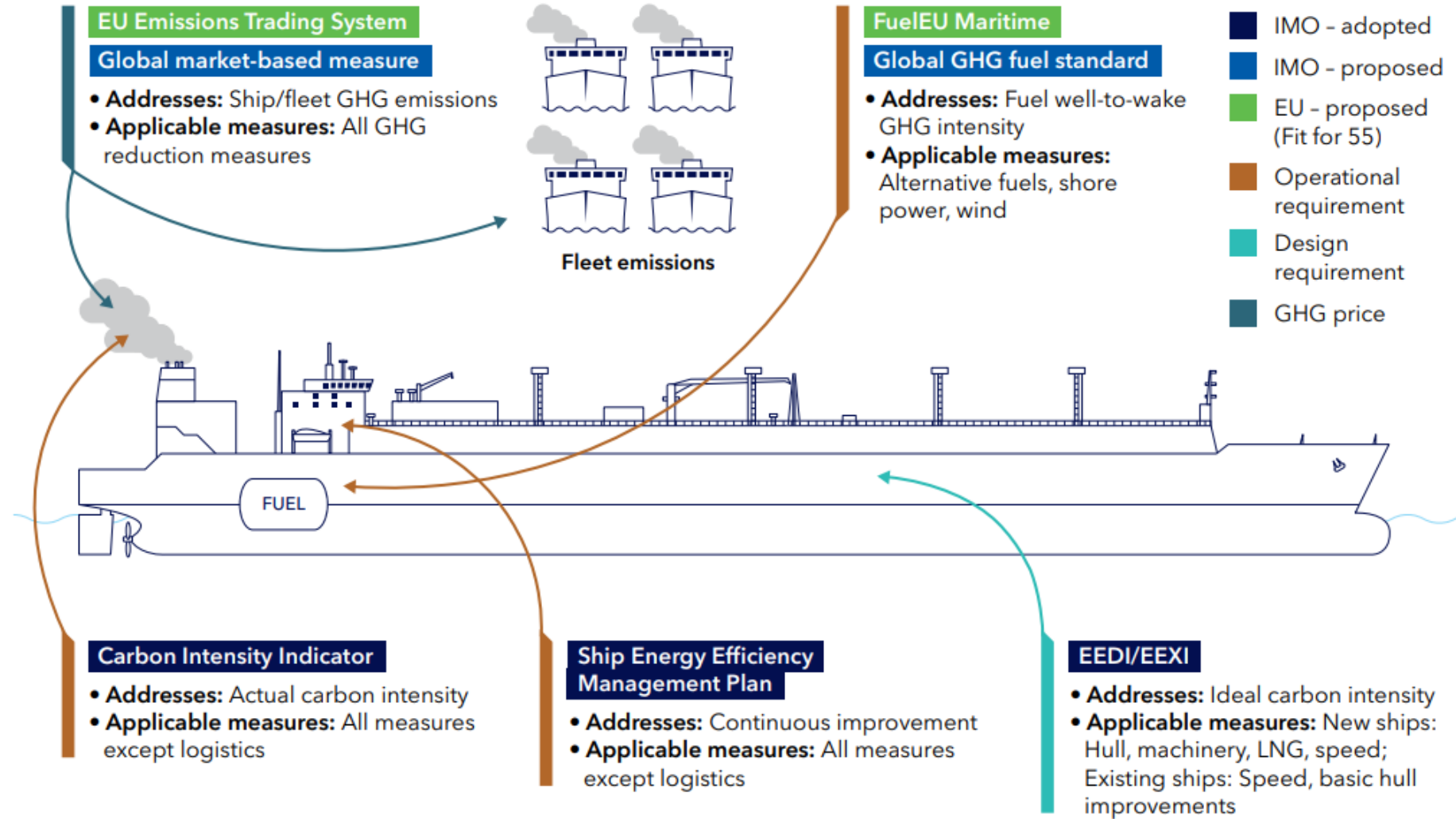


Growth of alternative fuel uptake by number of ships



Maritime challenge decarbonisation pathway

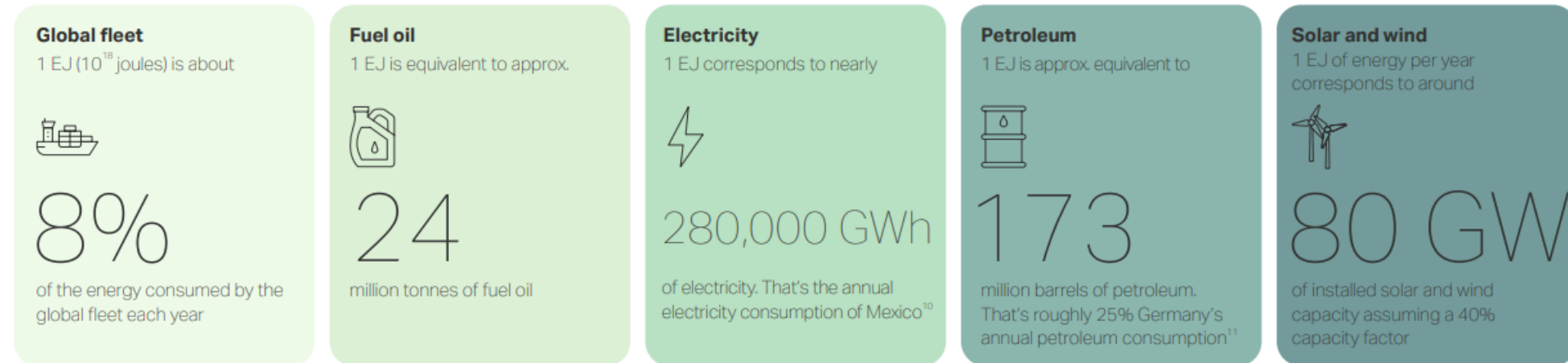
IMO and EU regulatory framework for GHG emissions