

OUR VIEW

The Danish shipping sector is taking significant steps towards the green transformation. On the path to net-zero in 2050, fuels based on Power-to-X technology will be essential in reducing emissions from shipping.

Danish Shipping believes that the global nature of shipping and the high demand for energy for propulsion create a unique opportunity for the shipping industry to drive the development of Power-to-X on a global scale.

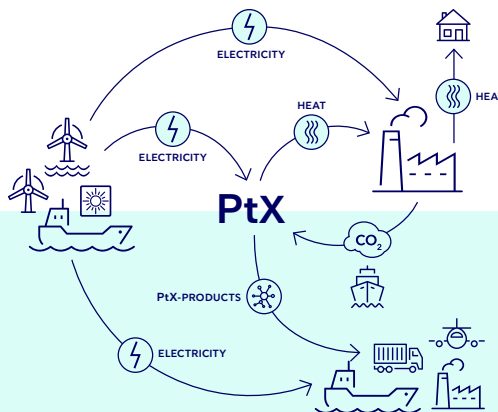
Danish Power-to-X production facilities will be able to supply future maritime fuels for both domestic and regional shipping while showing the way the whole industry.

Power-to-X (green fuels of the future)

DANISH SHIPPING BELIEVES THAT THE FOLLOWING FRAMEWORK SHOULD BE ESTABLISHED

In order for shipping to meet the ambitions of using fuels based on Power-to-X (PtX) technology, Danish Shipping believes that the following frameworks should be established:

1. The necessary infrastructure for production facilities and ports must be established. To enable national and regional demand, facilities for feed-stock collection, production, and storage should be set up. An analysis should be conducted to identify optimal locations for production and bunkering activities.
2. The price of PtX-based fuels must be reduced to make them more competitive with traditional fossil fuels. This can be achieved through a model of government subsidies during a transition period until production capacity reaches a size that allows for a competitive market.
3. To create synthetic fuels such as e-methanol, e-diesel, or e-kerosene, access to sustainable CO₂ must be ensured. This can be achieved either through appropriate national point sources or through imports. Access to sustainable CO₂ should be secured in line with the growing demand and scaling up of PtX fuel production.



FACTS

- A study produced for Danish Shipping, by COWI, shows that Danish domestic shipping will have a constant energy demand of 1.2 TWh, which will be covered either through direct electrification or the production of green fuels both in 2030 and 2050.
- The same study shows, that if we aim to meet the needs of international shipping, which currently bunkers in Denmark, we anticipate that 0.6 TWh of green electricity will be required for e-fuel production. As the maritime industry undergoes green transformation, this figure is expected to rise to 16.1 TWh in 2050.
- Equally, Denmark has the potential to export green fuels to shipping in our neighboring regions, including large nearby ports or, for instance, shipping in the Baltic Sea, where a significant portion passes through Danish waters. For the Baltic Sea region, there is potential to dedicate up to 4.2 TWh to the production of PtX fuels for shipping in 2030 and 110.3 TWh in 2050.