

Progressing Maritime Decarbonisation in the Caribbean Region

GMN Phase II: Regional Workshop

Workshop Completion Report

20&21
FEBRUARY
2025

Advancing maritime decarbonisation technologies in the Caribbean, with a focus on sustainable financing and empowering women to build a cleaner, more inclusive future.



MTCC CARIBBEAN
Maritime Technology Cooperation Centre



GMN | The Global
MTCC Network
A global network for energy-efficient shipping



THE UNIVERSITY OF TRINIDAD AND TOBAGO



Global
Gateway



This project is financed by the
European Union
and implemented by the
International Maritime Organization

Acknowledgements

This document was produced with the financial assistance of the European Union (EU). The contents of this publication are the sole responsibility of The University of Trinidad and Tobago (UTT) and can in no way be taken to reflect the views of the European Union and the International Maritime Organisation (IMO).

**

Preparation of MTCC Caribbean's Progressing Maritime Decarbonisation in the Caribbean Region: Workshop Completion Report was coordinated by Mr. Nathanael Davis. Contributors were Mr. Stephan Nanan, Mr. Michael Razack and Ms. Suzette Balkaran.

**

This document was edited by Mrs. Vivian Rambarath-Parasram. Thanks, are also due to the Project Coordinating Unit (PCU) for the Global MTCC Network (GMN) Phase II Project for reviewing the document in full.

**

Unless otherwise stated, the information in this document is protected under international copyright laws. The document includes texts, images, and logos, and is the Intellectual Property of UTT. Nothing contained herein shall be construed to grant the Receiving Party any license under any intellectual property right of UTT.

**

This document shall not be distributed, modified, displayed, published or reproduced in whole or in part without the written permission of UTT. The IMO and the European Union have the right to use, free of charge, any results of the Project, including the reports and other documents relating to it, which are subject to industrial or intellectual property rights. Any use made of this document must be for non-commercial research purposes or private study purposes only.

**

This document should be cited as follows: Rambarath-Parasram, V., Davis, N. Razack, M., Nanan, S., Balkaran, S. (2025). Progressing Maritime Decarbonisation in the Caribbean Region: Workshop Completion Report. Chaguaramas, Trinidad: MTCC Caribbean, The University of Trinidad and Tobago.

Contents

Regional Workshop - Executive Summary	3
1 Workshop Preparation	4
1.1 Workshop Agenda	4
2 Visibility Activities	5
2.1 Workshop Logistics	7
2.1.1 Workshop Participation	7
3 Webinar Programme	9
3.1 Keynote Addresses	10
3.2 Plenary Session 1 – Status of Maritime Decarbonisation in the Caribbean	11
3.2.1 Round Table Discussion: Accelerating the Implementation of Maritime Decarbonisation Initiatives	13
3.3 Breakout Session 1: Identifying Maritime Decarbonisation Priorities in the Caribbean	14
3.4 Plenary Session 2: Summary of Decarbonisation Strategies in the Caribbean	16
3.5 Plenary Session 3: Advancing SDG 5 in the Caribbean Maritime Domain	17
3.5.1 Round-Table Discussion: Challenges and Opportunities for Women in Maritime Decarbonisation	17
3.5.2 Working Group Session	20
3.6 Plenary Session 4: Financing Maritime Decarbonisation Initiatives and SIDS	21
3.6.1 Open Discussion: Accessing Financing	22
3.7 Plenary Session 5: Public and Private Partnerships and Regional Collaboration for Maritime Decarbonisation	22
3.8 Plenary Session 6: Sustainable Shipping Imperatives for the Caribbean	27
4 Participant Feedback	28
4.1 Workshop Duration and Content	28
4.2 Workshop Delivery and Organization	33
4.3 Suggestions for Improvement and Opportunities for Future Learning	33
5 Challenges	34
6 Looking Ahead	35
7 Annex I- Workshop Agenda	38

Regional Workshop - Executive Summary

MTCC Caribbean, as part of its deliverables under the International Maritime Organisation (IMO) and European Union (EU) Global MTCC Network (GMN) Phase II Project, hosted its 1st Regional Workshop of this phase of the project titled “Progressing Maritime Decarbonisation in the Caribbean Region,” on the 20th and 21st February 2025. The workshop followed the theme of “advancing maritime decarbonisation technologies in the Caribbean, with a focus on financing and empowering women towards building a cleaner, more inclusive future.” The two-day workshop featured a combination of expert presentations, panel discussions, breakout sessions and open forum discussions, with the aim of facilitating knowledge sharing and data gathering. The workshop achieved the following outcomes:

- An overview of maritime decarbonisation initiatives in ports and maritime shipping across the Caribbean,
- Insights on the challenges and opportunities for advancing decarbonisation initiatives in the region,
- Improved understanding of decarbonisation strategies applicable to the needs of the region,
- Identified gaps and opportunities to advance SDG 5 in the Caribbean maritime industry,
- Insights on applicable mechanisms and strategies for accessing financing for maritime decarbonisation initiatives in the region,
- Identification of opportunities for regional collaborative efforts for advancing decarbonisation initiatives,
- Identification of imperatives to advancing maritime decarbonisation initiatives in the Caribbean region.

Hosted at the University of Trinidad and Tobago (UTT) Chaguaramas campus, the workshop facilitated in-person participation of 98 individuals, from 14 countries, with a total of 39 organisations represented. The workshop featured a diverse panel of professionals, with representation from the public and private sector as well as representatives from various International Organisations, inclusive of an International Financial Institution. The participants comprised a mixture of maritime administrations, port authorities, government agencies, fuel/energy providers, logistics firms, NGOs, academia, research and innovation centres, policymakers and other key industry stakeholders.

Click here to watch the [Workshop Recording](#).

1 Workshop Preparation

Preparation for the Regional workshop was undertaken in accordance with the IMO-EU GMN Phase II project IPA agreement. MTCC Caribbean activities for the workshop included, but were not limited to:

1. Development of the workshop Agenda and inviting industry experts;
2. Coordinating and collating presentation material for the workshop;
3. Developing marketing and preparing communications and visibility materials;
4. Logistics for the regional workshop;
5. Conducting and moderating the workshop; and
6. Preparing and submitting a workshop completion report.

