

22/10/24 La Nave, Madrid



I Jornada del Amoniacos Renovables

Hacia una economía circular: amoniacos
renovables y su papel en la sostenibilidad global

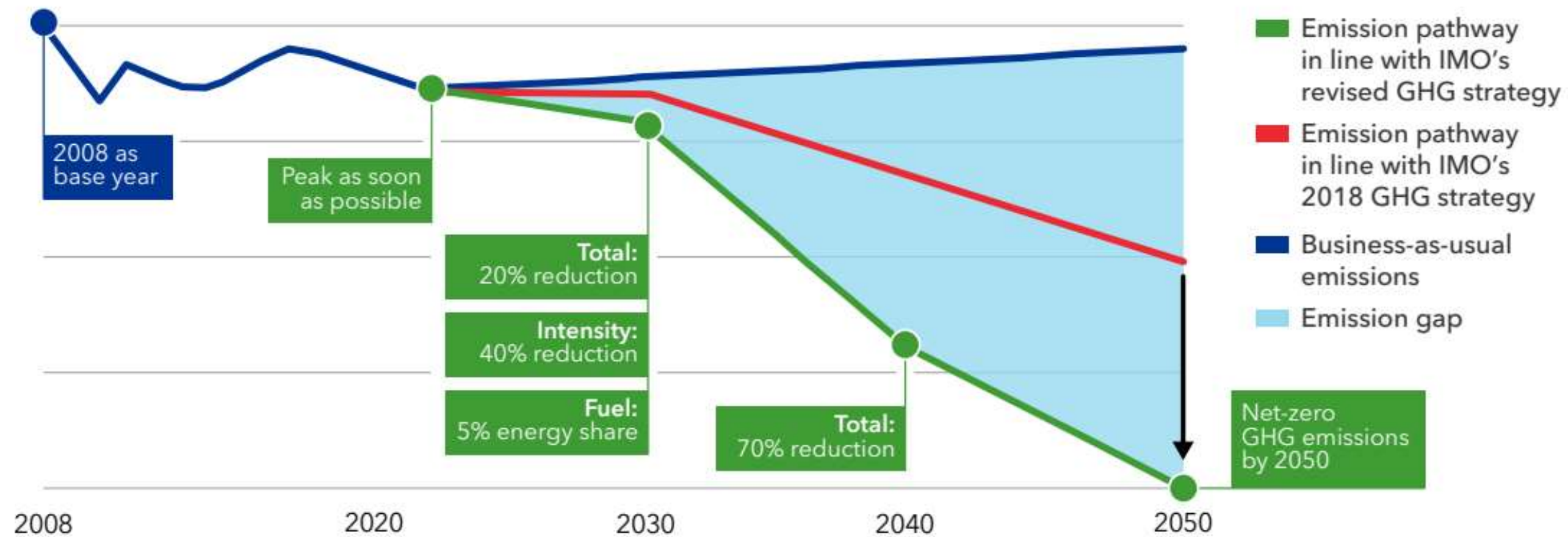
