



GREEN  
CLIMATE  
FUND

# GCF REGIONAL DIALOGUE

with THE CARIBBEAN

**Saint Kitts and Nevis**  
17–20 March 2025



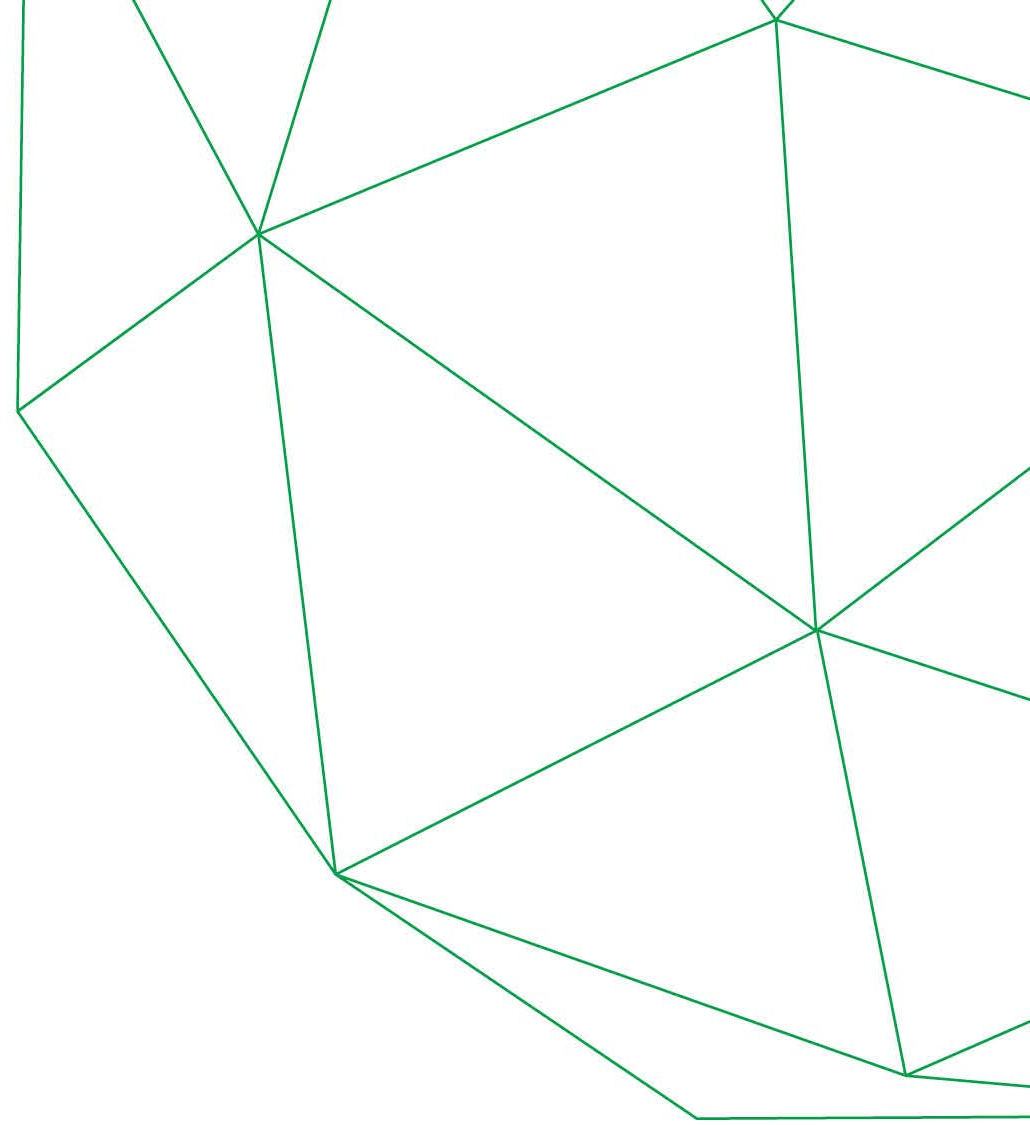


GREEN  
CLIMATE  
FUND

GCF REGIONAL DIALOGUE  
with THE CARIBBEAN

# Maritime Decarbonization in Pacific and SIDS – lessons learnt and direction

**Saint Kitts and Nevis**  
17–20 March 2025



# The Maritime Sector in Climate Change



Nearly **3%**

of total greenhouse gas emissions comes from the global maritime sector contributes nearly

around **47%**

of Fiji's total emissions come from Fiji's land and maritime transport sector contribute