1.1 Workshop Agenda

The workshop agenda (see Annex 1) was developed with the aim of facilitating regional dialogue, knowledge-sharing, and collaboration among key maritime stakeholders to advance efforts towards decarbonising the Caribbean's shipping sector.

MTCC Caribbean was tasked with organising an in-person workshop to strengthen capacities of maritime and port authorities, shipping industry and government representatives, for maritime energy efficiency, related technologies and measures. The agenda was developed around the following presentation points:

- Status of Maritime Decarbonisation in the Caribbean Region
- Identifying Maritime Decarbonisation Priorities in the Caribbean
- A Summary of Decarbonisation Strategies in the Region
- Advancing SDG 5 in the Caribbean Maritime Domain
- Financing Maritime Decarbonisation Initiatives and SIDS
- Public and Private Partnerships and Regional Collaboration for Maritime Decarbonisation
- Sustainable Shipping Imperatives for the Caribbean

Panellists and presenters, representing both private and public interests, offered a holistic view of the issues related to maritime decarbonisation.

2 Visibility Activities

Communication and visibility materials for the regional workshop included workshop flyers, email banners, online dissemination of invitations via targeted emails, social media posts, website updates and a Press Release. With the Regional Workshop being an invite-only event, targeted email communication was the main method of publicising the event for in-person attendance. Regional MARADS, as well as key local maritime stakeholders, were targeted for in-person participation. Additionally, the Centre also utilised social media, such as LinkedIn and Facebook, to publicise and promote the workshop's livestream and outcomes. See image I below for examples of the social media posts made by MTCC Caribbean.

Image I - Social Media Posts for the Regional Workshop



All workshop artwork, including flyers, videos and presentation template, were developed, in compliance with the communication guidelines (see images III and IV for a copy of the flyer and presentation slide, respectively). The recording of the workshop is also available on MTCC Caribbean's YouTube page and can be accessed [here](#).

Image II – Regional Workshop Flyer



**Progressing Maritime Decarbonisation
in the Caribbean Region**

GMN Phase II: Regional Workshop

**20&21
FEBRUARY
2025**

Advancing maritime decarbonisation technologies in the Caribbean, with a focus on sustainable financing and empowering women to build a cleaner, more inclusive future.

UTT Chaguaramas Campus,
Trinidad and Tobago

 **MTCC CARIBBEAN**
Maritime Technology Cooperation Centre

 **GMN** | The Global MTCC Network
A global network for energy-efficient shipping

 **UTT**
THE UNIVERSITY OF TRINIDAD AND TOBAGO

 **Global Gateway**

 This project is financed by the European Union and implemented by the International Maritime Organization

Image III - Presentation Slide



• Organisation Logo

Click to add title

Click to add subtitle

 **MTCC CARIBBEAN**
Maritime Technology Cooperation Centre

 **GMN** | The Global MTCC Network
A global network for energy-efficient shipping

 **UTT**
THE UNIVERSITY OF TRINIDAD AND TOBAGO

 **Global Gateway**

 This project is financed by the European Union and implemented by the International Maritime Organization

2.1 Workshop Logistics

Workshop logistics were executed through the joint efforts of MTCC Caribbean and the IMO. Major workshop logistics included securing internal approvals, coordinating venue and service arrangements, managing participant communications, and producing communication and visibility materials. Event logistics can be classified as follows: Event Preparation, Pre-event, Event, and Post-event logistics. These categories were used to break down tasks and develop an event checklist to ensure a smooth-running event.

All services and products procured for the workshop followed the host institution's procurement policies.

2.1.1 Workshop Participation

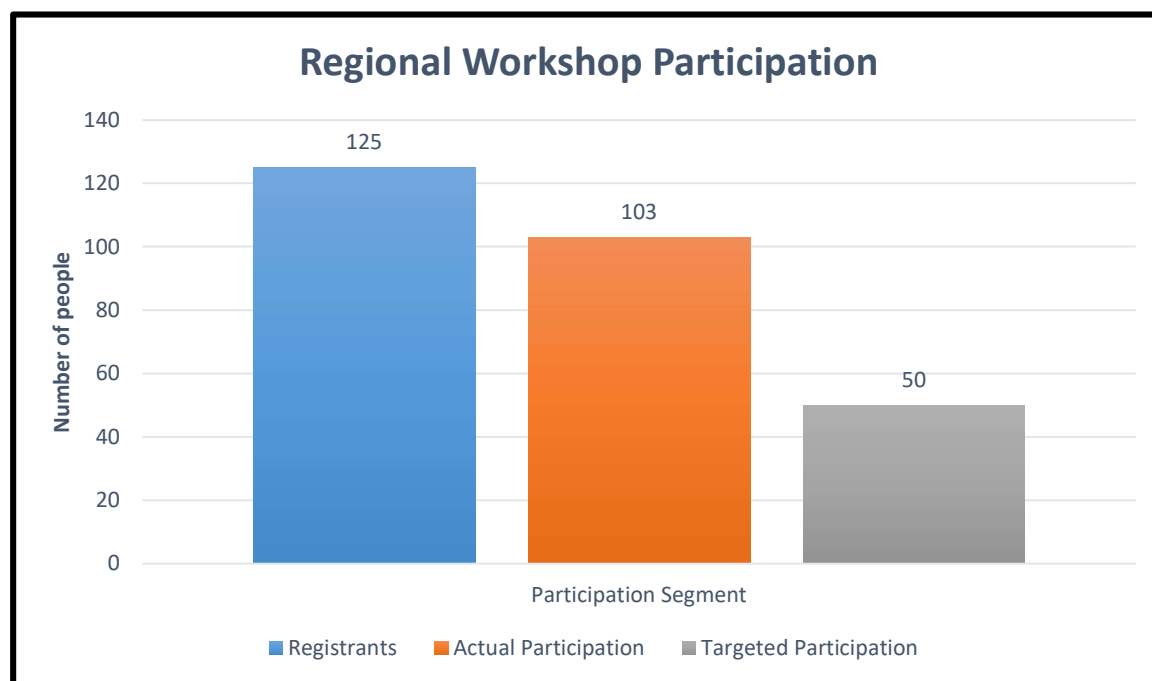
The workshop saw participation of 103 individuals, constituting the following categories of stakeholders:

