

CSRD Implications on Decarbonization Strategies

How are maritime companies embedding decarbonization in their reporting and strategic steering?



26 March 2024

ESRS E1 sets clear requirements for companies on how to structure their climaterelated efforts

Governance and strategy

- DR related to ESRS 2 GOV-3 Integration of sustainability-related performance in incentive schemes
- E1-1 Transition plan for climate change mitigation
- DR related to ESRS 2 SBM-3 Material impacts, risks and opportunities and their interaction with strategy and business model

Impact, risk and opportunity management

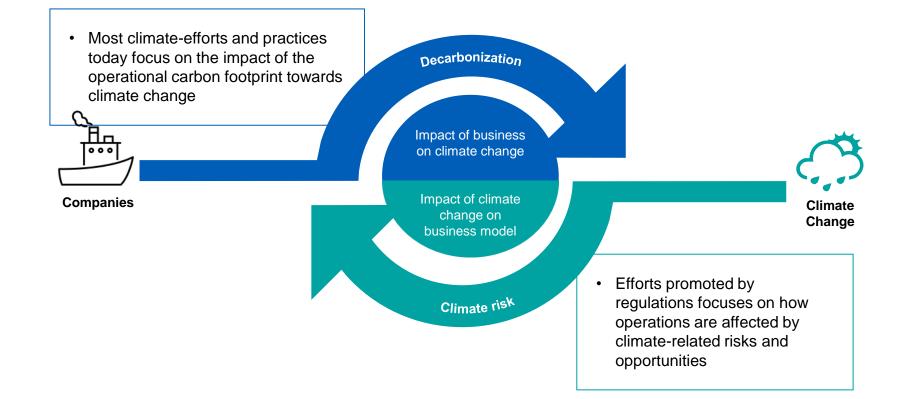
- DR related to ESRS 2 IRO-1 Description of the processes to identify and assess material climate-related impacts, risks and opportunities
- E1-2 Policies related to climate change mitigation and adaptation
- E1-3 Actions and resources in relation to climate change policies

Metrics and targets

- E1-4 Targets related to climate change mitigation and adaptation
- E1-5 Energy consumption and mix
- E1-6 Gross Scopes 1, 2, 3 and Total GHG emissions
- E1-7 GHG removals and GHG mitigation projects financed through carbon credits
- E1-8 Internal carbon pricing
- E1-9 Anticipated financial effects from material physical and transition risks and potential climate-related opportunities



Companies are required to have a holistic approach that considers both external and internal factors





Add to that, pressure to decarbonize is increasing in the sector



- Paris Agreement 1.5°C reduction pathway
- IMO energy efficiency and carbon intensity schemes; intensity GHG reduction targets
- EU ETS inclusion of maritime sector by 2027
- National systems / regulations differences between nations, with EU leading the way



Business

- Higher energy/regulatory costs to be expected if there is no investment in decarbonization/sustainability
- Access to capital from banks can be constrained without action
- Loss of competitiveness due carbon intensive asset base



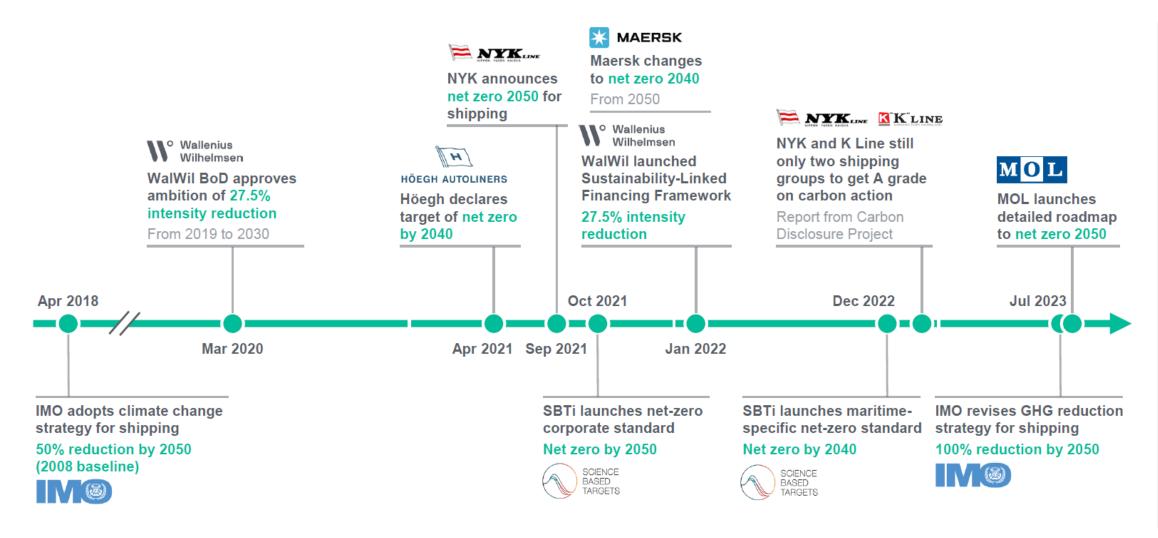
- Clients have emission targets and are demanding their partners and suppliers to take action in line with these targets
- Public pressure continues to increase



