Laivaliikenteen murroksesta



The Initial IMO Strategy on reduction of GHG emissions from ships



IMO remains committed to reducing GHG emissions from international shipping and, as a matter of urgency, aims to phase them out as soon as possible in this century.

This is the vision in the initial strategy on reduction of GHG emissions from ships, adopted in April 2018.

Levels of ambition include:

- Reduction of CO₂ emissions per transport work (carbon intensity), as an average across international shipping, by at least 40% by 2030, pursuing efforts towards 70% by 2050, compared to 2008; and
- For the first time a reduction of the total annual GHG emissions from international shipping by at least 50% by 2050 compared to 2008, while, at the same time, pursuing efforts towards phasing them out as called for in the vision, for achieving CO₂ emissions reduction consistent with the Paris Agreement goals.

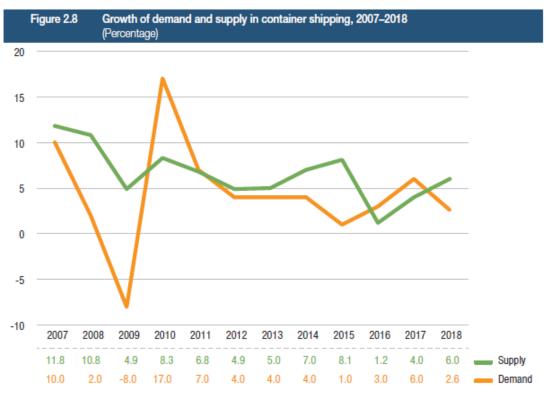
Reducing GHG emissions from ships – why it matters

Maritime transport is the backbone of international trade and the global economy. Around 80% of global trade by volume is carried by sea, and international seaborne trade has been constantly growing for the last decades (UNCTAD, Review of Maritime Transport 2018).

IMO (International Maritime
Organization) is a specialized agency
of the United Nations.

Our mission: safe, secure, clean and sustainable shipping.

CO₂ emissions from international shipping were estimated (2012) to be 2.2% of global anthropogenic emissions (*Third IMO GHG Study* 2014).

