The 'CARES Connects' networking event, organized by the International Maritime Organization (IMO) CARES Project, took place on September 27, 2023, at the Mayfair Suite of Sofitel London St James, 6 Waterloo Place, London.

The event provided a platform for exploring technology solutions and connecting key stakeholders for advancing decarbonization efforts within the maritime sector of developing countries, emphasizing the importance of cooperation in achieving sustainability goals.

**EVENT STRUCTURE AND OBJECTIVES:**

The event featured roundtable discussions between donors, beneficiary countries, and technology providers, with each discussion moderated by IMO representatives. The objectives were:

- To identify specific decarbonization project ideas applicable to ports and national shipping industries in developing countries.
- To encourage collaboration and partnerships among stakeholders.
- To help identify suitable energy-efficient technologies for deployment in developing regions.
- To promote sustainable maritime decarbonization.
KEY DISCUSSION POINTS:

DONORS:

- Emphasized the importance of capacity building in developing countries and the development of national action plans.
- Stressed the need for bankable pilot projects and strong collaboration between the north and south.
- Emphasized their commitment to supporting Small Island Developing States (SIDS) and Least Developed Countries (LDCs) in implementing the 2023 IMO GHG Strategy.

BENEFICIARY COUNTRIES:

- Explained the specific challenges they face in their countries around maritime decarbonization and what are their priorities and needs.
- Many countries indicated the need for alternative energy sources for their ports.
- The application of shore to ship power is being considered by some countries.
- Concerns about the environmental performance and safety of domestic fleets was raised.
- A country highlighted ongoing port infrastructure upgrades and the development of a new LNG port.
- Another country emphasized its potential role as an alternative fuels hub and provided insights into ongoing projects.
- In general, beneficiary countries expressed a keen interest in exploring shore power solutions, aligning with country level GHG targets and decarbonizing their domestic fleets.
- Countries were particularly interested in trialling alternative fuels on domestic vessels and applying other energy saving technologies that can have immediate impact to reduce costs.
TECHNOLOGY PROVIDERS:

- During the discussions, technology providers introduced their energy saving products and discussed practical questions about how the technology might be applied in different countries.

- The types of technologies discussed can be broadly grouped into the following: alternative fuels, electric propulsion, zero-emission vessels, wind energy, ocean thermal energy, shore power integration, biofouling prevention, data-driven fuel efficiency solutions, ai-enhanced routing, engine efficiency.

- Most technology providers expressed strong interest in partnering with beneficiary countries demonstrating a commitment to advancing sustainable maritime solutions.

- Technology providers emphasized their capabilities in tackling intricate technical challenges associated with decarbonization efforts, underscoring their expertise in developing and implementing innovative technologies.

- During the discussions, technology providers introduced various solutions that generated significant interest among participants. Throughout the event, technology providers conveyed their willingness to participate in pilot projects, addressing a range of technical aspects related to decarbonization. Their emphasis on the importance of public-private partnerships reiterated their commitment to fostering effective collaboration.

- In summary, technology providers not only displayed a strong desire to collaborate but also showcased various solutions and technologies that hold promise for sustainable maritime decarbonization. Their recognition of the significance of partnerships reaffirmed their dedication to making substantial progress in this domain.

- In addition, many saw the benefit of trialling their technologies on smaller vessels and at smaller ports as a first step to much wider / international application.
DISCUSSION HIGHLIGHTS:

- Collaboration opportunities were identified for port supply vessels, fishing vessels, superyachts, cruise ships, ferries, and shore power.

- Prioritization of Short-Term Needs: Participants recognized the importance of addressing immediate challenges in the maritime sector. Short-term needs, such as finding solutions for current emissions and efficiency issues, were given priority during discussions. This reflects the practical approach of focusing on immediate improvements while planning for more extensive, long-term solutions.

- Balancing Onshore and Onboard Solutions: There was a consensus among participants not to overburden SIDS and LDCs with onshore-based decarbonization solutions. Instead, a balanced approach was emphasized, which includes considering solutions that can be implemented directly onboard vessels. This approach acknowledges the limited resources, land availability, and services in some developing countries and seeks to distribute the decarbonization efforts between onshore and onboard options for a more feasible and sustainable approach.

- The importance of being a first mover in the energy transition and addressing safety and environmental concerns was highlighted.

- There was broad consensus amongst participants of the need to trial energy-saving technologies in developing countries, to help raise awareness, unlock investment, save operational costs and drive GHG reduction targets.

- Participants recognized the special needs of SIDS and LDCs and the importance of addressing their immediate challenges. This reflects the practical approach of focusing on immediate improvements on existing, aging vessels while planning for more extensive, long-term solutions.
Several promising opportunities for decarbonization solutions were discussed during the event, generating significant interest among participants. These have been noted by the secretariat and will be prioritised for project development.

Several notable innovations for enhanced vessel performance, generated significant attention due to the potential to improve the efficiency and environmental performance of maritime operations and large-scale uptake. Further bilateral discussions may explore these applications and benefits in the context of various projects.

Another technology firm expressed its readiness to collaborate with interested parties on projects related to documenting improved energy efficiency. This collaboration could potentially lead to valuable insights and advancements in energy-efficient maritime practices.

Another technology provider offered potential solutions for clean energy in ports and cargo handling, drawing considerable interest from the beneficiary countries and donors. The potential to reduce emissions and enhance sustainability in these in the context of developing countries is a promising development.