reduction from international shipping



Maritime challenge decarbonisation pathway

12,4 EJ (exajoule 10^{18})

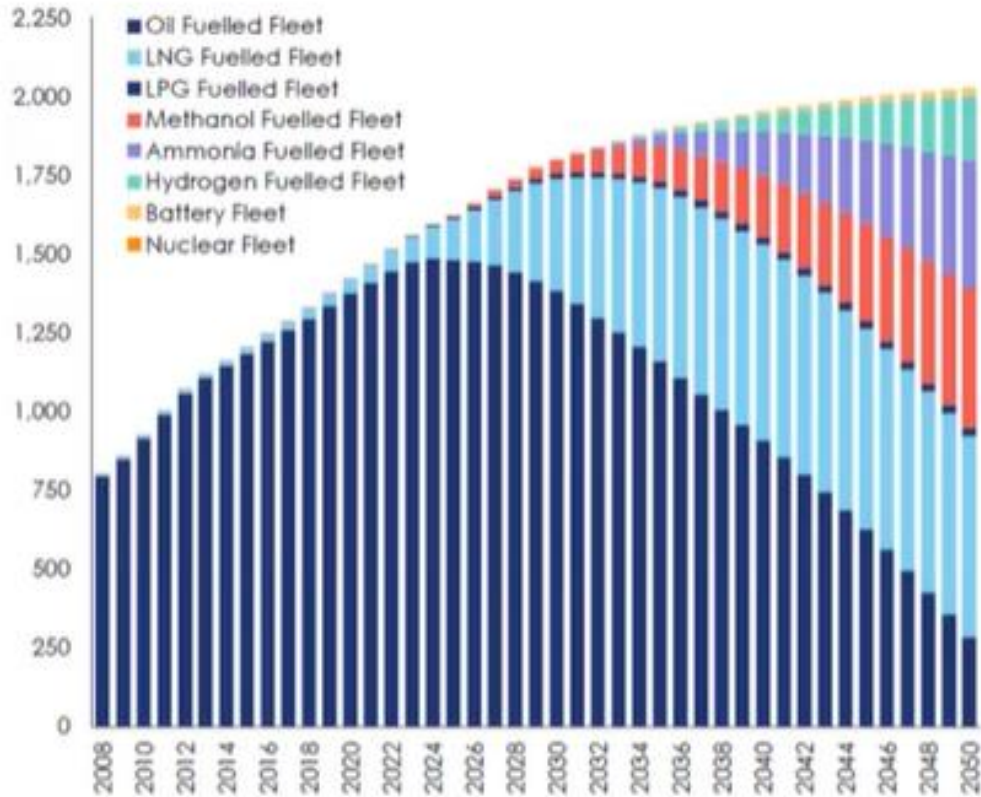
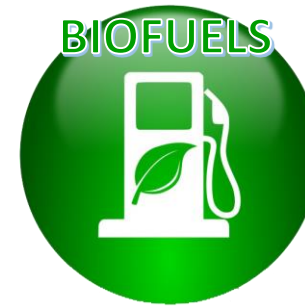
How much is one exajoule (EJ) of energy?