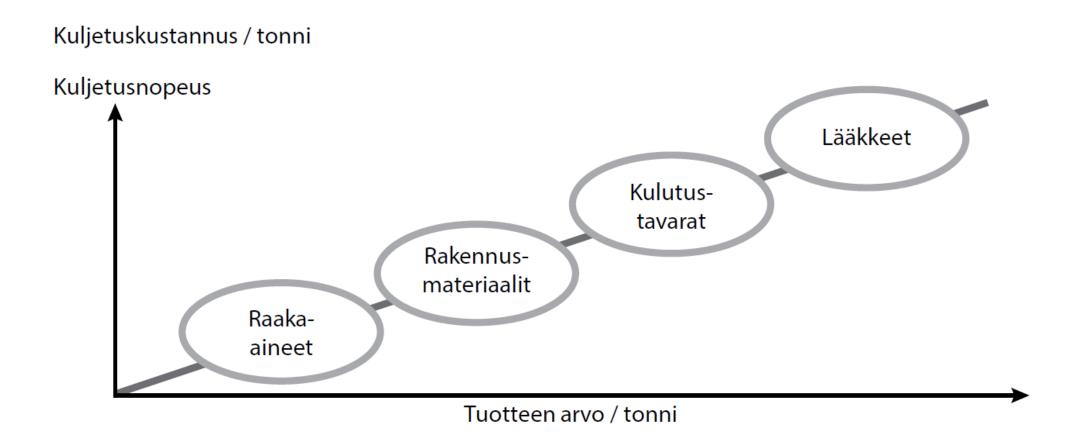


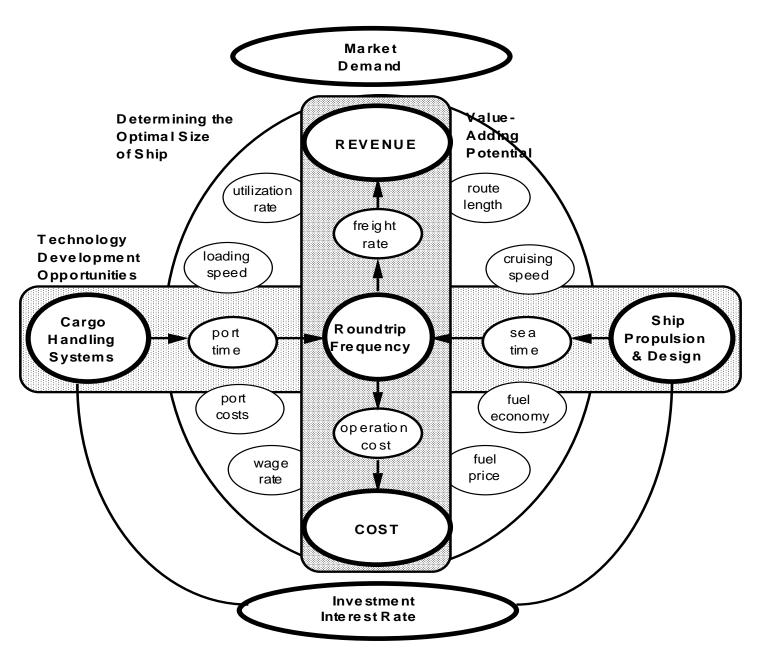
Source: UNCTAD secretariat calculations. Demand is based on data from figure 1.5, and supply is based on data from Clarksons Research, Container Intelligence Monthly, various issues.

Notes: Supply data refer to total capacity of the container-carrying fleet, including multipurpose and other vessels with some container-carrying capacity. Demand growth is based on million TEU lifts.



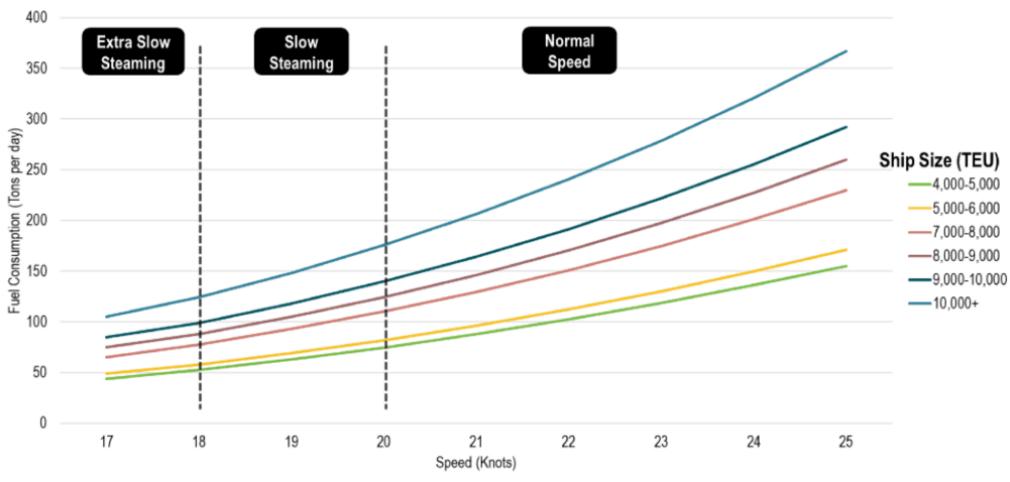
Tuotteen arvon ja kuljetusnopeuden yhteys





Aluksen taloudellisuuteen vaikuttavat tekijät (Lähde: Laine & Vepsäläinen, 1994).

