

# Shipping decarbonization

What can and must be done today?

*Pete Gornall*







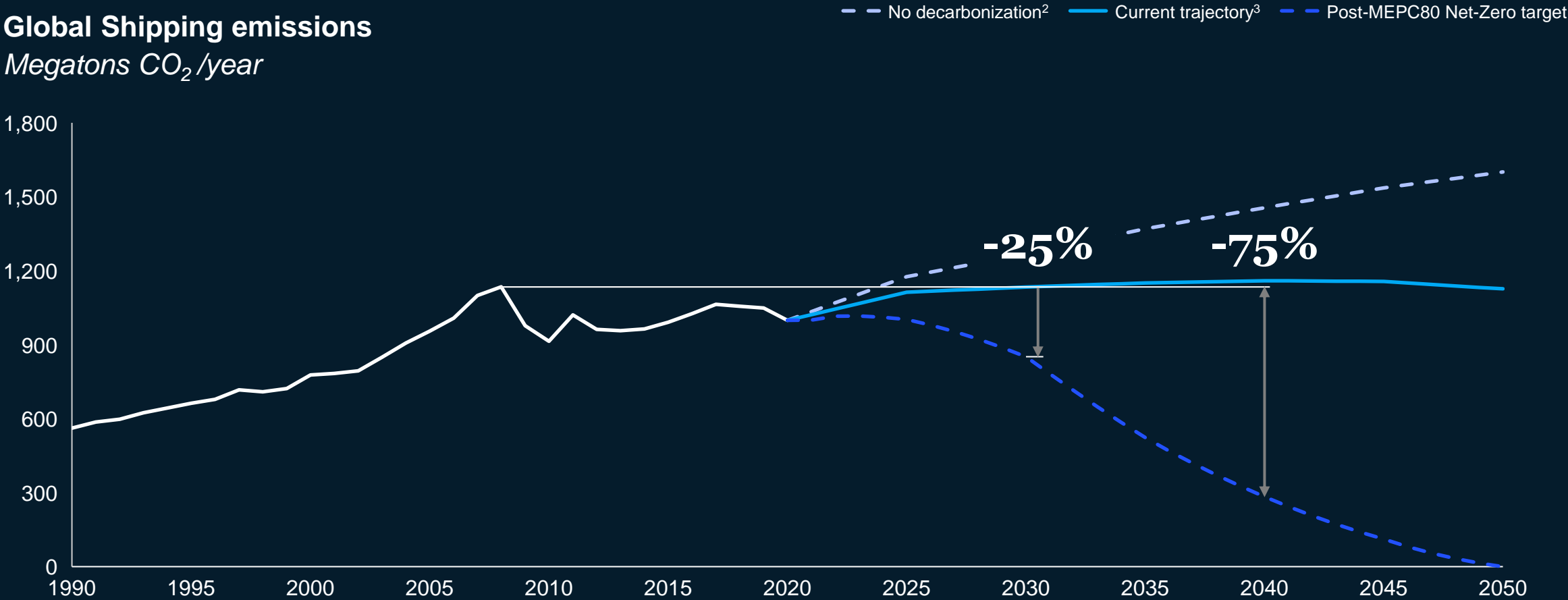




# The challenge we are all here to solve

## Global Shipping emissions

Megatons CO<sub>2</sub>/year



# The basis of our perspectives

Partnerships with leading shipping decarbonization collaborations

Mærsk  
Mc-Kinney  
Møller Center  
for Zero Carbon  
Shipping



Getting to Zero  
Coalition



Serving leading shipping & ports players

**4 out of 5**  
top container shipping lines