Many technology companies saw the benefit of trialling their technologies on smaller vessels and at smaller ports as a first step to much wider/international application on larger vessels.
CHALLENGES AND CONSTRAINTS:

- **Lack of Awareness and Education:** One prevalent challenge noted during the discussions was the limited awareness and education about new technologies within beneficiary countries. Many participants stressed the importance of addressing this knowledge gap, as it can hinder the adoption of innovative solutions. Efforts in education and awareness-building are considered critical to facilitate technology uptake and promote sustainable practices.

- **Geographical Space Limitations:** SIDS face unique geographical constraints. Their limited land area can pose challenges for the establishment of land-based power generation solutions, such as large-scale renewable energy installations. Finding creative and space-efficient ways to harness clean energy is essential to overcoming this hurdle.

- **Financial Constraints:** Financial resources for implementing sustainable initiatives remain a significant concern. Developing countries often have competing priorities for government investment, such as addressing poverty, healthcare, and infrastructure. Balancing the allocation of resources to address immediate socio-economic needs with long-term sustainability goals poses a complex challenge.

- **Transitioning from Low-Quality Fuels:** A fundamental challenge in decarbonization efforts involves transitioning away from low-quality and environmentally harmful fuels. These fuels may have high sulphur content and contribute to increased GHG emissions. Shifting to cleaner and more sustainable energy sources is necessary but often comes with cost implications and logistical challenges.

- **Zero Emissions Goals:** Striving for zero emissions in maritime activities is a commendable but challenging long-term objective. Achieving this goal necessitates the development and adoption of innovative technologies and practices across the maritime sector. Such ambitious targets require comprehensive strategies, including regulatory frameworks and technological advancements, which can be resource-intensive.

- **Infrastructure Upgrades:** Outdated infrastructure and vessels within beneficiary countries presents a multifaceted challenge. Upgrading ports, terminals, and cargo handling equipment to meet modern environmental and efficiency standards can be costly and complex. It requires careful planning, investment, and coordination to ensure that infrastructure aligns with sustainability goals.

- **Logistics Challenges for Technology Companies:** While technology providers expressed their commitment to pilot projects, some noted the difficulties in servicing such projects due to logistical challenges in reaching SIDS and LDCs.
CONCLUSION:

- The CARES Connects networking event served as an important platform for fostering meaningful dialogues among diverse stakeholders, including donors, beneficiary countries, and technology providers. The event not only facilitated these discussions but also yielded valuable insights and potential collaborations that hold promise for future decarbonization initiatives.
- During the event, the participants worked together to identify developing country challenges, suitable technology solutions and potential partnerships.
- Throughout the event, a clear consensus emerged on the pressing need for more pilot demonstrations to showcase the effectiveness of available technologies and to help unlock much greater investments for maritime decarbonisation.
- One key takeaway from the event is the vital role of education and awareness-building in promoting the adoption of new technologies and sustainable practices. Bridging the knowledge gap within beneficiary countries is essential to ensure the successful implementation of innovative solutions. This entails equipping stakeholders with the necessary information and insights to make informed decisions and embrace sustainable maritime practices.
- Collaboration emerged as a central theme during the discussions. The event highlighted the significance of partnerships between technology providers, governments, and beneficiary countries. Such collaborations can harness collective expertise, resources, and commitment to drive impactful change in the maritime industry. These partnerships should be nurtured and leveraged to their full potential.
- Additionally, regulatory support was acknowledged as a critical element in advancing maritime decarbonization efforts. Governments and international bodies play a pivotal role in creating a conducive regulatory environment that encourages the adoption of clean technologies and the reduction of emissions. It is imperative that regulatory frameworks are developed and refined to support sustainable practices in the maritime sector.
- It is worth noting that all discussions conducted during the event adhered to the Chatham House Rule, which encourages open and candid dialogue while respecting the confidentiality of the participants.
- In conclusion, CARES Connects served as an important catalyst for promoting collaboration and the identification of technology solutions to support developing countries.
• For technology providers, CARES Connects provided an opportunity to promote their technologies to countries and donors who are interested to trial energy saving solutions.
• For donor organizations, the event was an opportunity to understand what are the decarbonization solutions that might be trialled in SIDS and LDCs and be eligible for donor support.
• And for the recipient countries, it was an opportunity to understand what technologies might be most applicable for their shipping sector.
• And for all participants the event provided an opportunity to build connections and establish new partnerships.
• Finally, it was suggested recurring CARES Connect meetings are organised in different regions. This approach can foster broader stakeholder engagement and help identify regional differences and preferences in decarbonization projects. By holding regular events, IMO CARES can adapt its strategies to address the evolving needs of developing countries and further enhance collaboration and sustainable maritime solutions.
• Looking ahead, IMO will use the outcomes from the discussion to develop concrete ideas for project concepts, help build partnerships, and ultimately, we will use the output to help mobilize more funding for technology demonstrations in developing countries.

• In the immediate future, the technology companies which participated are invited to be part of the IMO CARES Global Challenge. This is a competition that will identify decarbonization technologies for demonstration in Africa and the Caribbean.

• For those companies interested to participate, the winners will receive between US$ 15K - 30k to develop full Technical Proposals, promote their technology globally and work closely with IMO and local partners. It is also intended that the competition will link to an IMO implemented and European Commission funded project, where the chosen technology will be piloted in-region (with a budget allocation of between US$ 500K – US$ 1M per pilot). More details on the Global Challenge will be shared with all participants in late October 2023.