- Fast-changing technologies requires investment to remain competitive
- Penalties tomorrow if no action is taken today



IMO and Peers have stated ambitious decarbonization targets



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Going from theory to practice comes with uncertainties



How to implement a decarbonization strategy?



What are the business opportunities arising from decarbonization?



What are the costs incurred?

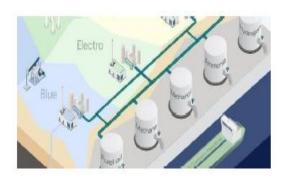


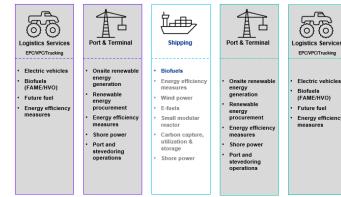
How to enable transformation?



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Shipping companies are working on several initiatives







Secure new energy SOURCES

Build end-to-end reduced carbon services

Develop new technologies

Stakeholder management - define and implement robust governance and reporting regime - roll out new contract clauses to recover abatement costs from customers - work with vendors to reduce scope 3 emissions

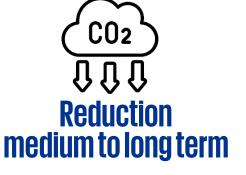




Maritime sector has a range of decarbonization levers to choose from over near- and long-term



- Shore power
- Digital optimization
- Energy monitoring
- Sail efficiency
- Hotel load optimization
- Batteries
- General e`fficiency upgrades (engines, waste heat, etc.)



- Bio fuels
- E-fuels
- Carbon capture, utilization, and storage
- Nuclear power



Offsetting

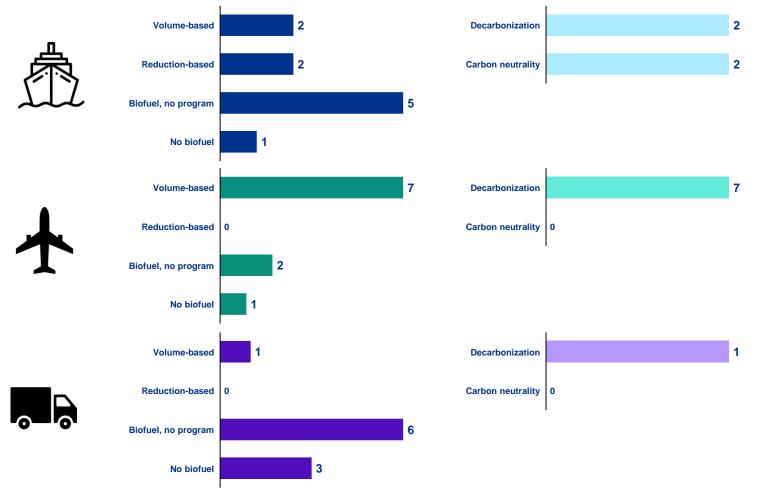
- Part of last-mile GHG strategy
- Up to 10% of residual GHG emissions can be offset on path to **net zero**
- Questions of timing and project type when it comes to offset procurement

Fuel Type	TRL	Availability	\$	Considerations
Bio-fuel		\checkmark	×	 Bio-fuel available in EU Prices are expected to increase due to increased demand
E-fuel	?	?	~	 Availability of e-fuels by 2030/35 for the shipping sector is still uncertain Prices are expected to decrease due to increased supply