**4 out of 7**  
top cruise lines

**Leaders**  
in drybulk, tanker, ferry, etc.

Deep experience in green fuels value chain

Serving **85%** of the top 30 energy companies

**Hydrogen Council**

# Three guiding thoughts

**1** Invest way more in efficiency measures now



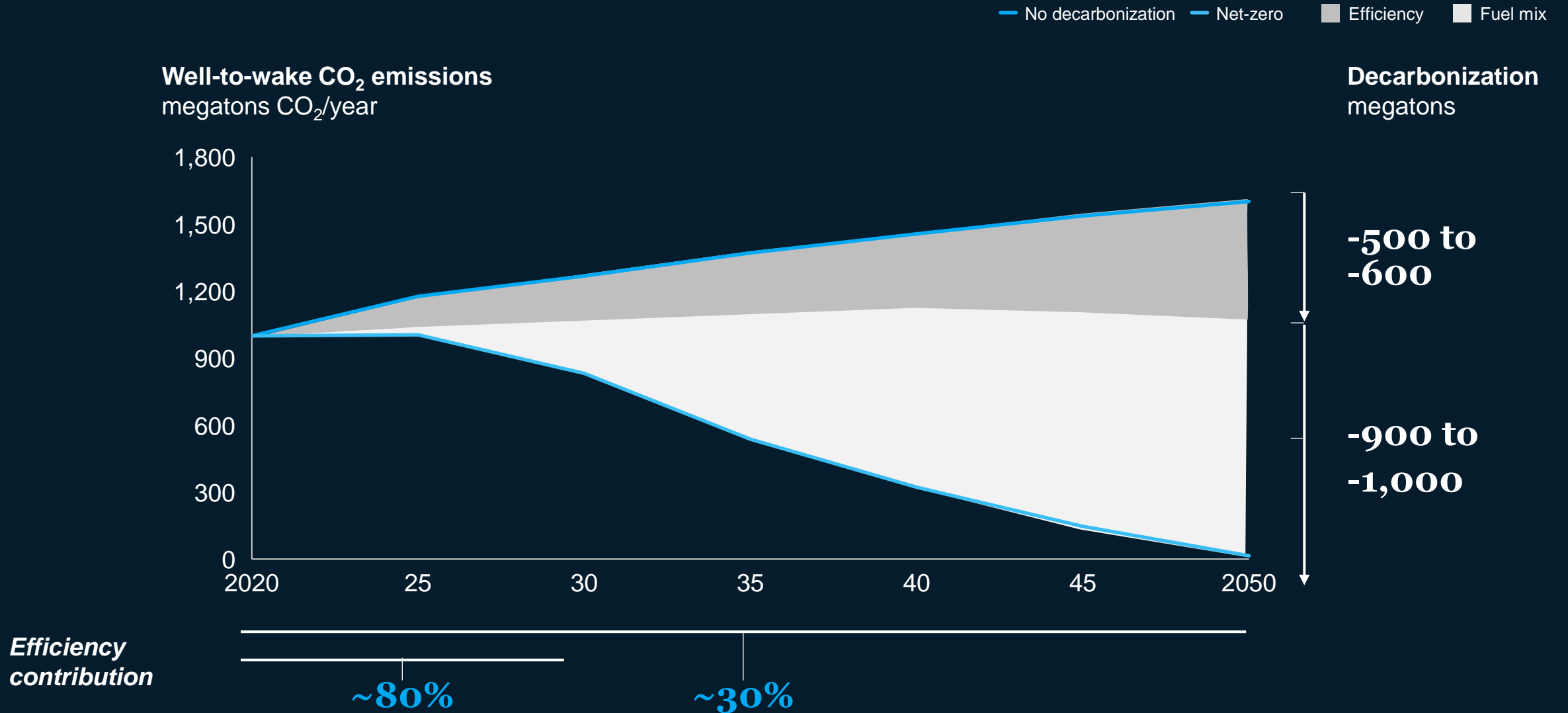
**2** Prepare now for a multi-fuel future



**3** Create the commercial constructs to enable the shift



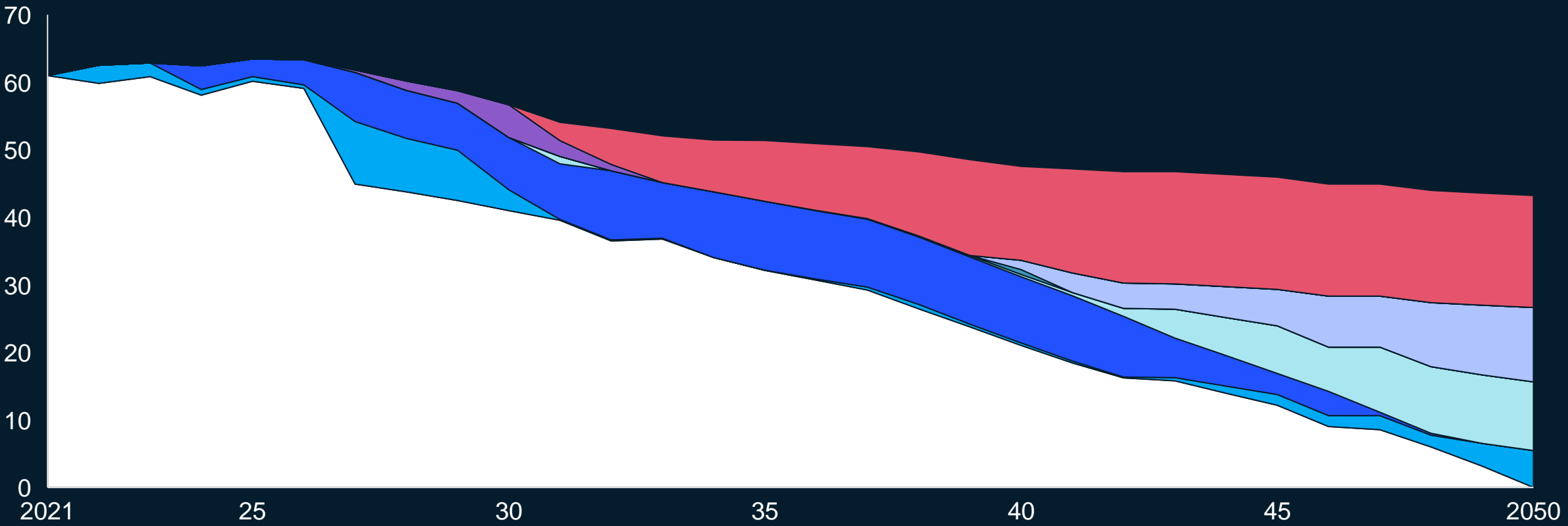
# 1. Invest way more in efficiency measures now