El amoniaco como vector energético



El amoniaco en el sector marítimo

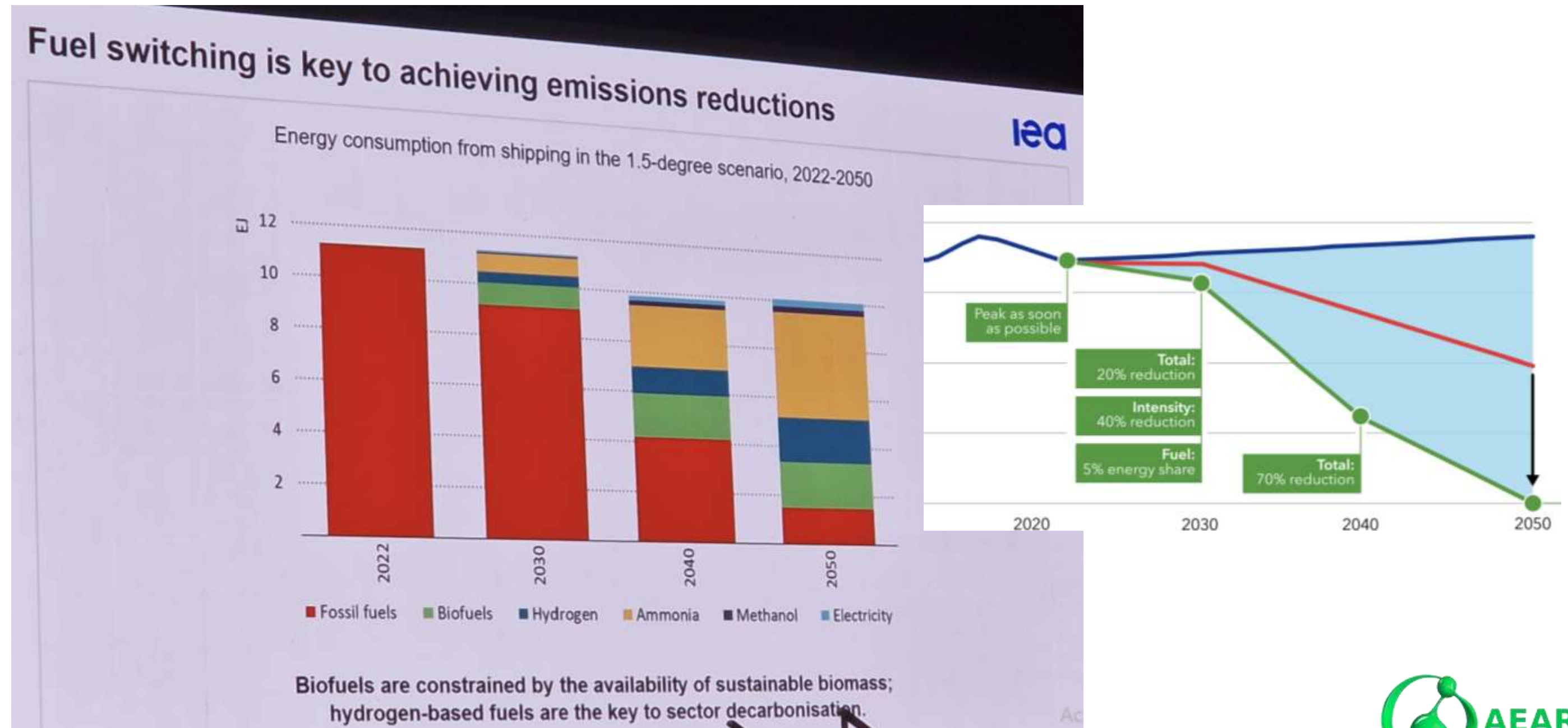
Outline of ambitions and minimum indicative checkpoints in the revised IMO GHG strategy