Stakeholder Distribution

Stakeholder Category	No. of people
Maritime Administrations	22
Government Agencies	7
International Organisations	2
Maritime Companies and Services	7
Maritime Training and Research Institutions	7
Maritime-related NGO	3
Port and Port Authorities	9
Ship Owners/Operators	6
Professional Services	2
Students	15
Organisers and Presenters	21
Other Stakeholders	2

Figure 1 below illustrates the targeted number of participants and the actual number of participants. MTCC Caribbean initially targeted 50 participants; however, due to high levels of interest, invitations were extended to key local stakeholders.

Figure 1 - Breakdown of Webinar Participation

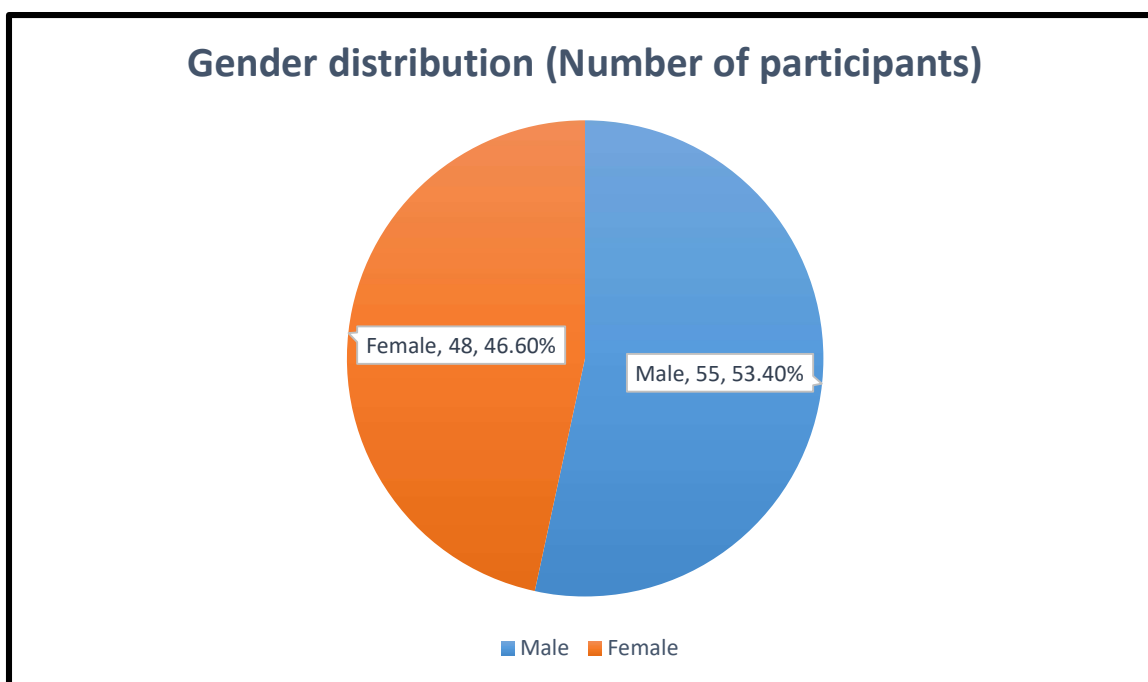


The states within the Caribbean region represented at the workshop included:

- Antigua and Barbuda
- Bahamas
- Barbados
- Belize
- Dominica
- Guyana
- Jamaica
- St. Kitts and Nevis
- St. Lucia
- St. Vincent and the Grenadines
- Suriname
- Trinidad and Tobago

Of those who participated, the workshop saw 48 female participants. This represents 46.6% of the total participants (see Figure II). While not an equal distribution, this statistic still displays the Centre's commitment to our Gender Action Plan and the advancement of SDG 5.

Figure 2: Participants' Gender Distribution



3 Webinar Programme

The workshop constituted 8 sessions, which included an opening ceremony, six plenary sessions and one breakout session. These sessions were spread evenly over the span of the two days, engaging participants from 0900hrs to 1700hrs each day. Throughout the Plenary sessions, the workshop featured:

- 2 working group sessions
- 4 Round Table Discussions
- 2 Polling segments
- Open Discussion forums

The structure of this workshop allowed the MTCC Caribbean team to gather data to inform future workshops, research project proposals, and publications. The following sections of this report provide a brief overview of each session of the workshop, inclusive of key takeaways.

3.1 Keynote Addresses

The Opening Ceremony featured representatives from the Delegation of the European Union to Trinidad and Tobago, the International Maritime Organisation (IMO), the University of Trinidad and Tobago (UTT) and the Ministry of Works and Transport Maritime Services Division (MSD). These representatives brought opening remarks.

H.E. Ambassador Peter Cavendish brought remarks on behalf of the European Union, GMN Phase II project funders. In his remarks, the EU's commitment to maritime decarbonisation was highlighted through the spotlighting of a few initiatives undertaken by the EU. These included the implementation of legislation mandating the use of Shore Power by vessels in European Ports and the provision of grant funding to aid SIDS and LDCs in the uptake of decarbonising technologies.

Representing the IMO, implementing partners of the GMN Phase II project, Captain Sukhjit Singh provided the general aims of the GMN Project, a brief overview of some of the topics to be discussed in the workshop, as well as extended gratitude to the EU for funding the project.