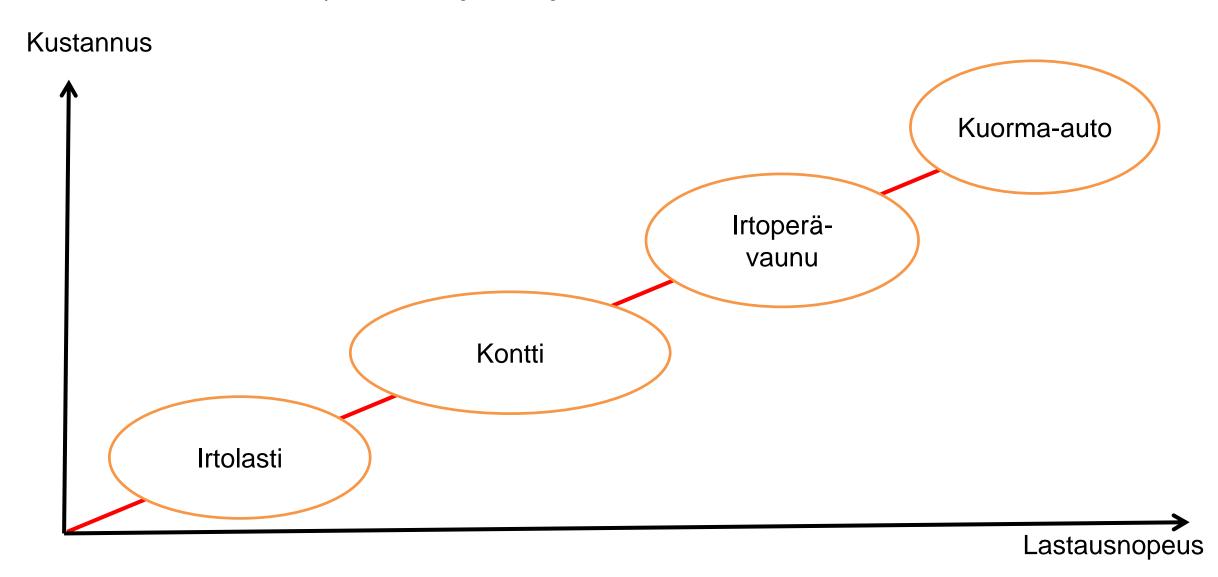
Fuel Consumption by Containership Size and Speed

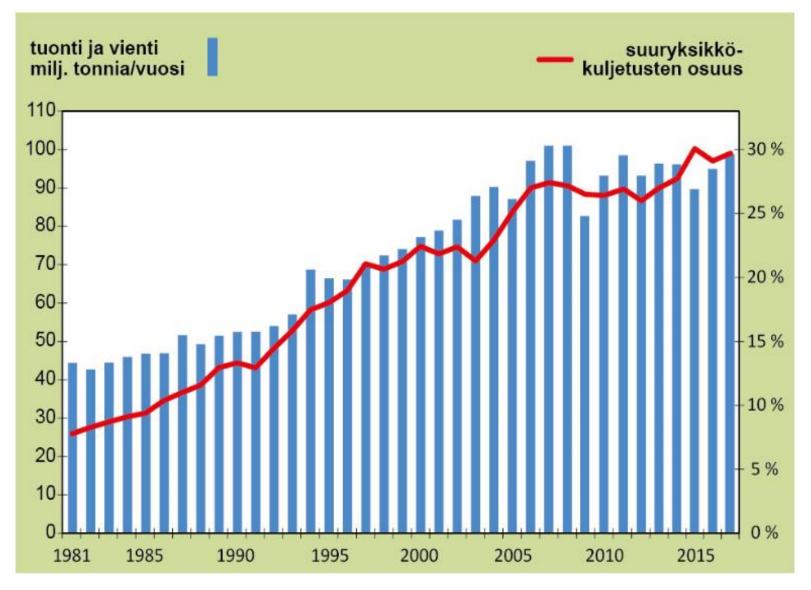


Fuel Consumption by Containership Size and Speed

The Geography of Transport Systems Jean-Paul Rodrigue (2020)