**the maritime sector**

was excluded from UNFCCC negotiations

Pacific islands have both:  
1. high socio-economic reliance on maritime sector  
and  
2. a high vulnerability to climate change impacts

**40%**  
reductions of domestic maritime shipping emissions stated in Fiji's NDC Target 4

# IMO role and the Pacific's response



IMO's 2023 GHG Strategy sets

- a **Vision** for international shipping,
- emission reduction **Targets**,
- **Guiding Principles**, and
- potential mid- and long-term **Measures** for States

IMO has proposed an international maritime sector Net zero target by 2050  
and is leading negotiations for implementing global measures to meet targets

IMO acknowledges the challenges Pacific faces for low carbon shipping

## Consequences for the Pacific

1. Capturing a fair share of revenues
2. Ambition in transforming shipping value chains to meet Net Zero Target

→ Pacific Blue Shipping Partnership is an initiative of Pacific countries – led by Fiji, Marshall Islands, Kiribati, Tuvalu, Solomon Islands, Tonga, Vanuatu, Samoa, Cook Islands and Palau

## “Thin blue lines”

The Pacific’s maritime challenges are unique, yet the Pacific Blue Shipping Partnership offers a platform for problem-solving



### Solutions

Alternate fuels have not reached maturity on price/fuel / supply/ regulations

Low Carbon Maritime Technologies exist but expensive

### Challenges

Heavy dependance on imported fossil fuels at the highest prices

hardest region to transition to alternative energy

Most vulnerable in the world to natural disaster

Longest thinnest routes to service

### GCF’s fact finding:

1. Is there a Strategic Case for climate action ?
2. Is there a Technical Case of contestable markets and feasible solutions ?
3. Is there a socio-economic case for climate action?
4. Is there a financial case for GCF’s concessional & catalytic climate financing instruments?
5. Is there a management case for achieving long lasting sustainable impact?

# Strategic Case for climate action

## Transforming problem statements to opportunities



### Problem Statements

1. Rising greenhouse gas emissions **disproportionately intensify climate impacts** on Pacific island countries.

2. Maritime cargo & passenger operations are **vital to Pacific Island economies** but rely on carbon-intensive technologies, perpetuating environmental and economic challenges.

3. **Ageing cargo and passenger fleets** in Pacific Island countries result in unreliable, inefficient, and expensive services, resulting in large government subsidies.

4. **Reliance on imported fossil fuels** makes Pacific Island countries vulnerable to global price fluctuations & supply chain disruptions, driving high, unpredictable operational costs for maritime transport.

5. **Limited financial resources, technical capacity, and high upfront costs** restrict the adoption and scaling of zero-emissions maritime solutions.

### Opportunities

1. Aligning maritime emissions reductions with established policy frameworks to **demonstrate global climate leadership** and foster international collaboration.

2. Creating a **virtuous economic cycle by enabling local businesses** to operate efficiently and trade at a regional scale by delivering reliable, low-carbon socio-economic maritime connectivity and localised energy generation.

3. **Driving new employment opportunities** and developing a globally valuable skillset in zero-emissions technologies and vessel maintenance through a just transition

4. Utilising catalytic financing to overcome initial investment viability gaps, **delivering long run financial and economic benefits, improved balance of trade and improved energy security** which outweigh costs.