Professor Clement Imbert, Chairman of the Board of Governors of the UTT, expressed gratitude to the EU and the IMO and the role they played in the establishment of the MTCC Caribbean as part of the GMN project. He also spotlighted the alignment of the MTCC Caribbean and the GMN project to the aims of the University, bringing together academia and key industry stakeholders for collaboration and knowledge sharing towards the sustainable development of a sector/industry. President of UTT, Professor Stephen Joseph, also representing the host institution, emphasised UTT's commitment to maritime decarbonisation, supporting research and innovation through its programmes offered under its Centre for Maritime and Ocean Studies, as well as its continued commitment to hosting the MTCC Caribbean and supporting its deliverables under various projects, including the GMN project, IMO CARES and TEST Biofouling project.

Lt Cmdr Ronald Alfred, Director of the Maritime Services Division of Ministry of Works and Transport Maritime Services Division, commended the MTCC Caribbean for its work in advancing the uptake of technology, capacity building, and knowledge sharing, promoting energy efficiency and decarbonisation of the maritime sector both locally and throughout the Caribbean region. Director Alfred also took the opportunity to highlight initiatives being undertaken by the government of Trinidad and Tobago towards the adoption of low-carbon technology in the sector.

The opening ceremony prefaced the theme of the workshop as well as the overall aims of the GMN project. The organisations represented also emphasised their commitment to supporting the region in decarbonising the maritime sector.

3.2 Plenary Session 1 – Status of Maritime Decarbonisation in the Caribbean Region

Plenary Session 1 set the tone for the workshop and guided discussions for the sessions that followed. The session featured six presentations and a round-table discussion, all aimed at achieving the key outcome of providing an overview of maritime decarbonisation initiatives in the region. Presentations focused on technology uptake and ongoing decarbonisation efforts within the Caribbean, offering valuable insights into regional progress. Additionally, the session provided an update on the GMN Phase II project, outlining its major deliverables and objectives. Special emphasis was placed on the long-term establishment of MTCC Caribbean, underscoring its role in driving sustainable maritime development in the region.

Kicking off the session, Mrs. Vivian Rambarath-Parasram, Director and Head of MTCC Caribbean, provided an overview of the centre's key initiatives since its inception. Mrs Rambarath-Parasram highlighted MTCC Caribbean's contributions under projects such as GMN Phase I, TEST Biofouling, and IMO CARES, showcasing the centre's role in technology demonstrations, pilot projects, capacity-building efforts, and the development of technical proposals for the adoption of decarbonisation technologies in two beneficiary organisations within the region.

Additionally, Mrs Rambarath-Parasram spotlighted the centre's recent research efforts funded by the Inter-American Development Bank (IDB), including:

- A Position Paper on the use of the Carbon Intensity Indicator (CII) to assess the energy efficiency of ships operating in the region (CII Study).
- A Regulatory Gaps Analysis to identify key areas for policy and legislative improvement.

The successful completion of Port Greenhouse Gas (GHG) Inventories for three ports in Trinidad and Tobago, providing critical data to inform future decarbonisation strategies, was highlighted.

Mr Stephan Nanan, MTCC Caribbean's Deputy Director and Greenhouse Gas Advisor, provided insights on the critical findings of the CII study. This presentation highlighted the negative implications of the current methodology of calculating a ship's CII, especially when applied to short sea shipping. In addition to presenting these findings, Mr. Nanan's presentation provided participants with an overview of the current negotiations surrounding the CII as the critical element in the short-term measures of the 2023 IMO Strategy on the Reduction of GHG Emissions from Ships. This presentation emphasised the importance of the region's participation and representation in these discussions, ensuring the unique needs of the region are heard and understood as the legislative landscape continues to evolve.

Following this, IMO representative, Captain Sukhjot Singh, and MTCC Caribbean's Project Manager, Mr. Michael Razack, provided an overview of the GMN Phase II project. Captain Singh presented the IMO's perspective, outlining the objectives of GMN Phase II and the key global deliverables expected under the initiative. His presentation framed the broader challenges that the GMN project aims to address in advancing maritime decarbonisation. The presentation also

included a brief overview of IMO's other GHG-related projects that provide support to Member States.

Mr. Razack then focused on MTCC Caribbean's key deliverables within the GMN Phase II project, placing specific emphasis on:

- The Gender Action Plan, aimed at promoting inclusivity and gender mainstreaming in maritime decarbonisation initiatives.
- The establishment of a Regional Industry Alliance (RIA) to foster collaboration among industry stakeholders and drive sustainable shipping practices in the Caribbean.
- Pilot projects being implemented in the region, showcasing practical applications of low-carbon technologies and energy-efficient measures.

These presentations set the stage for discussions on how the Caribbean can leverage the GMN project to advance maritime decarbonisation efforts.

Having set the context for the workshop, the session proceeded with featured presentations from port and vessel operators, a petrochemical manufacturer and the local pilot association. These presentations highlighted current decarbonisation initiatives and strategies being implemented, as well as key considerations in the transition to energy-efficient technologies and zero to near-zero (ZNZ) fuels.

Ms. Hannah Sukhu-Maharaj, representing PROMAN, shared that company's work in increasing the production of blue and green Methanol and promoting the uptake of alternative fuels to power the maritime sector. In addition to their manufacturing operations, PROMAN's vessel operations and ongoing cadetship programme, in collaboration with UTT, were spotlighted, not only showcasing the company's commitment to promoting the uptake of alternative fuels in the maritime sector, but also demonstrating their commitment to supporting training and capacity building of individuals in the region.

Representing National Energy Corporation of Trinidad and Tobago (NE), a local port and vessel operator, Ms Michelle Scipio-Hosang presented National Energy's decarbonisation initiatives, spotlighting the ambition for the uptake of renewable energy at their ports, and the addition of their IMO tier III compliant tug to their fleet. Ms Scipio-Hosang also highlighted the company's ambition to develop bunkering facilities for green hydrogen, supporting the availability of transition fuels, and an Integrated Transport Network to promote resource optimisation and enhance operational efficiencies.

Mr. Terrence Boodoosingh, Operations Manager at La Brea Industrial Development Company (LABIDCO), presented on the port's decarbonising strategy, as the managing body over the port of Brighton, the first certified green port locally. The strategy included the continued investment and integration of renewable energy on the port of Brighton, Carbon Sequestration, improving waste management and the development of integrated, intermodal transport and logistics services. Mr. Boodoosingh highlighted that their approach is guided by the Port Green House Gas

inventory study, showcasing the role of research in developing decarbonisation strategies that are applicable to the unique needs of an organisation.