# 2. Almost every fleet will need to adopt to multiple fuel pathways

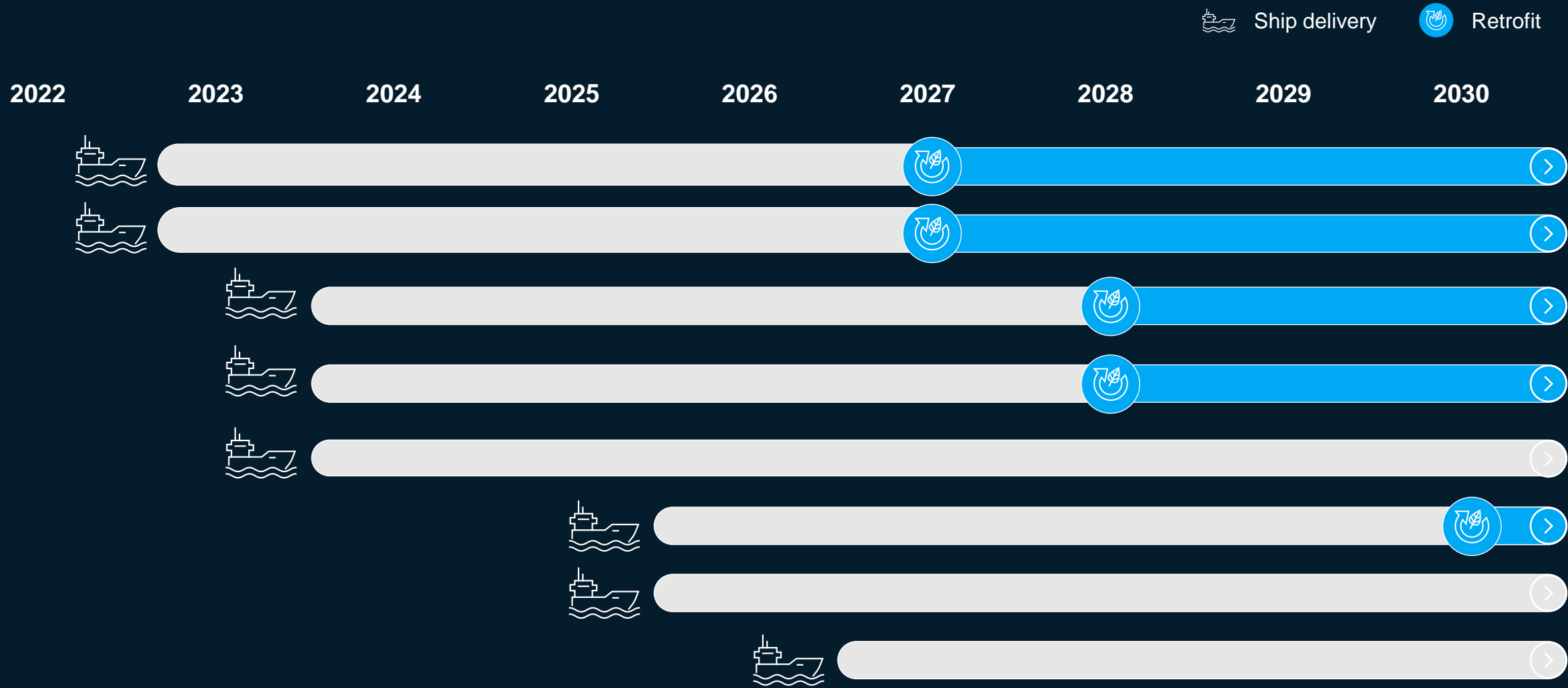
E-methanol Bio-methanol (cellulose) Ammonia (green) Ammonia (blue) E-LNG LNG Biodiesel (HVO) LSFO