# Technical Case - contestable markets?



A complicated market

With much activity

Spread across many categories & sizes of vessels, many functions

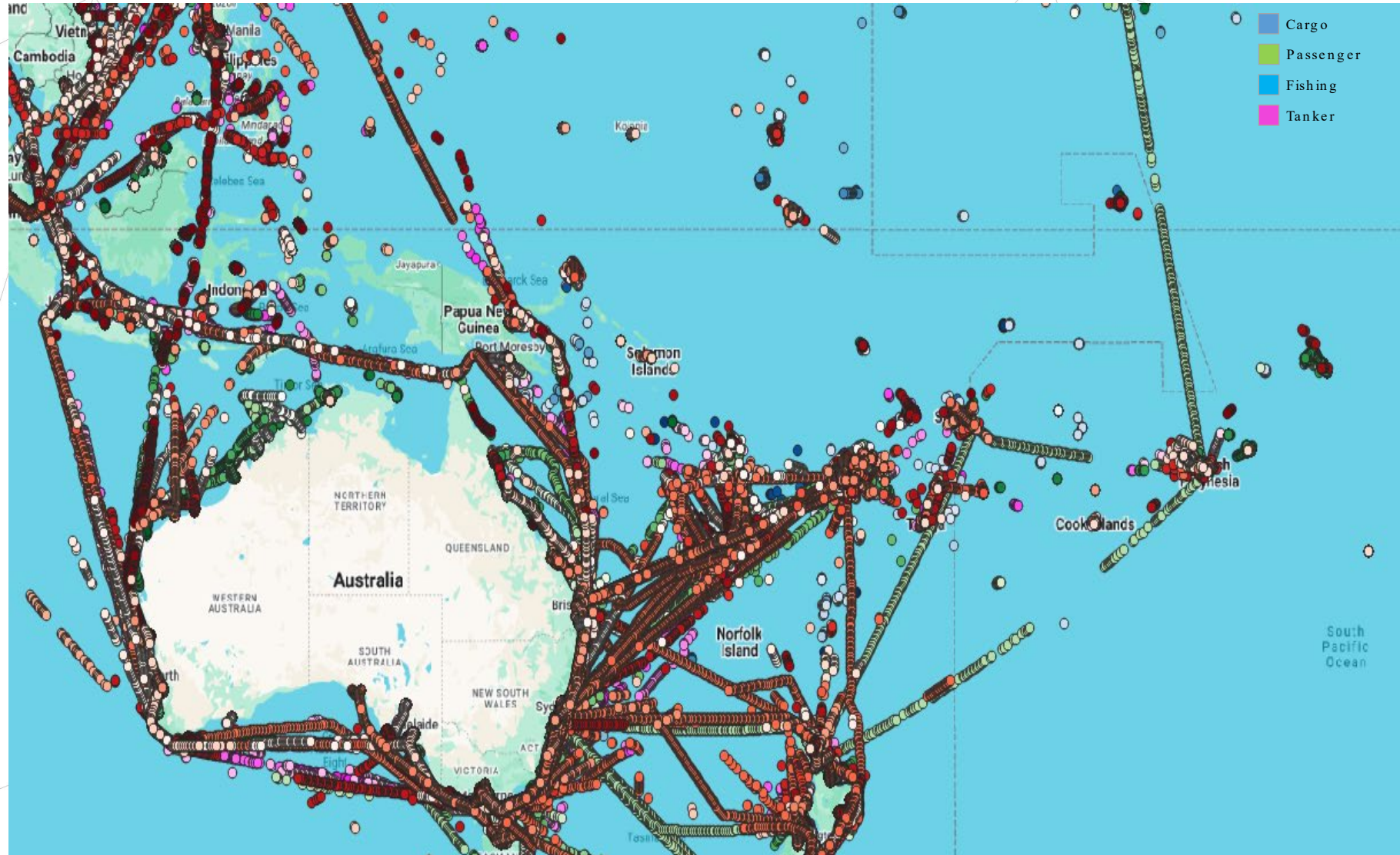
Many routes

Little landside infrastructure

Poor energy security

Poor socio-economic connectivity

Heavily subsidised



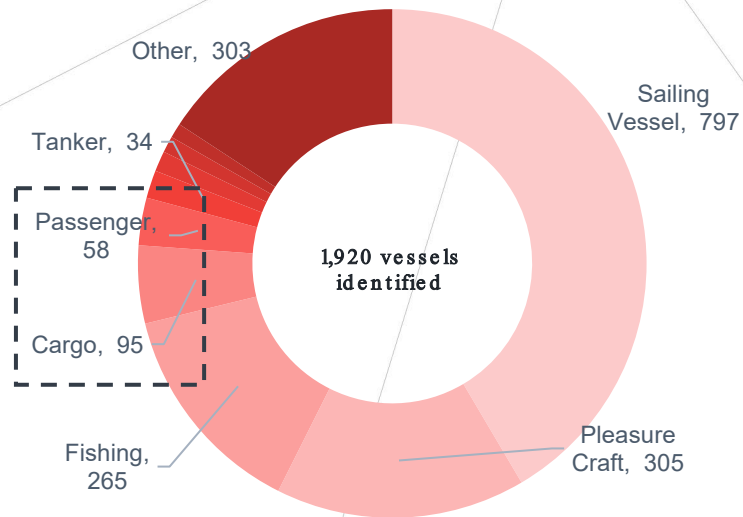
# Technical Case - contestable markets?

Understanding the Total Addressable Market – each island group is unique