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Several logistics biofuel programs are emerging, mainly based on physical reduction and volumetric systems¹



- Among top shipping companies, the majority are currently testing biofuel use in their fleets and have not declared customer program intentions as of yet
- Among top airlines, the majority have nascent SAF programs that offer volume-based decarbonization
- This trend is expected to continue as economic recovery is a critical requirement in these early days (SAF comes at a significant premium)
- Road transport faces a different environment: most of the top companies have much of their operations within jurisdictions that offer biofuel incentives, therefore they leverage these programs rather than market program offerings to customers

Note¹ We examined the top 10 companies in each industry, therefore the data above should not be viewed as comprehensive; Note² CMA CGM, Hapag-Lloyd offer the two carbon neutrality products



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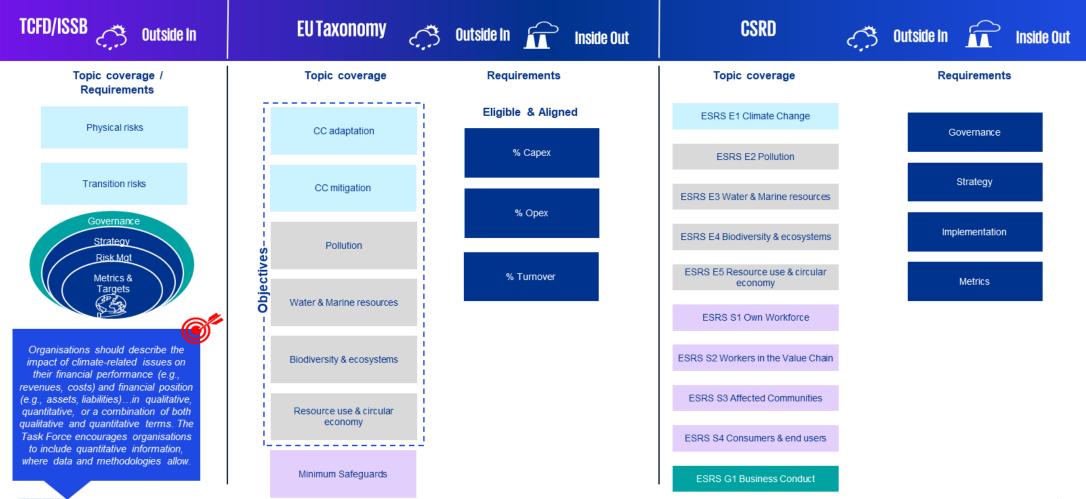
Offsetting less favourable from standards perspective, while insetting lacks clear framework in the immediate term

	SCIENCE BASED TARGETS	GREENHOUSE GAS PROTOCOL	Analysis
CO ₂ Diffsetting	 SBTi companies may not use offset credits for the achievement of near-term targets (2030) SBTi allows for carbon removal offsets in the achievement of net-zero targets (2050), however this is limited to 5-10% 	 The GHG Protocol states 'companies that are unable to meet GHG targets through internal reductions may use offsets generated from sources external to the target boundary' Offset credits must be based on credible accounting standards, and avoid double counting : i.e. the purchase of an offset is the transfer of the ownership of the emission reduction in question 	 Credible offset credits lead to carbon removal rather than avoidance Avoidance credits are trending to be less valuable over the long run Using carbon offset credits for net zero is very limited in nature – only for last-mile GHG Climate neutral claims are losing allure
Insetting	 SBTi is studying the use of insets and working to standardize the definition of insetting projects and establish a clear accounting methodology Currently, SBTi assesses insetting projects on a case-by-case basis during the validation process and reserves the right to not approve their use It is likely that SBTi will follow the forthcoming guidance by the GHG Protocol 	 The GHG Protocol is working on a definition for insetting In a draft guidance, the GHG Protocol states 'companies shall avoid double counting between insets and the scope 3 inventory (e.g. by accounting for the impact of a value chain activity through scope 3 inventory accounting rather than through crediting)' Insetting is likely to be linked to avoided emissions rather than a crediting mechanism 	 As of today, there are credibility concerns as there is no clear accounting methodology Claim of avoided emissions within a Scope 3 category is likely to emerge as a credible option Early signals that insetting credits will not be accepted, therefore direct physical reductions may be safer alternative