Spain anual consumption

Maritime challenge decarbonisation pathway

Alternative fuels



Alt. fuels - Potential Fleet Development



LNG (CH₄)



Methanol (CH₃OH)



Ammonia (NH₃)



Hydrogen (H₂)

Maritime sector moving

Shipping companies

Baleària ferry realizes first European trip with 100% renewable biomethane

by The Editorial Team — June 7, 2021 in Fuels



Credit: Baleària



Eleanor Roosevelt, operated by Spanish shipping company Baleària, became the first fast ferry to realize a European pilot trip with 100% renewable fuel.

The 133-mile journey between the ports of Barcelona and Ciutadella (Menorca) took place as part of Baleària's cooperation with renewable energy company Axpo Iberia.

The companies said the use of renewable biomethane fuel on this route has prevented the emission of more than 50 tonnes of CO2 into the atmosphere, marking a further step towards the decarbonization of the Spanish energy system and maritime transport sector.



ISWAN: Reports of abuse, bullying, harassment and discrimination increased



Marshall Islands lowers ship security level within Yemeni waters



Co-financed by the Connecting Europe Facility of the European Union

NUEVA CONSTRUCCIÓN

CAP DE BARBARIA (2023)

- 1er Ferry eléctrico en España
- 100% eléctrico

Posibilidad de consumir:

- Hidrógeno verde (H2 Ready)