Lastausnopeuden ja kuljetuskustannusten suhde

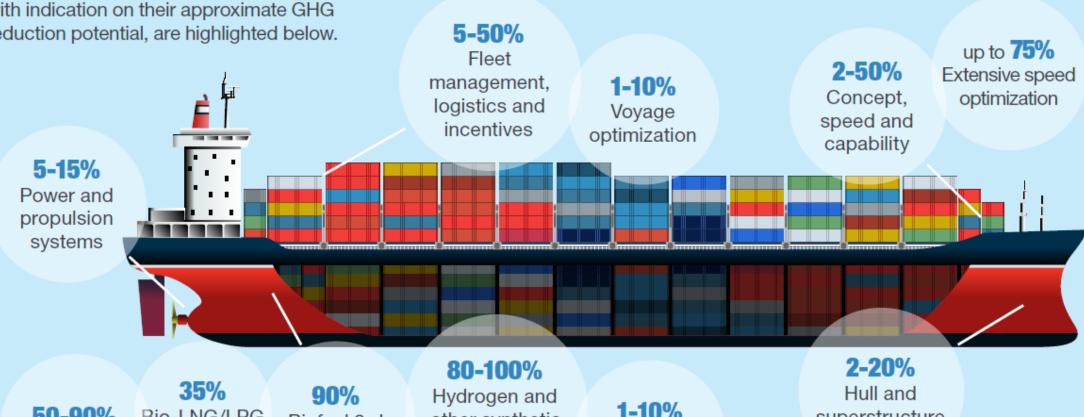




Tuonti- ja vientikuljetusten määrien ja suuryksikkökuljetusten osuuden kehitys v. 1981-2017

A wide variety of design, operational and economic solutions

Achieving the goals of the Initial IMO GHG Strategy will require a mix of technical, operational and innovative solutions applicable to ships. Some of them, along with indication on their approximate GHG reduction potential, are highlighted below.



50-90% Full electric Bio-LNG/LPG

Biofuel 3rd generation other synthetic fuels

1-10% Energy management superstructure

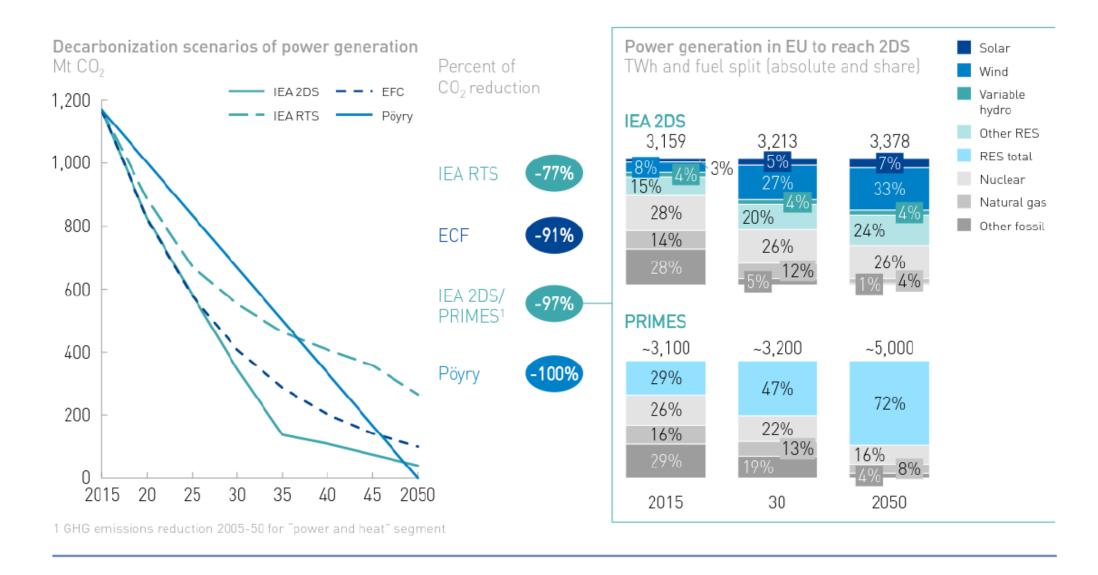


Figure 1 Decarbonization scenarios and power mix – today to 2050 (Fuel Cells and Hydrogen Joint <u>Undertaking, 2019).</u>