Units: GHG emissions

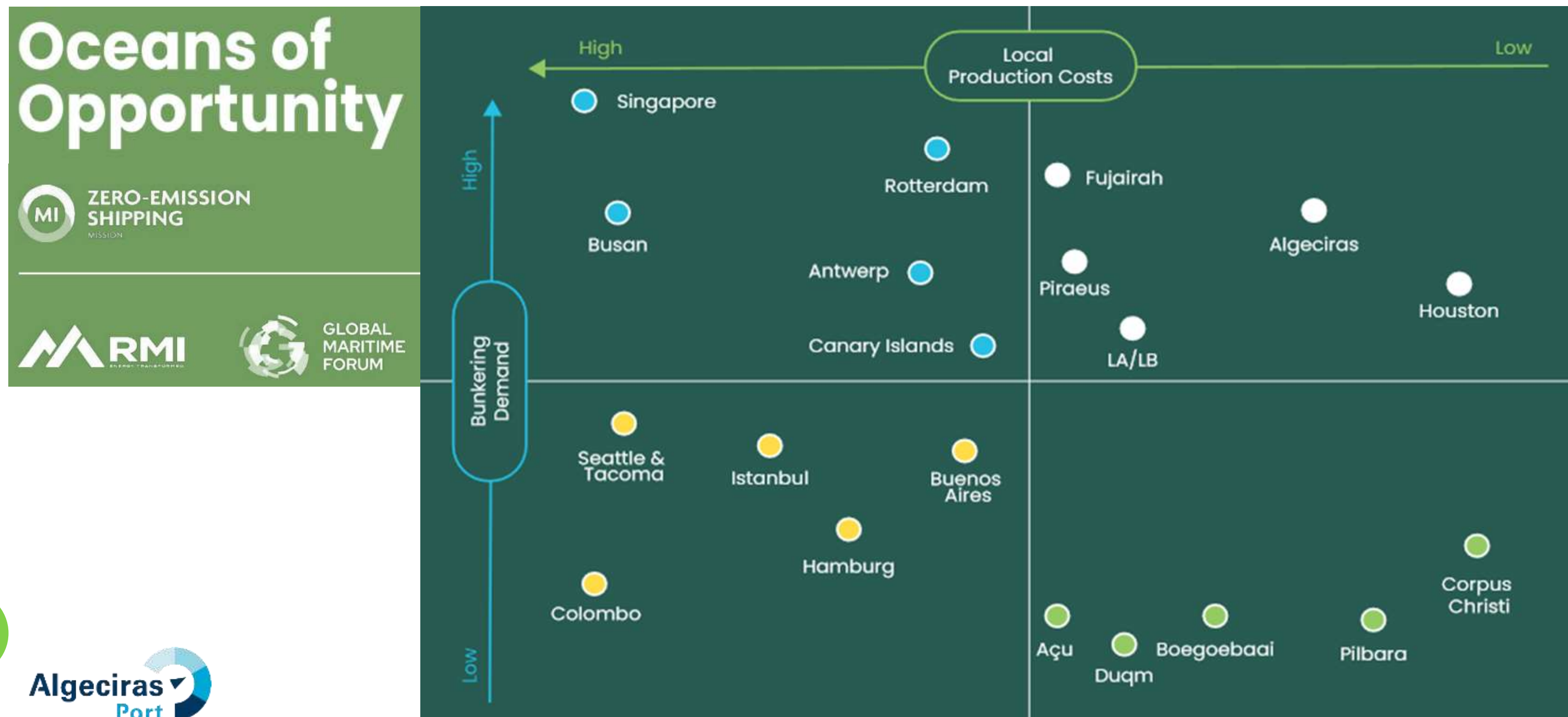


Total: Well-to-wake GHG emissions; Intensity: CO₂ emitted per transport work; Fuel: Uptake of zero or near-zero GHG technologies, fuels and/or energy sources