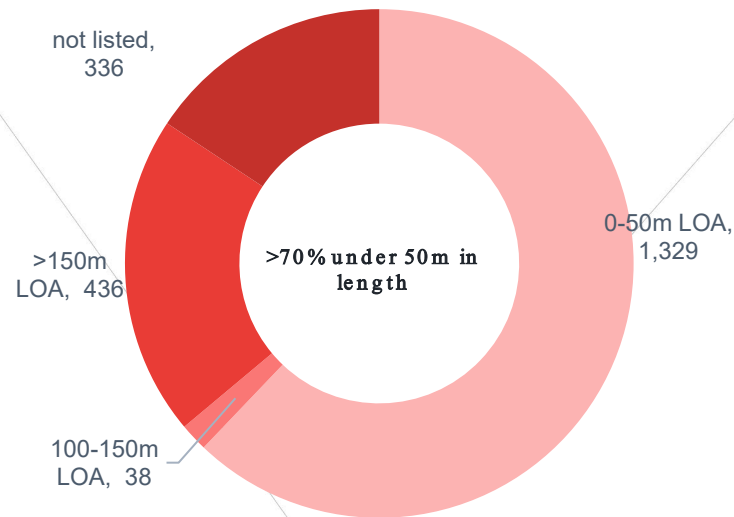


Identified 1,920 active vessels in the Pacific SIDS shipping market, the majority are sailing vessels but 150 are in the passenger and cargo segments

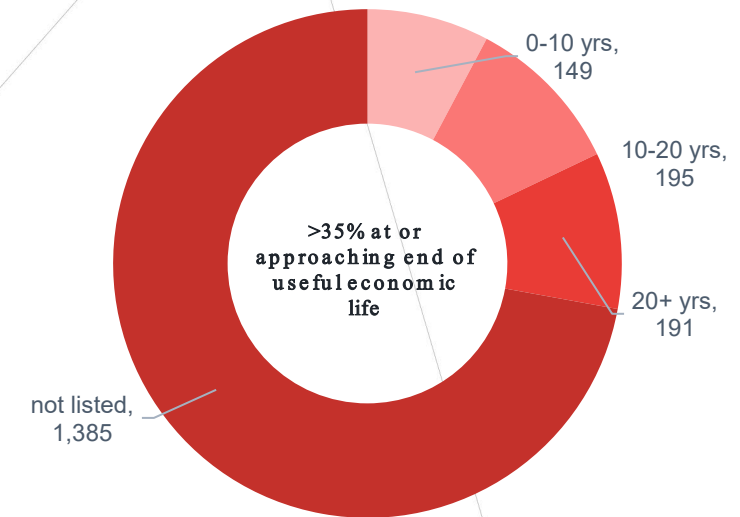
Breakdown by Vessel Purpose



Breakdown by Vessel Length



Breakdown by Vessel Age



## Focus 1 – Purpose

- **Passenger & Cargo Fleets** offer the highest potential economic benefit by unblocking supply chains and ensuring easy movement for local populations



