

# 5M. Cargo demand dynamics

## Purpose



- Examine expected growth and development, trade patterns, and the cargo value chain
- Assess the cargo's **sensitivity to changes in shipping/transportation costs** over time, including share of shipping as part of overall product cost and emissions.
- **List possible alternatives** of transporting the cargo and identify **competing routes and transportation modes**.
- Evaluate the cargo owners' and end-consumers' willingness to pay.
- Identify **mechanisms and regulations** that likely impact the cargo owners' and/or end consumers' **willingness to pay**.
- Perform just and equitable assessment to identify communities, workers and ecosystems potentially affected by the shift in cargo transportation mode and/or demand dynamics.

## Key questions



- What are the **trade patterns** for the cargo types in the specific green corridor? Who **owns the cargo**?
- What is the **value of the cargo** and what is the cost of the green transportation per cargo unit?
- What are the **alternative** routes outside the green corridor or alternative means of transportation?
- How much of the incremental cost can be covered by **cargo owners** and through the **full customer chain**?
- Which **levers** will have an expected positive or negative impact on the cargo owners' and/or end consumers' willingness to pay?
- How might the use of alternative fuels affect the cargo beyond emissions?
- Are there any **socio-economic opportunities and risks**, and how can they be maximized/minimized, respectively?

## Importance



- While work on fuel, ports and vessels aggregates the total cost of the green corridor, the cargo assessment addresses the **options of closing the cost gap with the price on cargo**.
- Within the supply chain, one central dimension is the **willingness of cargo owners and end-customers** to pay for green transportation.



# Workstream gap analysis – Cargo demand dynamics

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1							Project Vision										Header Definitions		
2																	<div><div>Elements</div><div>[see workstream-specific spreadsheets for a list of elements]</div><div>Main Gaps</div><div>[describe gap]</div><div>Solution</div><div>[describe solution to close gap, i.e. demonstrators, SOPs, studies, etc.]</div><div>Time</div><div>[timeframe to close gap]</div><div>Cost to close gap</div><div>[demonstrators, pilots, etc.] [\$M]</div><div>Investments</div><div>[Capex/Opex to reach project scope]</div><div>Dependencies</div><div>[describe pre-requisites and timing/sequence for solution]</div><div>Gap factor</div><div>[rate the gap based on the means required to close gap] [traffic light]</div><div>Criticality</div><div>[to ensure operation] [traffic light]</div></div>		
3																			
4							Workstream Scope / Targets												
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6																			
7																			
8																			
9	Workstream	Topic	Feasibility Assessment	Elements	Description	Main Gaps	Solution/ Mitigating Actions	Timing	Cost to Close Gap	Investments	Dependencies/ Commitments	Gap Factor	Criticalit y						
10			Technical  Specify main gaps to target state (scope) and mitigating actions. What are the key technical challenges and mitigating actions? How are they expected to evolve over time? How does this align with the target state time line?																
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15	Regulatory  Specify main gaps to target state (scope) and mitigating actions. What are the key regulatory challenges and mitigating actions? How are they expected to evolve over time?																		
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Throughout the Feasibility assessment, fill the table with insights on **technical and regulatory feasibility**<sup>6</sup> – specifically, use this table to highlight **gaps** and ways to close them

Legend and definitions



6. Cost assessment is covered under the residual cost gap analysis methodology