El amoniaco en el sector marítimo



El amoniaco en el sector marítimo



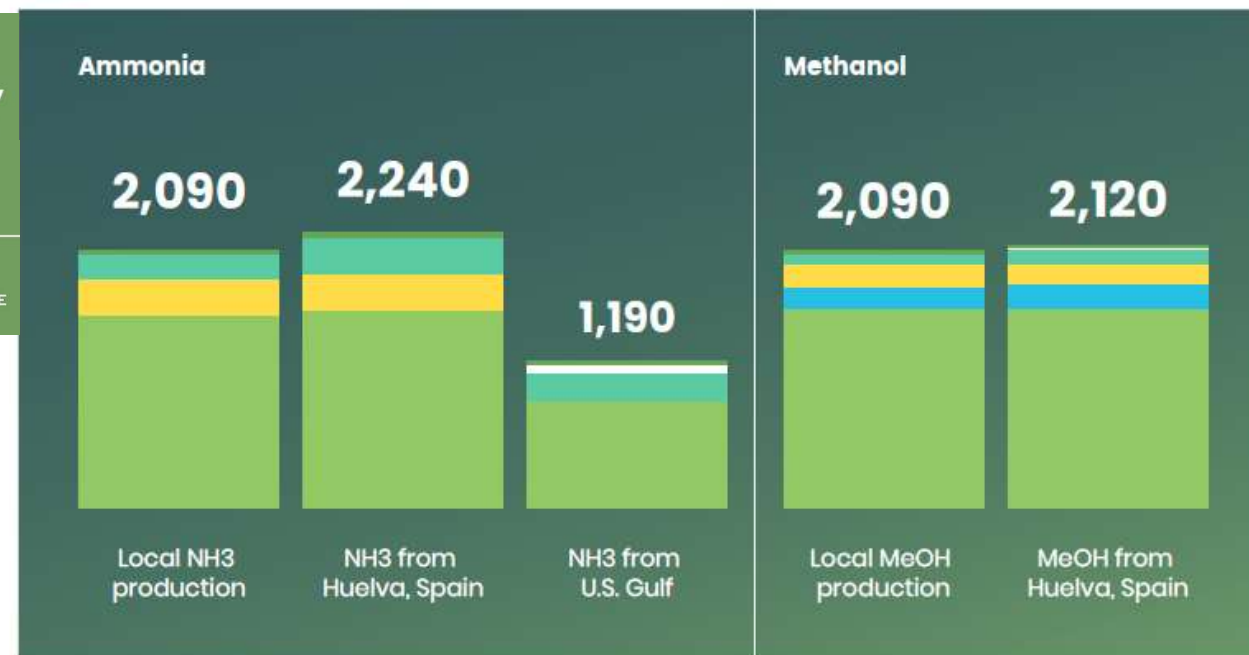
El amoniaco en el sector marítimo

Precio VLSFO Rotterdam: 547,50 \$/mt (27/10/2024)

Precio Grey Methanol Rotterdam: 409 \$/mt o 841 \$/mte

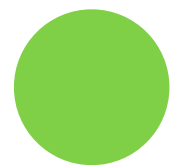
Algeciras could source locally-produced green methanol and ammonia

Assessed green methanol and ammonia supply pathways for Algeciras in 2030²⁷
USD/metric ton VLSFO-eq of fuel



Hydrogen support mechanisms, like the IRA, can significantly reduce the cost of green fuels at ports

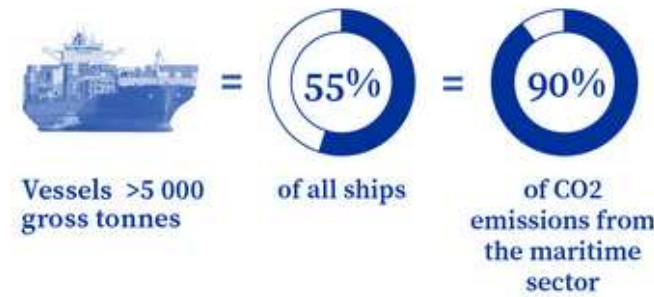
Delivered cost of e-methanol at Port of Houston with and without IRA tax credits
USD per metric ton VLSFO equivalent.



El amoniaco en el sector marítimo

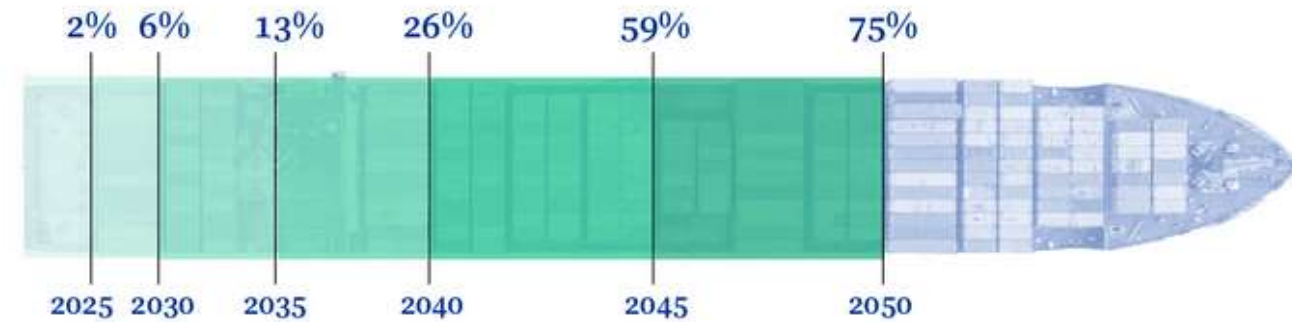


The FuelEU maritime regulation will oblige vessels above 5000 gross tonnes calling at European ports (with exceptions such as fishing ships):