Pilot Master John-Paul Pantin of the Trinidad and Tobago Pilots' Association (TTPA), presented unique considerations with respect to safety and training standards with the uptake of energy-efficient technologies on board ships. Utilising the widespread adoption of Shaft Power Limiters as a key example, Pilot Master Pantin spotlighted its effect on safe navigation in manoeuvring in ports and channels. Through case studies, Pilot Master Pantin demonstrated the importance of updating legislation as new technologies are integrated within the sector to achieve the ambitions set by the IMO 2023 GHG Strategy.

The presentations in Plenary Session 1 provided a comprehensive overview of ongoing maritime decarbonisation efforts in the Caribbean, highlighting both progress and challenges in transitioning to cleaner technologies and energy-efficient solutions. Speakers underscored the importance of research, policy alignment, and industry collaboration in shaping the region's approach to decarbonisation.

A recurring theme was the need for greater investment in port infrastructure, alternative fuel bunkering, and renewable energy integration, alongside a proactive approach to adapting IMO regulations to the Caribbean's unique context. The insights shared during this session not only set the stage for deeper discussions throughout the workshop but also reinforced the urgency of developing regional strategies, fostering innovation, and securing financial resources to accelerate the decarbonisation of the Caribbean maritime sector.

3.2.1 Round Table Discussion: Accelerating the Implementation of Maritime Decarbonisation Initiatives

Closing session 1 was a round-table discussion chaired by Captain Rawle Baddaloo, Co-leader of the Caribbean Marine Environment Protection Association (CARIBMEPA). The panel featured representatives from MTCC Caribbean, IMO, National Energy (NE), La Brea Industrial Development Company (LABIDCO), MTCC Latin America, and the Trinidad and Tobago Pilots' Association (TTPA).

The discussion, themed "Accelerating the Implementation of Maritime Decarbonisation Initiatives," explored:

- The role of academic institutions in driving decarbonisation.
- Barriers to implementing decarbonisation technologies and initiatives.
- Technology evaluation and its suitability to the Caribbean region.
- The importance of collaboration and partnerships in advancing maritime decarbonisation.

Key Takeaways from the Discussion:

- **Partnerships & Knowledge Sharing:** Effective collaboration between governments, industry, and academia is essential for advancing decarbonisation in the region.
- **Research & Technology Assessment:** Academic institutions play a critical role in evaluating the suitability of decarbonisation technologies, advising on policy strategies, and addressing regional challenges.
- **Economic Considerations:** The high cost of adopting new technologies remains a barrier, particularly for governments. Many Caribbean ports operate at a loss due to low cargo volumes, making large-scale investments in port infrastructure difficult to justify.
- **Baseline Data & Proposal Development:** MTCC Caribbean is tasked with proposal development targets under the GMN Project, and maritime administrations (MARADs) are encouraged to collaborate with the centre on technology uptake proposals and applicability studies.
- **Legislative Preparedness:** MARADs must stay ahead of changing international regulations, particularly regarding their economic impacts. The region needs to shift from a reactive to a proactive approach—staying ahead may unlock untapped opportunities.
- **Access to Finance:** Funding for port infrastructure upgrades and technology adoption remains a major challenge. MARADs require capacity-building support to effectively navigate climate finance mechanisms and unlock funding opportunities.

This session reinforced the urgent need for a strategic and collaborative approach to overcome financial, technical, and policy barriers and accelerate maritime decarbonisation in the Caribbean.

3.3 Breakout Session 1: Identifying Maritime Decarbonisation Priorities in the Caribbean

This breakout session provided an opportunity for participants to engage in critical discussions on the major challenges, opportunities, and priorities for maritime decarbonisation in the Caribbean. The session explored port infrastructure upgrades, access to finance, policy implementation, regional collaboration, and the role of technology in advancing the decarbonisation agenda.

Decarbonisation vs. Other Port Priorities

Participants highlighted the high operating costs of Caribbean ports and the challenge of integrating decarbonisation into broader port modernisation efforts. While there is growing awareness of the need for cleaner technologies, financial constraints, policy gaps, and limited capacity remain significant barriers.

Access to Finance & Policy Gaps

- One of the biggest hurdles to port decarbonisation is access to funding. Many Caribbean ports operate at a loss and lack the financial resources to invest in green infrastructure.
- Participants noted that regional governments need to do more to align national policies with international maritime commitments, such as the IMO's Revised GHG Strategy.

Maritime decarbonisation needs to be seen as a critical part of national decarbonisation strategies.

- Some Caribbean governments, like Trinidad and Tobago, have ratified MARPOL Annex VI but have yet to fully integrate it into domestic legislation.
- A collective regional approach is needed to market the decarbonisation agenda in a way that resonates with policymakers and international financiers.

The Role of Collaboration & Regional Representation

- A stronger regional voice is needed in global maritime discussions.
- Platforms like MTCC Caribbean should be leveraged to unify the positions of Caribbean Maritime Administrations and advocate for policy and financial support on the international stage.
- There is also an opportunity for greater collaboration between Caribbean and Latin American countries to form a larger green shipping corridor and improve access to funding.

Technology & AI in Port Decarbonisation

- The role of artificial intelligence (AI) and digitalisation in decarbonisation was discussed, but participants stressed that many Caribbean ports lack the digital infrastructure needed to support AI-driven solutions.
- A readiness assessment of ports should be conducted to determine their capacity for adopting new technologies.

MTCC Caribbean's Role in Advancing the Agenda

- MTCC Caribbean was identified as a key resource in facilitating discussions among regional MARADs and other sector stakeholders, supporting technology assessments, and developing funding proposals to accelerate technology uptake.
- The Centre can also play a role in bridging knowledge gaps by producing research papers and academic studies on port decarbonisation in the region.

