

MARITIME

# Shipping CO2 emissions

Ambitions and regulations in a post-COP21 world

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# The post-COP21 challenge

## The backdrop

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- Scientists and policy makers generally agree it is critical to limit the average global warming to no more than 2°C
- To do this **emission need to peak very soon and then decline sharply**
- The Paris Agreement is a break-through, with implications also for the maritime industry
- The fracture lines between developed and developing countries are less apparent
- National pledges to reduce emissions are still far below what is needed to reach 2°C target, let alone 1.5°C – shipping must do its part



## COP21 and implications for shipping

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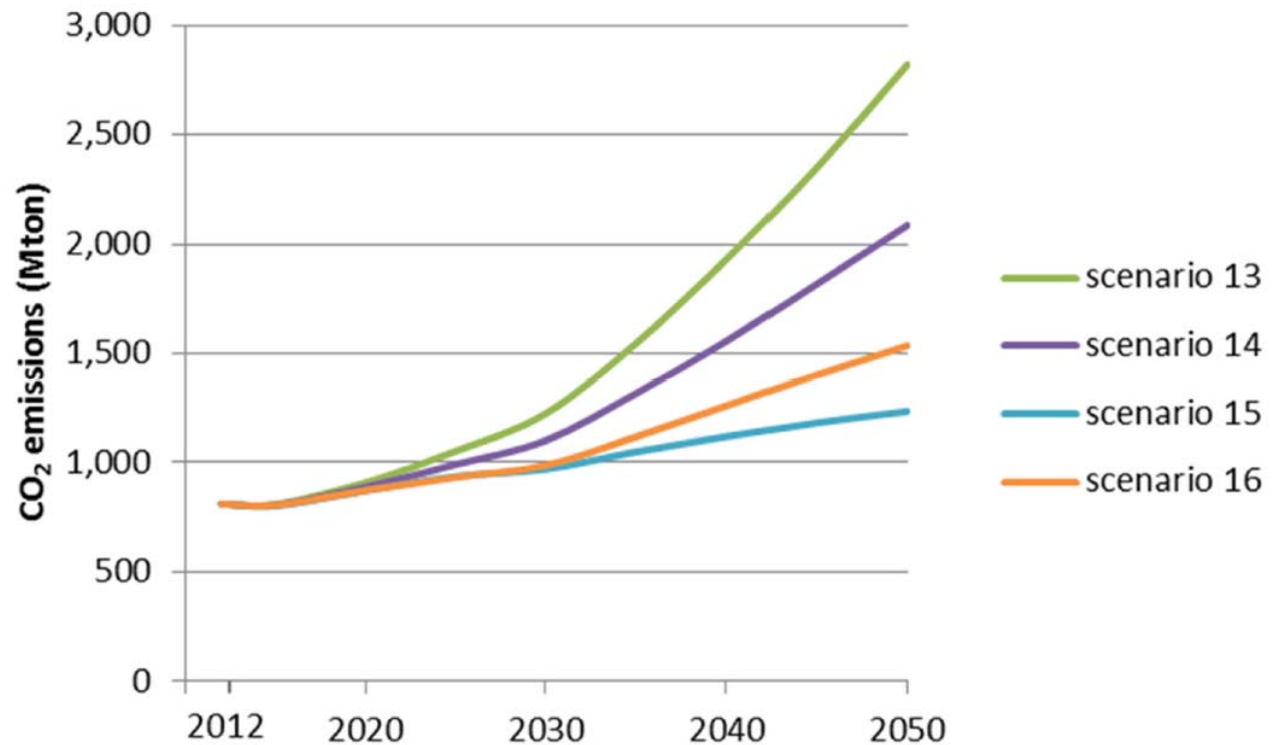
- Paris agreement reduced CBDR tensions; IMO work on CO2 emission reductions has been reinvigorated
- IMO needs to deliver firm and measurable results within the next 5 years in order to maintain its role - a global MRV system is a key first step
- IMO also needs to agree robust short and long-term goals – essentially an ambitious emission trajectory
- Expected growth in shipping makes absolute emissions reductions challenging. With existing technologies and reasonable growth scenarios, emissions can at best be stabilized
- Absolute reductions will be required – market-based offset mechanisms as well as break-through technologies are needed



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## Future shipping CO2 emission

- BAU projections show 50% – 250% increase by 2050
- Most optimistic mitigation projections show stabilization at best
- Not compatible with societal or policy goals