→ to reduce the greenhouse gas intensity of the energy used on board as follows

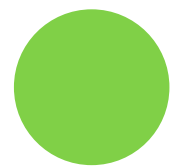
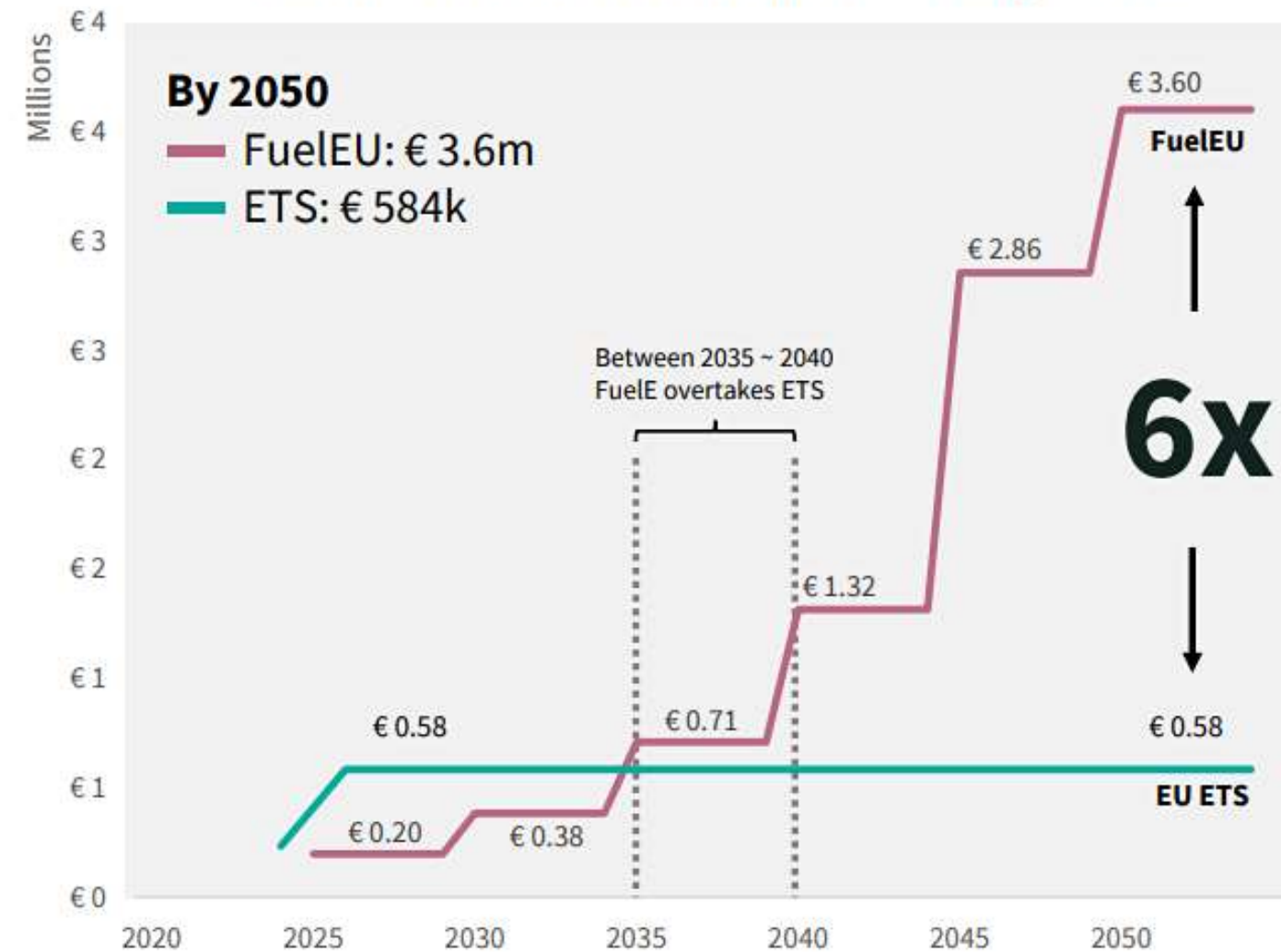
Annual average carbon intensity reduction compared to the average in 2020



→ from 2030, to connect to onshore power supply for their electrical power needs while moored at the quayside, unless they use another zero-emission technology



