

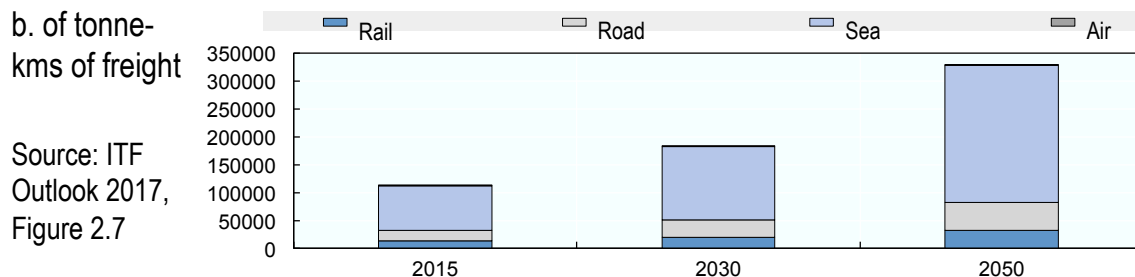


Sustainable Development and Ocean Governance: A Shipping and Ports Perspective

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Global freight transport growth will be the greatest for shipping



- Other propulsion fuels do not deliver the cost and energy efficiency of Heavy Fuel Oil.
- Regulators capped sulfur emissions to 0.5% by 2020; many shipping companies choose scrubbers because adequate supply of LSHFO (low sulfur HFO) is in doubt; some scrubbers increase ocean acidification.



Sustainable Development Must Include Decarbonization of Shipping

- The goal should be 'zero emissions' shipping by 2050. This means ultimately NO fossil fuels for ship propulsion.
- The industry knows it isn't only about carbon (or sulphur or methane or NOx or PM or ...)



Fuel Options Available Do Not Get Us As Far As Needed

Fuel Option for Propulsion		CO2 Reductions
Advanced biofuels	LNG is the Bridge to 'Zero Emissions' Shipping  Barry Parker , Contributor Barry Parker, bdp1 Consulting Ltd provides strategic and tactical support...	25-100%
LNG		0-20%
Hydrogen		0-100%
Ammonia		0-100%
Fuel cells		2-20%
Electricity		0-100%
Wind	Government support for research in countries with capacity Government support for making alternate fuels available at ports	
Solar		
Nuclear		0-100%

Source: ITF (2018). Decarbonizing maritime transport, Table 4.



The Good News: There Are Industry Champions

Maritime CEOs rally behind IMO efforts to de-carbonise world shipping

THE maritime industry is being urged to speed up both technological and business model innovation, further improve operational and technical energy efficiency, and switch to zero-carbon fuels and new propulsion systems in an effort to achieve de-carbonisation.

The message came as 34 CEOs and industry leaders worldwide gathered at the [Global Maritime Forum](#), where they signed a call for action aimed at steering the industry towards de-carbonisation, reported London's Tanker Operator.

... but there are significant concerns about cheating, and enforcement ... Hence governance at the national level is as important as multilateral.



The Good News: There Are Industry Champions

The Poseidon Principles establish a framework for assessing and disclosing the climate alignment of ship finance portfolios. They set a benchmark for what it means for the maritime sector and provide actors with a way to achieve this.

The Poseidon Principles are consistent with the International Maritime Organization, including emissions to peak as soon as possible and emissions by at least 50% by 2050.

As a result, the Poseidon Principles will encourage finance portfolios with responsible environmental management to support international shipping's decarbonization – industry and society.

... 11 shipping finance banks (representing USD100 B in financing) are committed.

Will the insurance industry follow?



The Good News: There Are Industry Champions

CMA CGM sticks to green path and says no to Northern Sea Route

FRENCH shipping giant [CMA CGM](#) has announced it will not use the Northern Sea Route (NSR) between Asia and Europe - currently being developed by Russia and China and last year tested by [Maersk Line](#).

The Arctic is ground zero in the climate crisis.



Gender Equality in Shipping & Ports Needs a Focus on Diversity

Transport industries are among the worst offenders in hiring women and minorities.

Two pronged approach to address:

- National governments make diversity a priority. The resulting social policies give women (and diverse peoples) time and opportunity to have a voice.
- All businesses support diversity in everything from hiring policies to benefits for employees. It starts at the top.

Egon Zehnder's *Global Board Diversity Tracker 2018* reports that corporate boards need a critical mass of 3 women to achieve positive change in the corporation's performance.



Questions?
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