Marine Technology Global Challenge Launch

WELCOME!
The workshop will start in a moment

The IMO CARES Foundation Project is funded by the Kingdom of Saudi Arabia and is implemented by IMO.
AGENDA

➢ 10:00  Agenda & introduction
➢ Welcome remarks
➢ What is IMO CARES and what is the Global Challenge?
➢ Introducing the MTCCs and regional challenges and opportunities
➢ Next steps and how to get involved
➢ Q & A
➢ 11:00 Conclusion
Zoom Workshop Etiquette

- Remain Muted Until Required
- Limit External Distractions
- Ensure Sufficient Bandwidth
- Utilize the Chat and Q&A
- Be Respectful Be Courteous
- Enjoy the Workshop
IMO CARES GLOBAL CHALLENGE

COORDINATED ACTIONS TO REDUCE EMISSIONS FROM SHIPPING

LAUNCH EVENT – JULY 2023

ANTON RHODES - DEPARTMENT OF PARTNERSHIPS AND PROJECTS (DPP)
THE CARES OBJECTIVE

• Accelerate tech demonstration, diffusion and uptake to achieve maritime decarbonization in developing countries

‘No country is left behind’
IMO CARES: KEY ACTIVITIES

NETWORKING EVENTS

TECHNOLOGY REPORT

GLOBAL CHALLENGE
GLOBAL CHALLENGE: KEY FOCUS

- Technology identification
- Domestic vessels and ports
- Most vulnerable countries (SIDS & LDCs)
THE TIMELINE

1. Identification and announcement of Tech Challenges
   July - Sept

2. Submission of concepts
   Oct - Nov

3. Review and selection of winners
   Dec - Jan
KEY CRITERIA FOR CONCEPTS

- Impact on GHG reduction
- Impact on vessel / ports operational costs
- Cost of technology (in project budget?)
- Cost of installation (in project budget?)
- Installation time (how easy? How hard?)
- Maintenance of tech after installation (how easy? / how hard?)
- Scalability (could the tech be applied to much larger number of vessels / ports?)
GLOBAL CHALLENGE: KEY PARTICIPANTS

Local Stakeholders
Maritime and port authorities & ship operators, MTCCs

Tech Providers
Tech companies, SME’s, R&D Institutions
WHY PARTICIPATE?

The winners will.....

• Receive between US$ 15K - 30k to develop full Technical Proposal
• Work with IMO and local partners
• Global promotion of the technology
• Possibility to open new markets for technology
• Support most climate vulnerable countries
• In-region demonstration of the technology under separate IMO / EC Project (budget allocation of between US$ 500K – US$ 1M)
SUMMARY

• Focus on energy efficiency technology solutions for ports and/or small vessels (under 5,000 gt)

• Focus on Africa and the Caribbean (2 countries per region)

• 2 – 4 winning concepts to be chosen by expert panel

• Funding for development of full proposal

• Funding (under separate IMO project) for the technology demonstration
GMN – The Global Maritime Network
Shipping in the Caribbean Region: Pilot Demonstration Projects Technology Needs & Focus

Vivian Rambarath-Parasram
Director & Head
MTCC Caribbean
**Key Focus Areas**

**Ports**
- R&D and uptake of Low-Carbon Technologies
- Climate Resilient Infrastructure
- Infrastructure for Green Energy Mix
- Emissions Inventory, Data & Monitoring Systems
- Capacity Building & Technology Transfer

**Vessels**
- Addressing Ships Emissions
- Energy Efficient Technology Uptake
- Green Energy Integration
- Data Gaps and Data Sharing
- Capacity Building & Training

**IMO Projects**

**TEST Biofouling**
- Training and Capacity Building (Knowledge and Skills Transfer)
- Needs analysis
- Technology Demonstration (National and Regional)
- Inform decision-makers of Policy/Legal framework on Biofouling Management
- Develop a network of Partnerships within the region

**GMN Phase II**

**IMO CARES**
- Capacity Building
- GHG gaps/barriers
- Maritime Climate Change
- IMO GHG Strategy
- Regional Needs
- Domestic Pilot Projects

**MTCC Projects**

**IMO CARES**
- Coordinated Actions to Reduce Emissions from Shipping

**GMN**
- The Global MTCC Network
- A global network for energy-efficient maritime transport

**TEST Biofouling**
- A network of environmentally-focused technologies

**GHG SMART**
- A program for zero and low-emission innovation
Sample Size - 205 Vessels (Jan to Jun 2023)

Vessels’ Profiles - Under 400 GT

Age of Vessels
- Above 30
- 26 to 30
- 21 to 25
- 16 to 20
- 11 to 15
- 6 to 10
- 0 to 5

Type of Vessels
- Other
- Utility Vessel
- Tug
- Platform Supply Vessel
- Passenger Ship
- Fishing Vessel
- Crew/Supply Vessel

Flag State
- 46% Flagged in Caribbean
- 54% Flagged outside Caribbean

Flagged in Caribbean
Flagged outside Caribbean
Vessels’ Profiles - 400 GT to 5000 GT

Age of Vessels
- Above 30
- 26 to 30
- 21 to 25
- 16 to 20
- 11 to 15
- 6 to 10
- 0 to 5

No. of Vessels

Flag State

Flagged in Caribbean

Flagged outside Caribbean

Sample Size - 285 Vessels (Jan to Jun 2023)

Type of Vessels
- Other
- Tug
- Dredger
- Ro-Ro Cargo Ship
- Products Tanker
- Platform Supply Ship
- Passenger/Ro-Ro Ship (Vehicles)
- Passenger/Cruise
- Offshore Support Vessel
- LPG Tanker
- General Cargo Ship
- Deck Cargo Ship
- Crew/Supply Vessel
- Container Ship (Fully Cellular)
- Chemical/Products Tanker
- Cement Carrier
- Anchor Handling Tug Supply
Factors to Consider for Technology Uptake & Demonstration

- **Minimal Retrofit**
  - Older Fleet
  - Integration with Existing Systems

- **Environmental Impact**
  - Current Fleet uses Diesel
  - Powered by Internal Combustion Engine

- **Space & Efficiency**
  - Small Ships
  - Compact & Size Efficient Tech
  - Impact to Cargo Space

- **Power Consumption**
  - Limited Power Generation Capacity of Ships
  - Avoid Strain on Ship’s System

- **Reliability & Durability**
  - Weather Conditions
  - Potential Impact to Ships

- **Safety & Compliance**
  - Safety First
  - Regulatory Requirements & Guidelines

- **Marketability & Bankability**
  - Scale Up
  - Regional Distribution
  - Funding Alignment

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NEXT STEPS

- **Sept**: Launch of CARES website
- **Sept**: Technical details released
- **11 Oct**: Q & A event (online)
- **12 Oct - Nov**: Submission of concepts
- **Jan**: Winning concepts announced
WEBSITE UPDATE

Updates on the Technology Report
Updates on our networking events
Updates on the Global Challenge
Register to join our Knowledge Network
Register to join CARES events
Updates on the Technology Report
Submission of concepts
A centre for info on tech deployment in developing regions
Links to other initiatives and projects