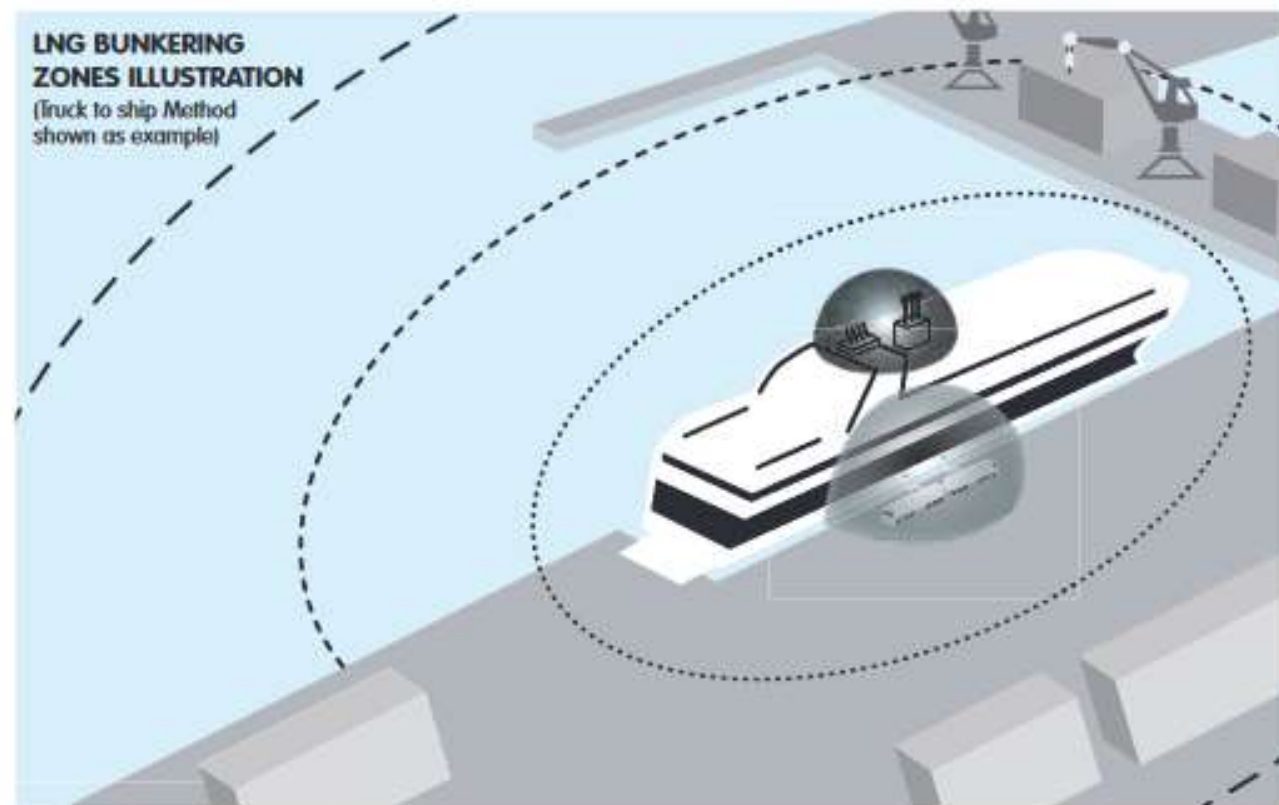
EU ETS and FuelEU Maritime cost comparison