Source; Third IMO GHG Study, 2014

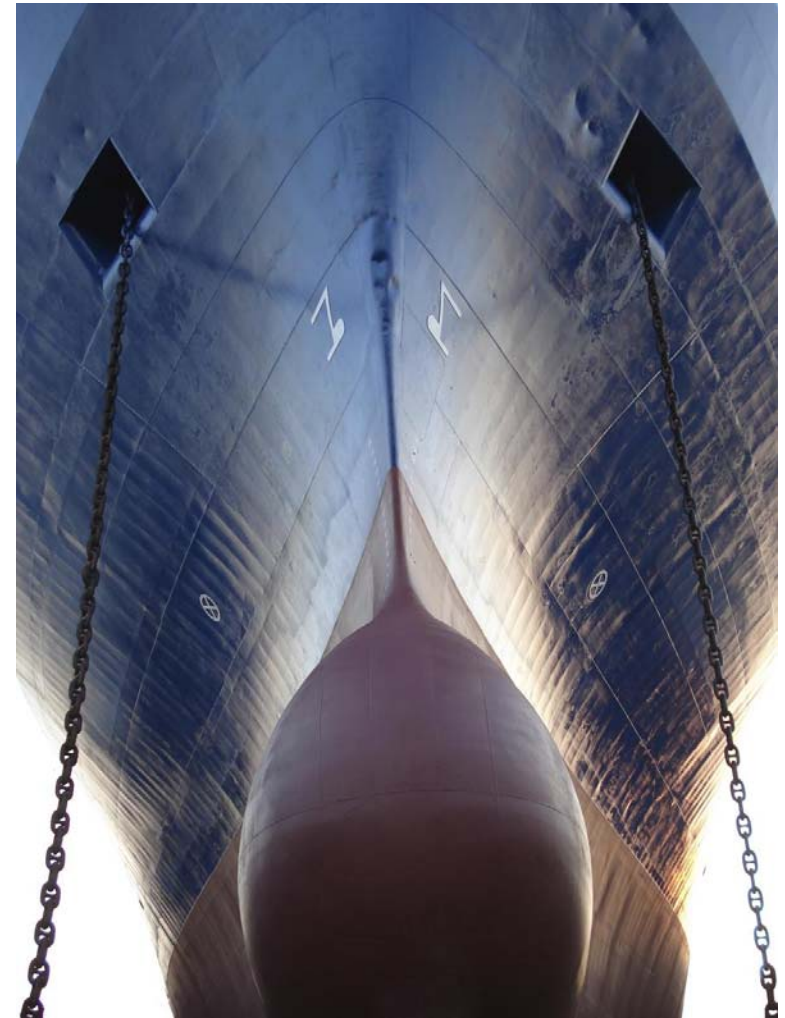
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# A blueprint for shipping

## A possible blueprint for CO2 reductions

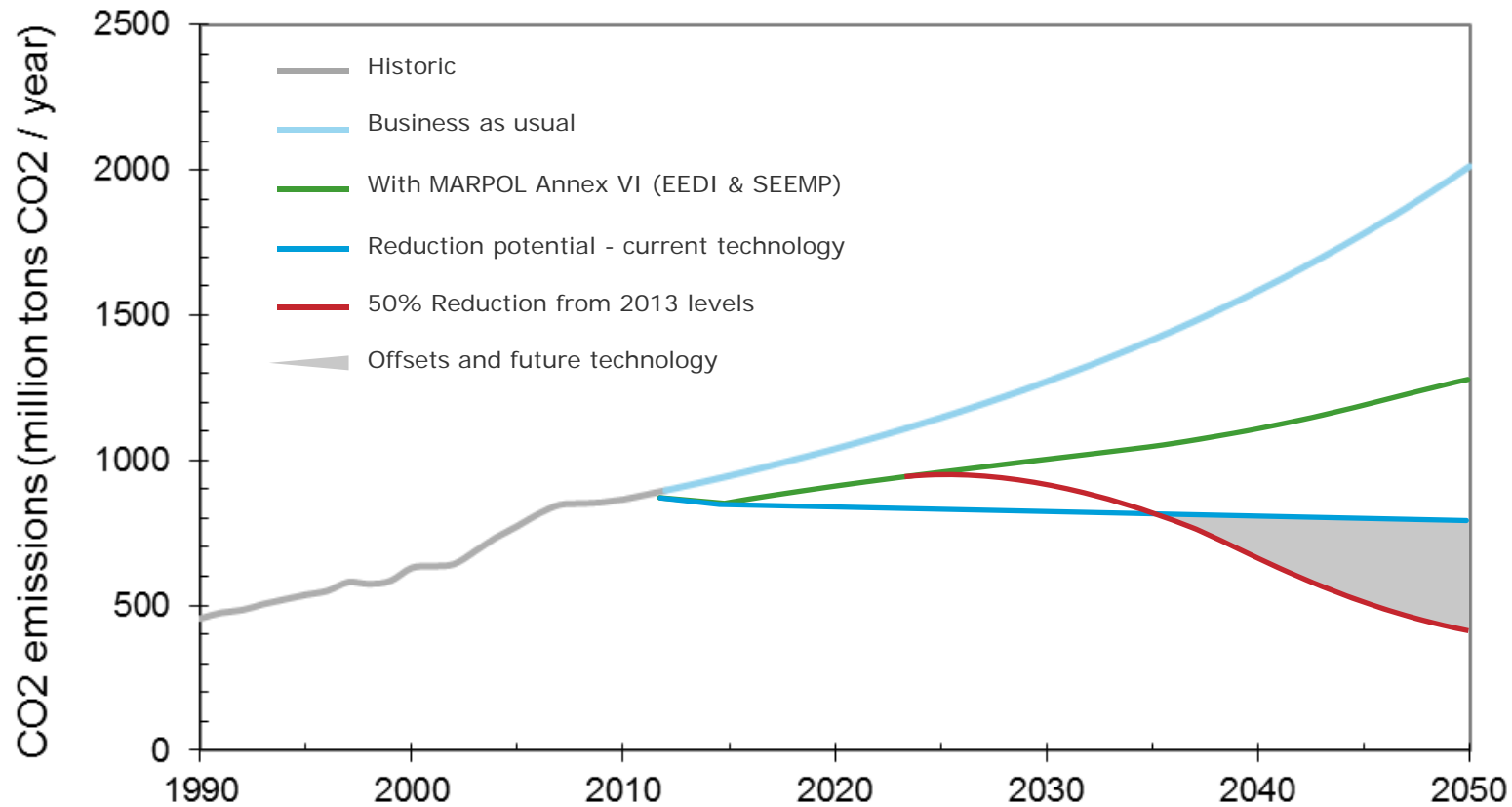
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- Retain tightening EEDI targets for new ships
- Introduce and make operational a global MRV system by 2019
- Set an industry target of carbon-neutral growth effective from 2023
- Set a long term goal of achieving 50% reduction in CO2 emissions by 2050
- The gap between carbon-neutral growth and long term goal to be covered by a global offset mechanism – this implies a market based measure managed by IMO linked to a functioning global carbon market
- Incentivise technology developments and uptake so as to over time reduce the need for offsetting