## Focus 2 – Area of Operation

- **Vessels operating primarily inter-island trips** ensure benefits from any investment are realised locally with minimal leakage outside the region



# Technical Case – feasible solutions?

A range of low carbon solutions were appraised, the market appears to have appetite to provide solutions



**A wide range of technical options for low carbon maritime transport are under commercialization:** Bio-Fuels, Hydrogen, Battery Electric Vessels (BEV), Liquid Natural Gas (LNG), Wind Assisted Ship Propulsion (WASP), Solar, etc.

**A wide range of success factors need to be addressed:** Range, Maintenance, Decarbonisation potential, Economic and Financial Impact, Technical maturity, Energy supply chain, Deliverability, Port Infrastructure, System-wide benefits

## MV Copenhagen – Passenger Ferry

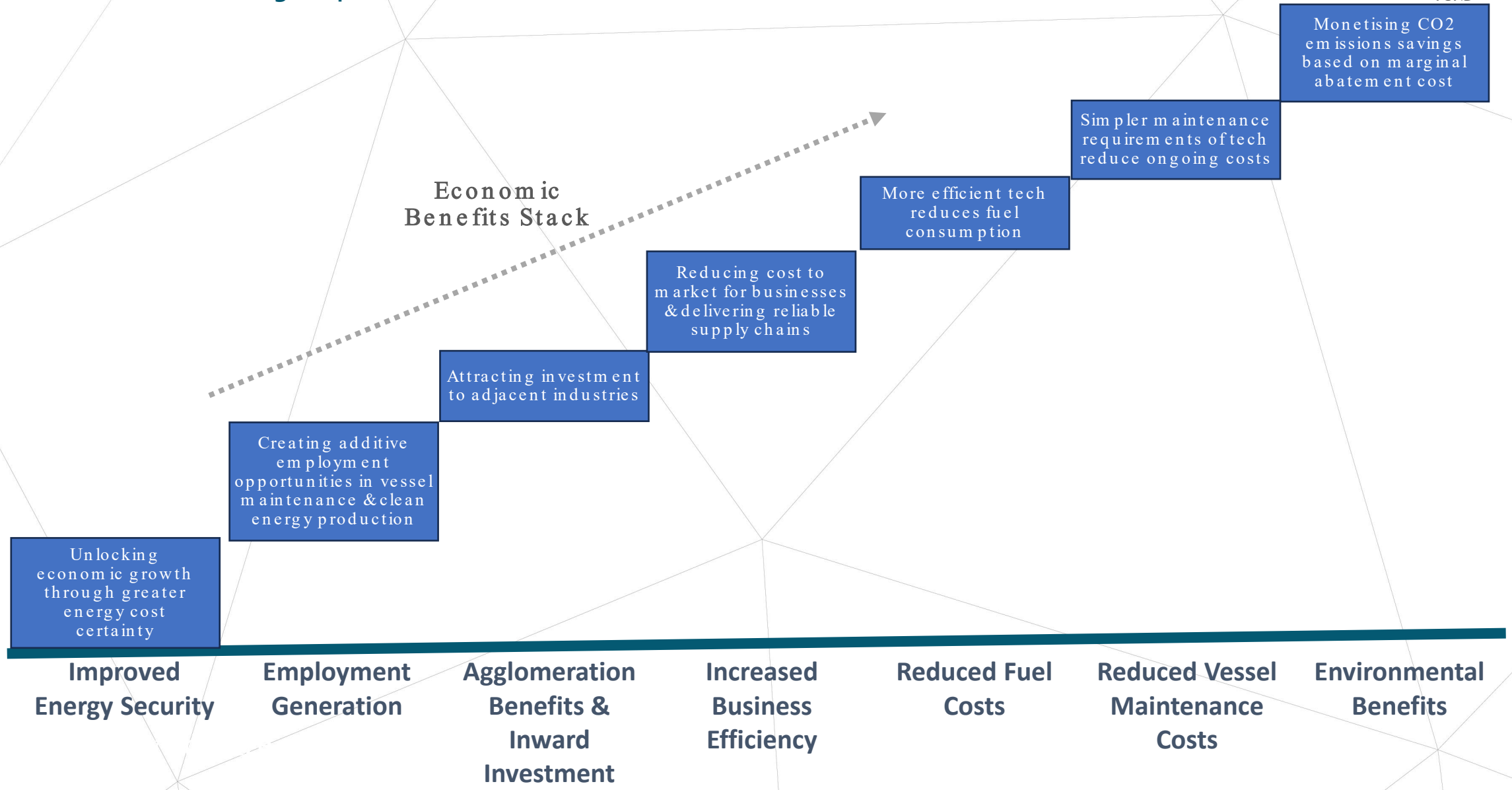


## SV Juren Ae – Small Cargo Vessel



# Socio-Economic Case for climate action




Systemic value-chain based solutions can strengthen livelihoods and give economic resilience to climate change impacts



## Financial Case

the high 'First-Of-A-Kind' risks in implementing low carbon solutions will likely require concessional & catalytic climate financing instruments such as GCF can offer



	<b>Use of Funds</b>	<ul style="list-style-type: none"><li>• Capital investments to acquire vessels, build energy supply chain &amp; upgrade infrastructure</li><li>• Capital investments to build human talent</li><li>• Operation &amp; Maintenance &amp; Asset Renewal</li></ul>
	<b>Source of Financing</b>	<ul style="list-style-type: none"><li>• Vessel Lease Financing</li><li>• Project Financing</li><li>• Concessional &amp; Catalytic Climate Financing</li></ul>
	<b>Source of incomes</b>	<ul style="list-style-type: none"><li>• Commercial revenues</li><li>• Government subsidies</li><li>• Sale of carbon credits</li><li>• Grant contributions</li></ul>