El amoniaco en el sector marítimo

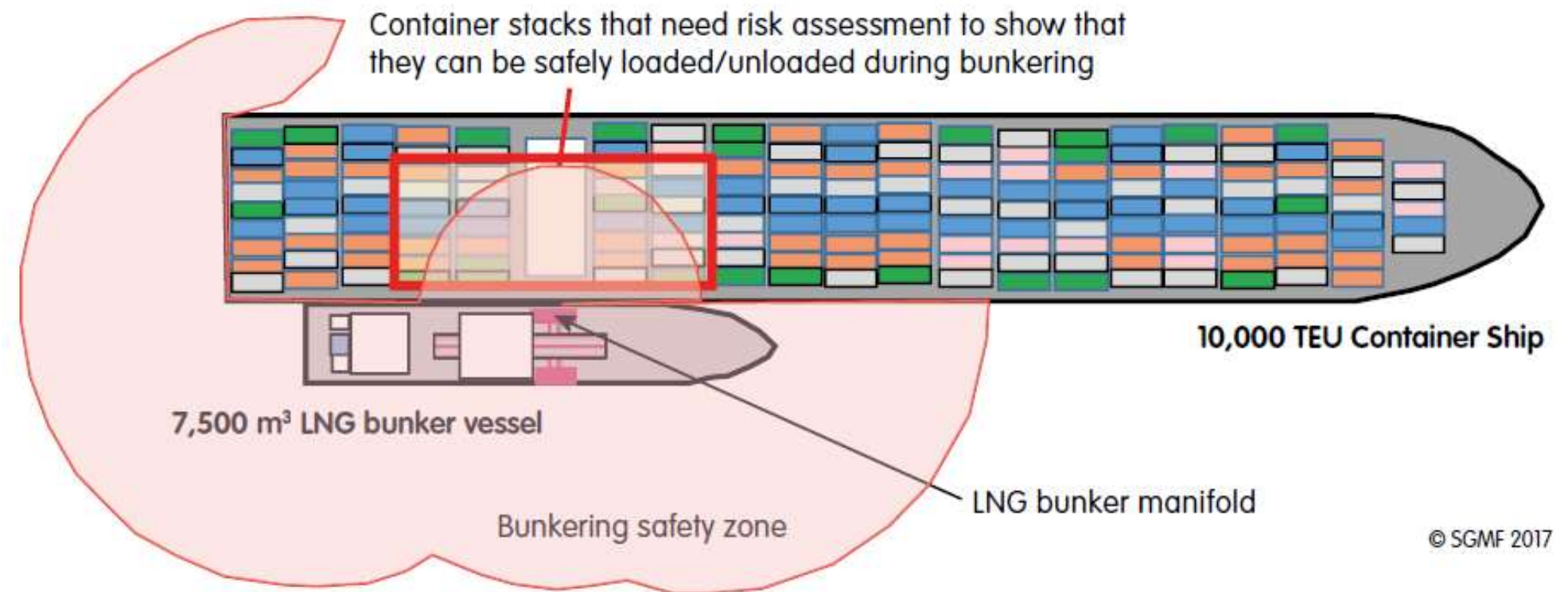
Controlled Zones

Five controlled zones are defined below and shown in the Figure.