# CO2 emissions from international shipping – a possible pathway

## CO2 emissions from international shipping from 1990 to 2050





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# EU implications

## Suggested EU pathway – implications for EU MRV

- An international, not only regional, approach is needed to agree and achieve effective long term shipping emission reduction targets
- As a first step, EU should maximise efforts to support a global MRV mechanism, through IMO
- This implies aligning the EU and IMO systems as allowed for by Article 22 of the EU MRV Regulation
  - EU system becoming effective in 2018 (EU MRV)
  - IMO system becoming effective in 2019 (Fuel consumption database)
  - Similarities, but also significant differences to be resolved (efficiency metrics, transparency, verification)
  - As a bonus alignment will remove administrative burden resulting from overlapping reporting systems
- The EU must continue its efforts to accelerate discussion and adoption of long term targets at IMO



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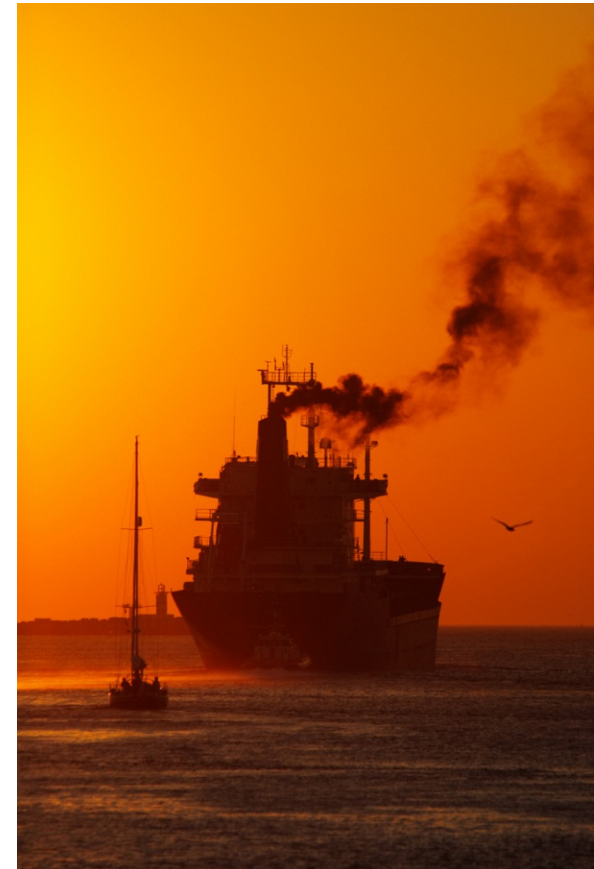
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# Wrapping-up

## Key points

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- Predicted emission trajectories are unacceptable
- Shipping must, through the IMO, establish robust and ambitious long term targets and trajectory
- Under realistic scenarios absolute CO2 emissions reductions are not achievable with known technologies
- Offsets are a crucial part of any solution, an international shipping MBM is necessary, linked to global carbon markets
- Technology development and uptake must be incentivised to gradually reduce offsetting
- As a first step, IMO needs to move quickly to adopt and implement a global MRV system
- To provide traction for a global system, EU MRV needs to be aligned with IMO approach
- The EU must continue its efforts to accelerate the IMO work on long-term targets



# Thank you!

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