Fuel consumed, TJ





# 2. The absence of a plan can lead to wrong choices today



### 3. Companies need to increase efforts to commercialize green shipping' economic potential



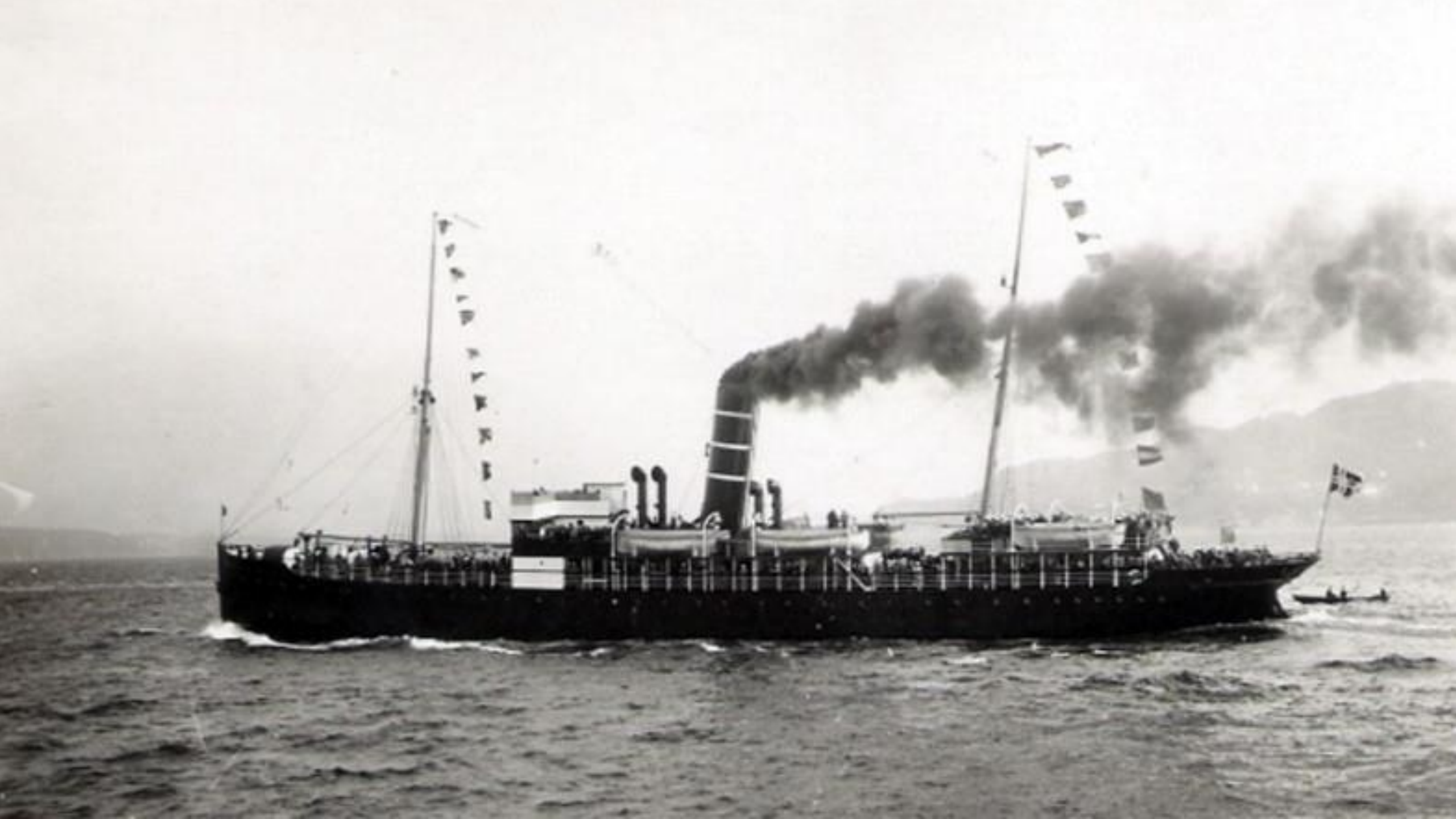
**Direct  
reductions**



**Physical  
decoupling**



**Carbon-neutral  
voyages**



# Three concluding thoughts

**1** Invest way more in efficiency measures now



**2** Prepare now for a multi-fuel future



**3** Create the commercial constructs to enable the shift