# Management Case

for achieving long lasting sustainable impact will require deep collaborative planning



## Key components to build a bankable business case



### Regional Market Analysis

- Key origin / destinations
- Trades handled
- Ports in use
- Fleet deployment
- Fleet age
- Fleet mileage & engine types
- Fleet owners / operators
- Fleet interactions with cargo owners



### Target Market Identification

- Align investment objectives & parameters with most appropriate segment(s)
- Assess investment scale, timeline, areas of highest influence, \$ per tonne CO<sub>2</sub> abated



### Future Fuels Assessment

- Overview of low / no carbon fleet technology – viability & possible cost curves
- Fuel source supply chains
- Extent of decarbonisation by fuel type
- Mapping of fuel sources to fleet segments
- Landside infrastructure requirements



### Financial Requirement

- Role & reliance on shipping in the community
- Regulatory barriers
- Insurance barriers
- Financing barriers

Next steps will require deep collaboration:

1. Reliable data on fleet characteristics, activities, energy consumption, etc
2. Reliable data on costs of energy & subsidies
3. Define target socio-economic connectivity
4. Define options for Asset Ownership, Operation & Maintenance, Financing Options
5. Etc.

# IMO Negotiations

## Key Takeaways



### **NOW! is the time for engagement**

- w/c 24<sup>th</sup> March is final Technical Working Group Negotiations
- w/c 1<sup>st</sup> April the Marine Environment Protection Committee Meet to agree on amendments



**Ambition** in the scale of mechanism creates space for both the transformation and equitable distribution

- Maritime sector requires a whole of government approach
- Revenue disbursement is critical for ensuring an effective, just, and equitable transition in the maritime value chain



Existing funds provide purpose, governance, synergies, speed and access that IMO can build upon