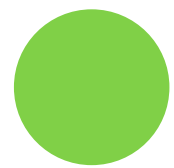


- I HAZARDOUS ZONE
- II SAFETY ZONE
- III MONITORING AND SECURITY AREA
- IV MARINE ZONE
- V EXTERNAL ZONE

Figure 2.2: Bunkering Safety Zone for a Container Ship



Source:  the society for gas as a marine fuel



Algeciras como Clean Fuel Hub

Horizonte 2030

Escenario Call for Interest

Puntos de agregación de producción

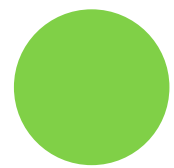
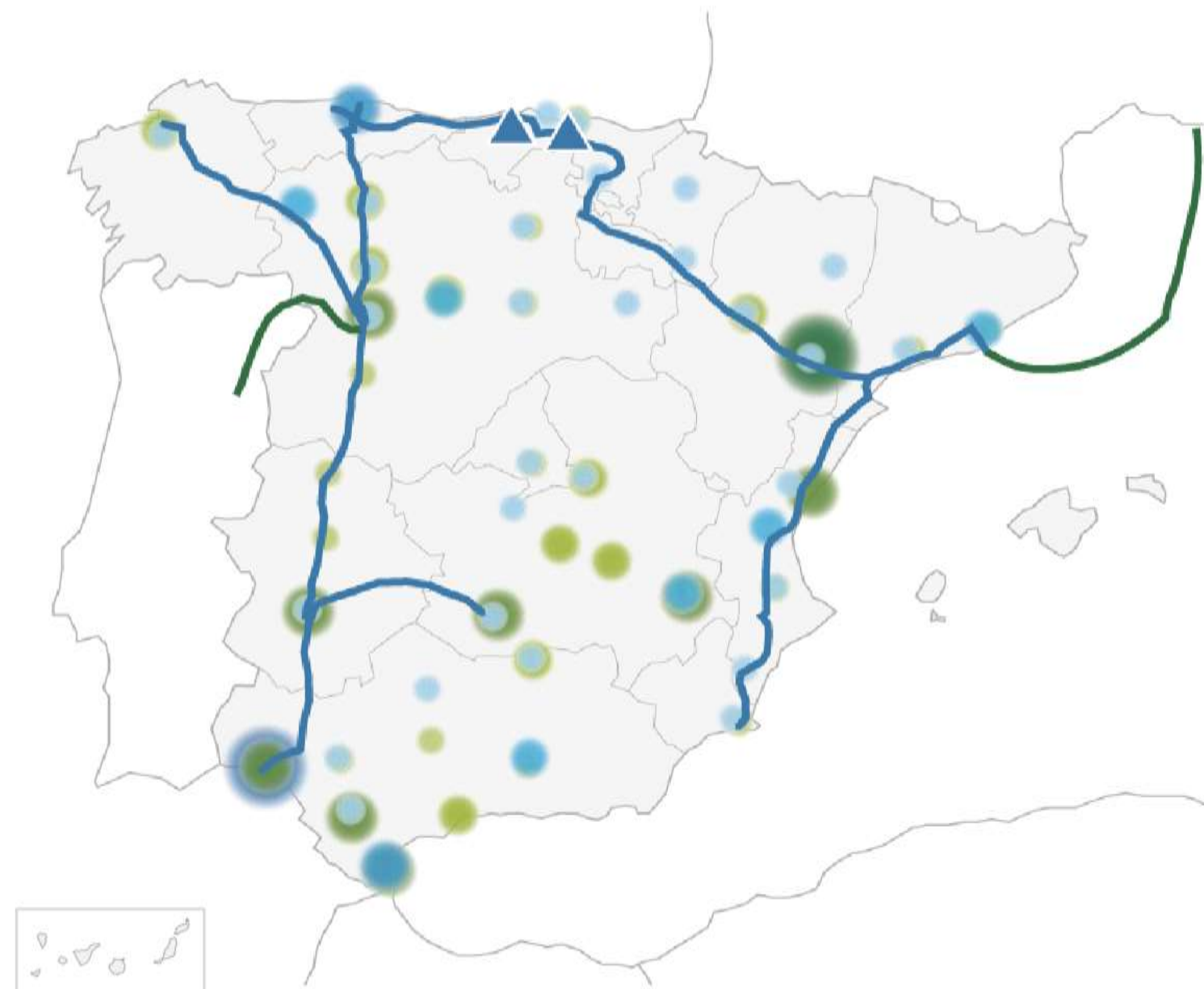
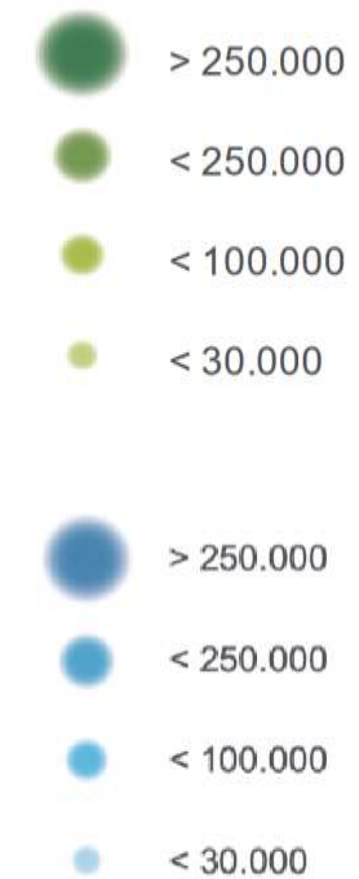
Puntos de agregación de consumo

Infraestructura española de hidrógeno 2030 (presentada a PCI)

Almacenamientos subterráneos

H2Med

2º DÍA DEL
HIDRÓGENO
DE ENAGÁS





**Muchas
gracias**



Asociación Española del Amoniacó Renovable