Eslora

82 m



Manga

15.5 m



Velocidad

14 nudos



Personas

350



Vehículos

50



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Availability

Renewable energy

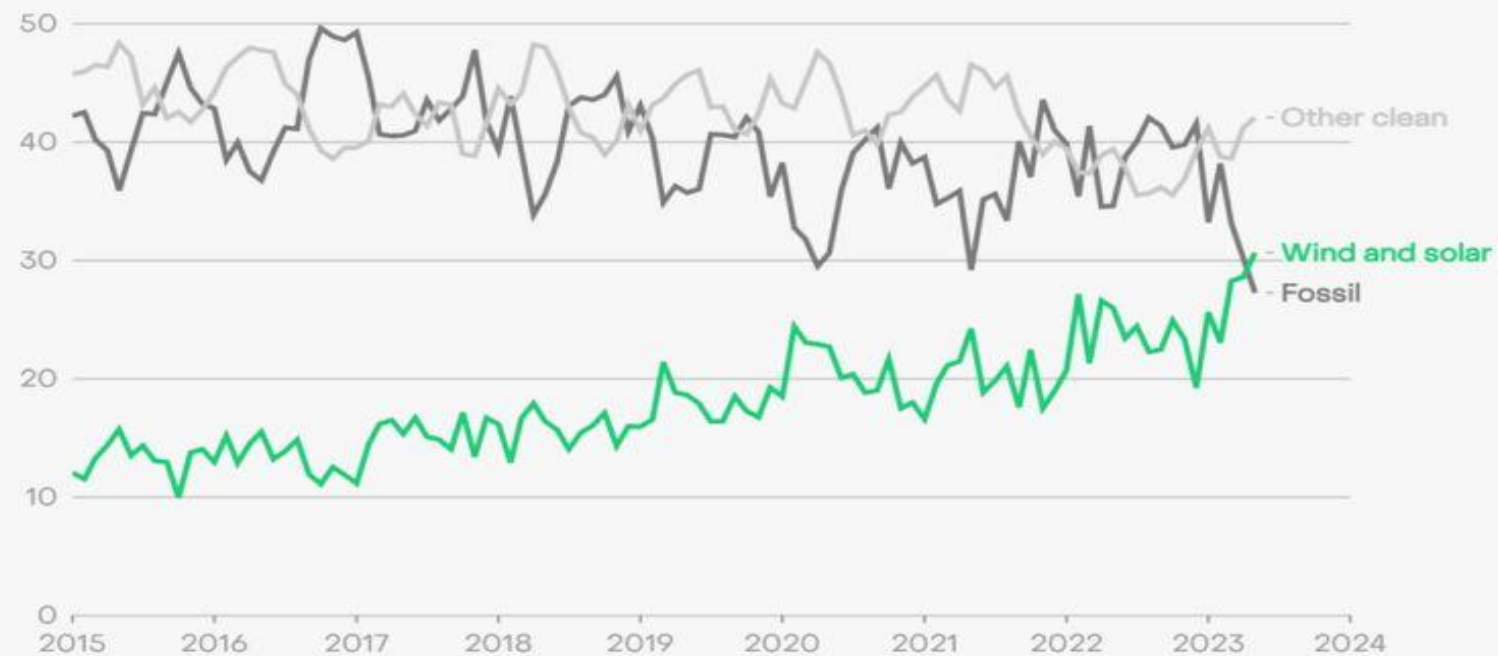


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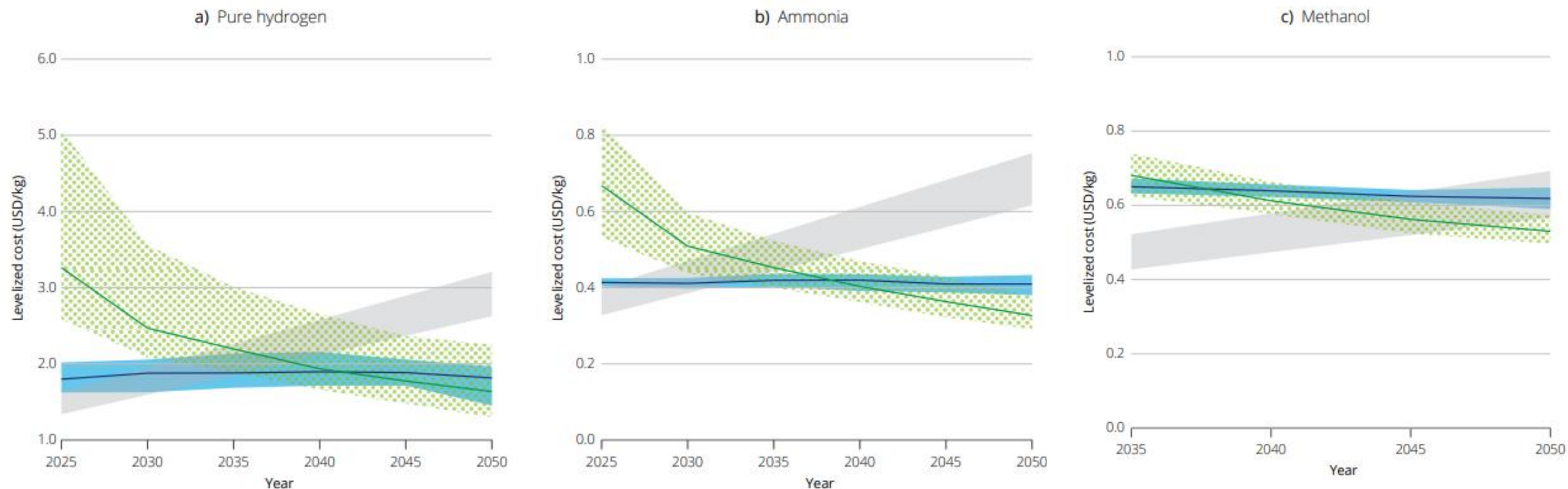
Wind and solar produce more of EU electricity than fossil fuels for the first time

Share of electricity generation (%)



Source: Monthly electricity data, Ember · Other clean includes hydro, nuclear, bioenergy and other renewables; Fossil includes coal, gas and other fossil fuels

Figure 5. Outlook on production costs of clean hydrogen and its derivatives, 2025 to 2050



Cost of green technologies (median in solid line)

 Cost of blue technologies (median in solid line)

 Cost of fossil-based technologies

Source: Deloitte analysis; The production cost is computed here as LCOH (levelized cost of hydrogen), a methodology accounting for all capital and operating production costs in the levelized manner over a unit cost of produced hydrogen and its derivative (US\$/kg). The green and blue areas represent the production cost distribution of 80% of clean hydrogen and its derivatives that can be produced in this outlook (solid lines representing the median).³⁷ The cost of grey pure hydrogen directly accounts for detailed modeling assumptions, while the cost of grey hydrogen derivatives (ammonia, methanol, and SAF) relies on average 2019 world market prices and a carbon price in line with the IEA's net-zero pathway. A 10% uncertainty range is added to the central estimate to account for market uncertainties.

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