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The outside-in perspective, climate risks & opportunities assessment, is required to provide certainty to investors



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Climate risks & opportunities assessment is a phased process to identify vulnerabilities and develop mitigation strategies



Process KPMG followed with Wallenius Wilhelmsen



Case study - Managing climate-related events will be focus area to mitigate financial impact of climate change

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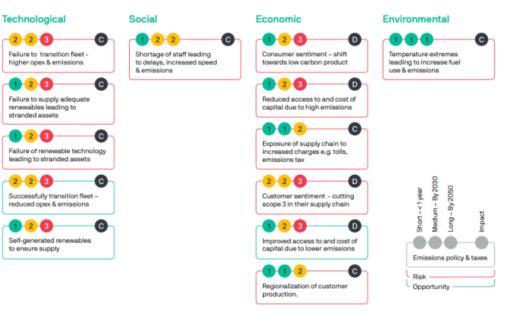
to

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Overview - Physical Risk

Area	Sub-category	Description	Short <= 1.)	Mediu by 20	Long by 20	Impac
	Chronic & Acute	Port Flooding	2	2	3	C
	Acute	Business Interruption/ days down due to weather events	1	1	3	С
		Increased insurance costs due to increased abnormal weather	1	1	3	С
		Increased weather-related accidents	2	2	2	D
Physical		Heat stress on vessel crews and production workers	2	2	2	D
훕		Increased weather-related damage to infrastructure, cargo and equipment	1	1	2	С
		Variation of speed to make up time lost due to abnormal weather	1	1	2	С
		Increased safety requirements due to increased abnormal weather	0	1	2	D
		Increased traffic interruption due to increased abnormal weather	1	1	2	С

Overview – Transition Risk

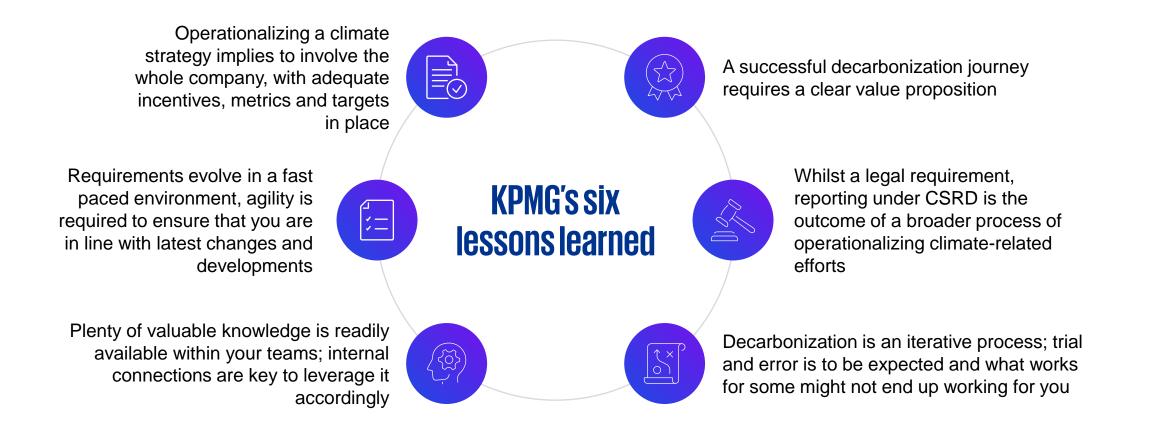


Explanation

Impact	С	Continuation of the use of resources	D	Dependency on the use of resources
Critical	4	Impossible, very costly or unavailable in the short term	4	Strong adverse reaction currently or very likely in the future
Significant	3	Possible, but costly in the short term, very costly or lacking in the medium term, impossible in the long term	3	Adverse reaction currently, strong adverse reaction likely in the future
Important	2	Possible in the short term, costly in the medium term, very costly in the long term	2	Negative reaction currently, adverse reaction likely in the future
Informative	1	Possible in the short, medium and log term	1	Signs of negative reaction currently in the future
Minimal	0	Without consequence in the short, medium and log term	0	Neutral / no reaction currently and likely in the future

Source: Wallenius Wilhelmsen Sustainability Investor Presentation (walleniuswilhelmsen.com)

KPMG's six lessons learned





Questions?



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