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NETHERLANDS
SHIPOWNERS

The way towards zero emission shipping

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Environmental regulations for shipping

- ▶ CO2 (IMO strategy with targets 2030 and 2050)
- ▶ NOx (NECA in North Sea as from 1/1/2021)
- ▶ Sulphur limitation in shipping fuels worldwide
- ▶ Reduction of Black Carbon (BC) in Arctic waters
- ▶ Reduction of plastic pollution into the seas
- ▶ Reduction of Volatile Organic Compounds (VOC)
- ▶ Reduction of under water noise for animal welfare
- ▶ Improving fuel quality
- ▶ Biofouling to avoid invasive species
- ▶ Ballast water treatment to avoid invasive species



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Level of ambition IMO GHG reduction strategy

1. Carbon intensity of the ship to decline through implementation of further phases of the energy efficiency design index (EEDI) for new ships;
2. To reduce CO2 emissions per transport work, as **an average** across international shipping, by at least **40% by 2030**, pursuing efforts towards 70% by 2050, compared to 2008; and
3. To peak GHG emissions from international shipping as soon as possible and **to reduce the total annual GHG emissions by at least 50% by 2050** compared to 2008 whilst pursuing efforts towards phasing them out as called for in the Vision as a point on a pathway of CO2 emissions reduction consistent with the Paris Agreement temperature goals.



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Mission and vision Dutch shipowners

- ▶ Minimum of 70% **absolute** CO₂ reduction in 2050 compared to 2008 (see: www.kvnr.nl/schoon)
- ▶ First zero emission vessels under Dutch flag will sail before 2030 (also mentioned in the Dutch Green Deal for shipping and ports)
- ▶ KVNR has a CO₂ database with data from the NL fleet to anticipate the discussions on measures (→ pro-active approach instead of waiting for regulators!)



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How to reach the 2030 CO₂ reduction (40%) target?

- ▶ Operational measures
- ▶ Technical measures
- ▶ Other type of (drop in) fuel
- ▶ Newbuilds (EEDI)





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What about the long term (2030 towards 2050) ?

- ▶ As from 2030 the number of zero emission ships in the world fleet will grow
- ▶ **Global** carbon price on fuels (MBM) to incentivize front runners
- ▶ Fuel/energy mix will probably remain
- ▶ In 2050 a vast majority of the world fleet will be zero emission



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What do we need to decarbonize?





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Thank you for your attention!

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