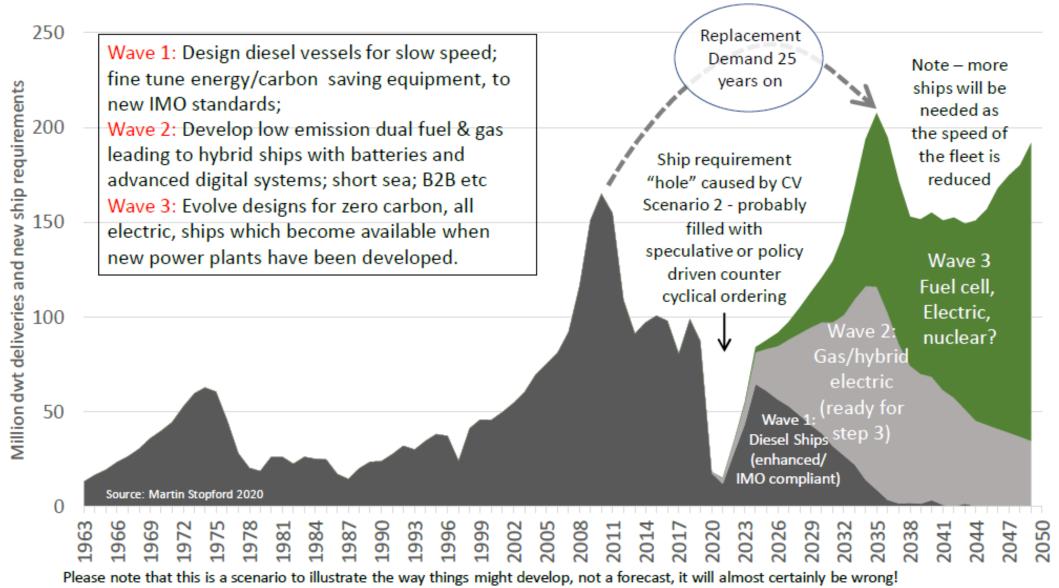


Figure 4: Technology scenario 2 to reach IMO 2050 CO2 target (based on trade scenario2 and shipbuilding scenario 2)

A White Paper published by Seatrade Maritime, part of Informa Markets, April 2020, Martin Stopford 2020

Finnlines invests in the highest passenger comfort – two environmentally friendly Superstar 5,100 lm ro-pax vessels ordered

Finnlines Plc

Media release, Helsinki, 8 January 2020

Finnlines invests in the highest passenger comfort - two environmentally friendly Superstar 5,100 lm ro-pax vessels ordered

After the order of three hybrid sto/ro ultra large green vessels at Jinling Shipyard back in 2018, Finnlines is pleased to announce that it has recently signed an order for **two ro-pax vessels** from **China Merchants Jinling Shipyard (Weihai)**, previously known as AVIC Weihai. Today, both shipyards are part of China Merchants Group.

Called the **Superstar** ro-pax vessels, they are expected to be delivered by 2023. They will be larger than the existing Star class vessels and will be Finnlines' flagships both in terms of size and technology. With a length of about 230 metres, their loading capacity will be for 5,100 lane metres for rolling freight and around 1,100 passengers.

The vessels will have the highest Finnish / Swedish ice class and will be built with the top technical and environmental views in mind, while being pioneers in honouring green values.





KIITOS!