Next Steps & Recommendations

- Draft a resolution outlining key regional priorities for decarbonisation to be presented to Caribbean administrations.
- Consider developing an academic paper leveraging the expertise of regional universities and researchers.
- Engage regional leaders in strategic meetings to align efforts and drive policy action.
- Strengthen advocacy efforts to ensure Caribbean interests are represented in international maritime discussions.

The discussion reaffirmed the critical need for regional cooperation, targeted financing, and strong policy frameworks to achieve maritime decarbonisation goals in the Caribbean.

3.4 Plenary Session 2: Summary of Decarbonisation Strategies in the Caribbean

This session featured country presentations from Barbados, Belize, Jamaica, St. Kitts & Nevis, and Trinidad & Tobago, focusing on their respective maritime decarbonisation strategies and initiatives. These countries were selected due to their ongoing efforts in implementing policies, projects, and technologies aimed at reducing greenhouse gas (GHG) emissions in the sector. The presentations provided insights into the varying stages of progress across the region, the challenges faced in policy development and implementation, and the opportunities for regional collaboration.

The session highlighted that many Caribbean states are still in the early stages of maritime decarbonisation. While some territories, such as Barbados, have taken significant steps in legislative updates and technology integration, others, including Belize, are still conducting feasibility studies on alternative fuels and emissions tracking systems.

Barbados has made considerable progress by incorporating MARPOL Annex VI into domestic legislation through the Marine Transport (Emissions Control) Act, 2024. The country has also launched policy frameworks and institutional mechanisms to facilitate maritime emissions control, including a dedicated Port Air Pollution and Emissions Control (PAPEC) Department and the implementation of a Maritime Single Window (MSW) system. Additionally, Barbados has undertaken investments in renewable energy, such as expanding solar power generation and developing a waste-to-energy facility to manage emissions from port operations.

Belize has initiated stakeholder engagement for emissions monitoring and baseline assessments to inform future policies. However, the country still lacks statutory emission reduction targets for maritime transport and is in the process of integrating MARPOL Annex VI into domestic law. Planned initiatives include feasibility studies on biofuels and shore power, the development of fleet transition strategies, and structuring a sustainable financing model for maritime decarbonisation.

Trinidad & Tobago reaffirmed its commitment to the IMO 2023 GHG Strategy, highlighting efforts to legislate MARPOL Annex VI through the upcoming Shipping (Marine Pollution) Bill. The country is also reviewing its National Maritime Policy to support offshore renewable energy production and the adoption of alternative fuels. Several decarbonisation projects are already underway, including a technical feasibility study on methanol as an alternative marine fuel, and collaborations with MTCC Caribbean and the IMO on green port initiatives.

3.5 Plenary Session 3: Advancing SDG 5 in the Caribbean Maritime Domain

The second day of the regional workshop began with a plenary session themed “Advancing SDG 5 in the Caribbean Maritime Domain.” This session entailed a presentation, a round-table discussion and a working group session. This session aimed to identify the gaps and opportunities to advance SDG 5 in the Caribbean Maritime Industry.

Ms. Mariana Noceti, Principal Programme Assistant of the Women in Maritime Programme in the IMO, presented on the IMO’s Women in Maritime Programme. This presentation spotlighted IMO’s work in empowering women’s maritime networks, promoting the advancement of SDG 5 in the sector globally. Ms. Noceti highlighted the 3 pillars of this programme: Training, Visibility and Recognition. Key to this programme is the many partnerships

Key takeaways from the presentation included:

- **Strengthening Policies & Legislation:** National frameworks need to explicitly support gender equality in maritime.
- **Capacity Building & Networking:** Collaboration with WiMAC, WMU, IMLI, and WISTA International is essential for mentorship and career development.
- **Addressing Workplace Challenges:** The sector must tackle barriers like workplace discrimination, limited career advancement opportunities, and work-life balance issues for women.
- **Funding & Investment:** More financial resources are needed to support women in maritime careers.

Through these initiatives, the IMO continues to drive gender equality, ensuring greater participation and leadership opportunities for women in the maritime sector.

3.5.1 Round-Table Discussion: Challenges and Opportunities for Women in Maritime Decarbonisation

Following the IMO’s presentation, a panel discussion, moderated by Ms. Suzette Balkaran (VP, Research and Development, WiMAC), brought together experts from across the sector, inclusive of active female seafarers and a crewing officer, to discuss key challenges and opportunities in advancing gender equality in maritime.

Key takeaways included:

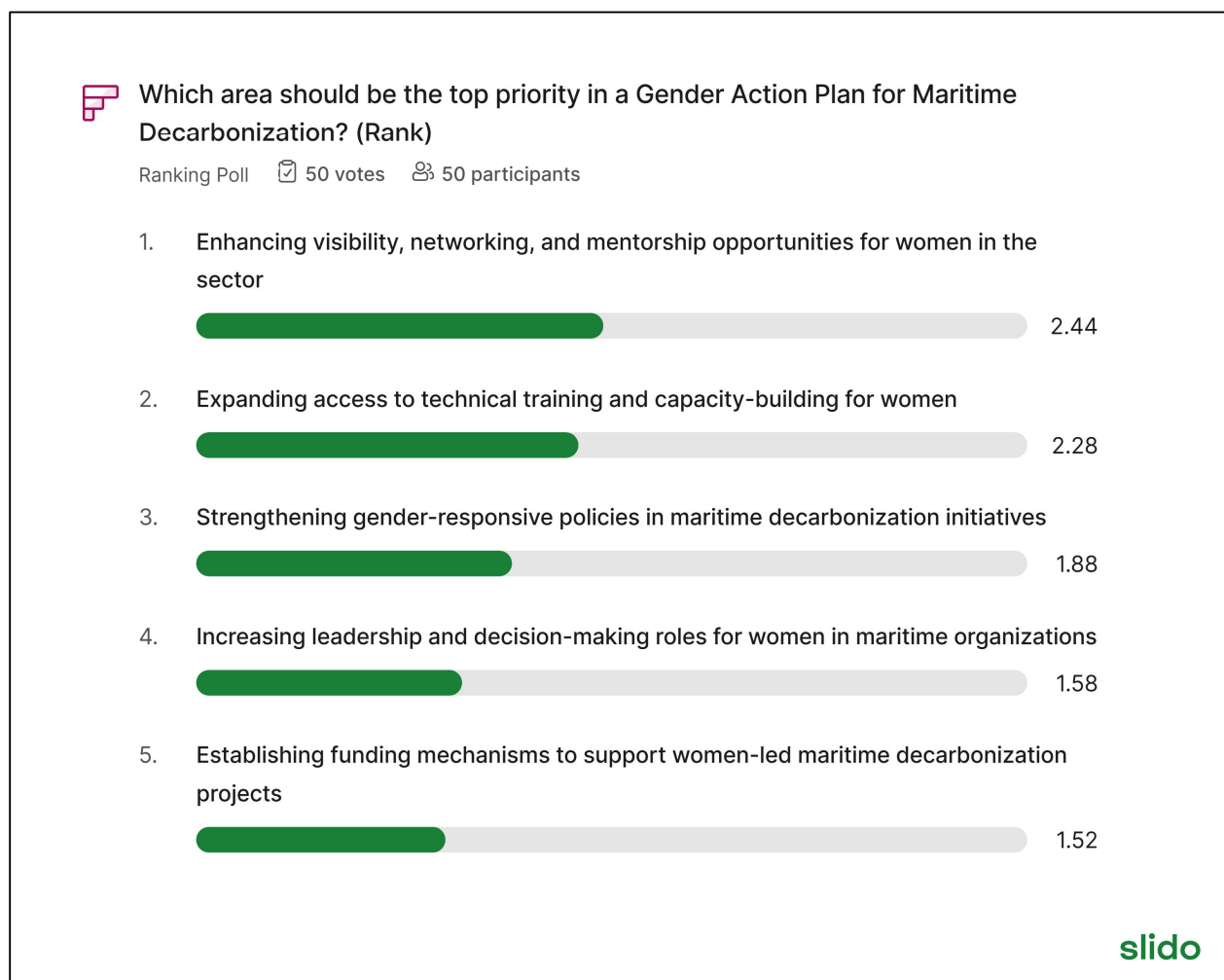
- **Strengthening Policies & Enforcement:** While harassment policies exist, enforcement remains weak, making reporting difficult. The IMO and ILO are working to strengthen regulatory frameworks to tackle these issues.
- **Breaking Barriers for Women at Sea:** Women face challenges in securing cadetship placements, especially on ships without female officers. A zero-tolerance approach to harassment and discrimination is needed to improve retention.
- **Bridging the Gap Between Sea & Shore Careers:** Support structures such as childcare programs and career transition pathways can help women move between sea-based and shore-based roles.

- **Encouraging More Women to Join the Industry:** Training institutions need formalised support structures to ensure greater female participation, and stakeholders must actively promote opportunities for women.
- **MTCC Caribbean's Commitment:** The centre has consistently ensured equal representation at its events and has a Gender Action Plan to address challenges faced by women, particularly those at sea.

The discussion reinforced the need for collective action, stronger policies, and targeted support mechanisms to create an inclusive and equitable maritime industry in the Caribbean.

Closing the round-table discussion, participants were invited to participate in two live poll questions. The first question asked them to identify the top priorities for inclusion in MTCC Caribbean's Gender Action Plan for Maritime Decarbonisation from a predefined list of options. Figure 3 below presents the results of Poll Question 1.

Figure 3: Showing results of the Plenary Session 3, poll question 1



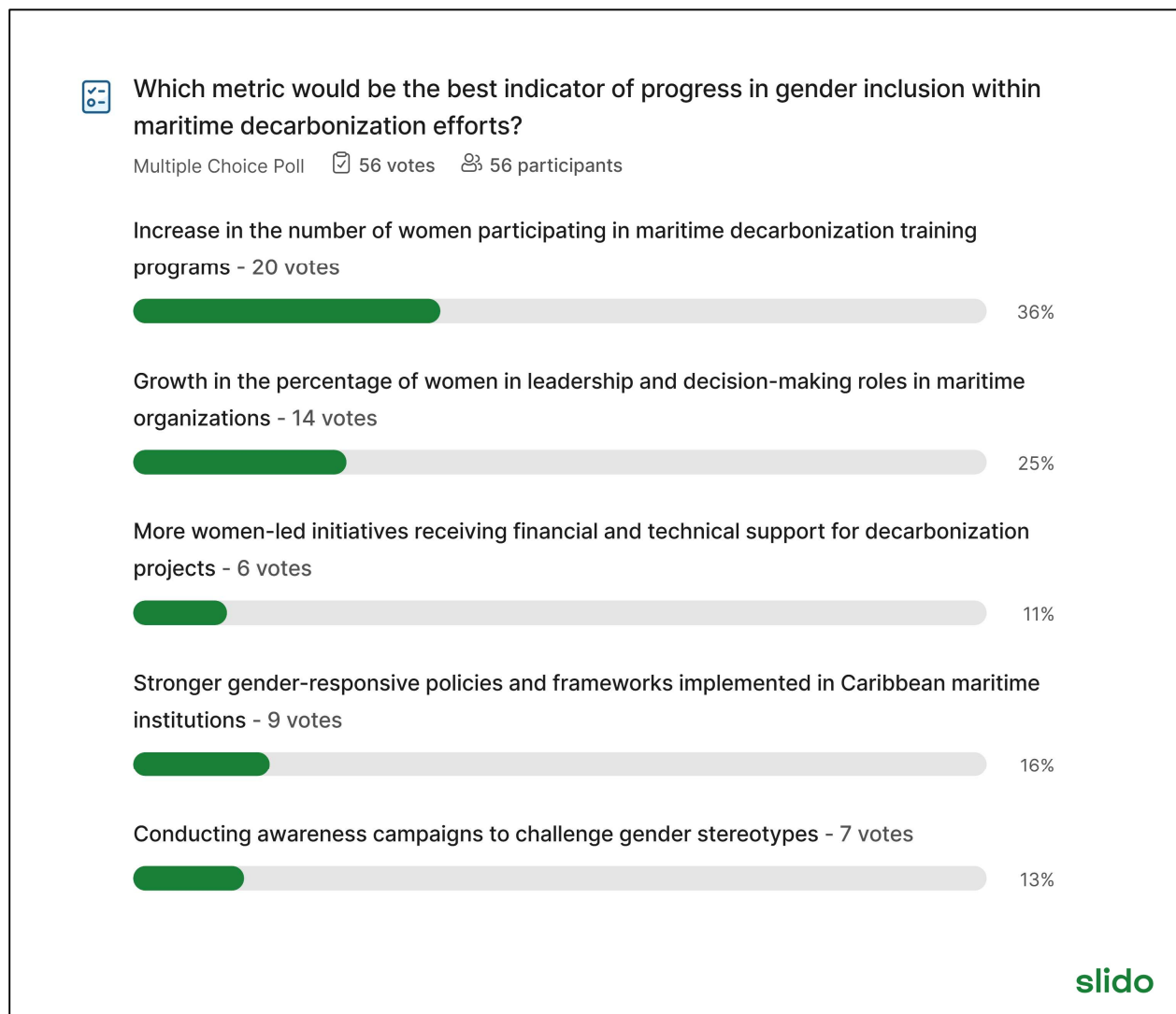
With approximately 50% of respondents (n=50), the two highest-ranked priorities were:

- Enhancing visibility, networking, and mentorship opportunities for women in the sector
- Expanding access to technical training and capacity-building for women

However, it is important to note that all listed options received a significant number of votes, indicating broad recognition of their relevance and importance in shaping a comprehensive Gender Action Plan for maritime decarbonisation.

The second poll question asked participants to identify the best indicator for measuring women's inclusion in maritime decarbonisation efforts. Participants were given five options and asked to select the most relevant one. Figure 4 below presents the results of Poll Question 2.

Figure 4: Showing results of Plenary Session 3, poll question 2



With 36% of respondents (n=56), the “increase in the number of women participating in maritime decarbonisation training programs” was regarded as the best indicator of progress in gender inclusion within maritime decarbonisation efforts. Additionally, 25% of respondents selected growth in the percentage of women in leadership and decision-making roles in maritime organisations as another key indicator of progress. These results highlight the importance of capacity building and leadership opportunities as critical areas for advancing gender inclusivity within the maritime decarbonisation agenda.

3.5.2 Working Group Session

Following the panel discussion, participants engaged in a working group session designed to identify key gaps, challenges, existing initiatives, and priorities for a Gender Action Plan in the Caribbean maritime industry. The session was structured into three groups, each led by a facilitator and a note taker, ensuring discussions remained focused on identifying practical solutions for gender inclusivity.

Key Challenges Identified:

- **Workplace Culture & Bias:** Women in maritime continue to face systemic bias, stereotypes, and unconscious gender discrimination, particularly in operational roles such as stevedoring, crane handling, and port logistics.
- **Infrastructure & Ship Design:** Many older ships and port facilities were not designed with women in mind, lacking necessary accommodations such as proper hygiene facilities and safe working environments.
- **Career Progression & Leadership Representation:** Women are underrepresented in senior maritime roles, and career advancement opportunities remain limited due to glass ceiling barriers and unequal recruitment practices.
- **Work-Life Balance & Job Security:** Maternity policies, job security for women starting families, and flexible working arrangements were highlighted as critical gaps preventing more women from entering and staying in the industry.
- **Reporting & Harassment Policies:** Fear of reporting sexual harassment and discrimination remains a major concern, as existing policies often lack enforcement.
- **Educational Barriers & Limited Awareness:** A lack of targeted scholarships and mentorship programs was identified as a key factor limiting young women’s entry into maritime careers.

Existing Initiatives Supporting Gender Equality:

- Some Caribbean countries, such as Jamaica and Antigua & Barbuda, have introduced gender representation targets in leadership, scholarship programs, and public sector boards to promote inclusivity.
- The 50/50 gender nomination for capacity-building workshops is helping to create a more balanced knowledge base.
- Collaboration with Maritime Education and Training Institutions to introduce gender-responsive curricula.
- Male Champions & Advocacy Programs encouraging men to actively support gender diversity efforts.

Priorities for the Gender Action Plan:

- Creating an Enabling Environment for Inclusivity – Developing workplace policies that support women in maritime, including maternity leave, harassment prevention, and mentorship programs.
- Awareness & Visibility – Implementing outreach programs to change mindsets and encourage more women to pursue careers in the maritime industry.
- Regulatory & Policy Frameworks – Advocating for updated legislation to ensure a more inclusive industry, with enforcement mechanisms for gender-related policies.
- Capacity Building & Mentorship – Establishing mentorship networks, scholarships, and targeted training programs to support women's career progression.
- Industry Collaboration & Research – Creating a knowledge database of qualifications, competencies, and opportunities available to women in the maritime sector.

This working group session emphasised the need for both systemic and cultural shifts to achieve gender equality in the Caribbean maritime industry. A clear Gender Action Plan must integrate policy improvements, workplace reforms, and educational outreach, ensuring a sustainable and equitable future for women in maritime. It was also underscored that progressing on SDG 5 should not result in compromise of progress on other SDGs. The discussion on the latter was in cognizance of the growing phenomena of women choosing work over childbearing which has been noted to have adverse consequences for aging populations.

3.6 Plenary Session 4: Financing Maritime Decarbonisation Initiatives and SIDS

This session featured two presentations followed by an open discussion. With a focus on accessing financing, it began with a presentation by Mr. Pablo Periera, an Operations Specialist in the Infrastructure and Energy Division focused on Public and Private Partnerships of the Inter-American Development Bank (IDB).

Mr. Periera highlighted the role of Public-Private Partnerships (PPPs) in financing climate-resilient and decarbonised infrastructure in the Caribbean. The key challenges in implementing PPPs highlighted include weak institutional frameworks, limited sustainability measures, and inadequate regulatory support. Addressing these issues requires a strategic combination of policy reforms, investment planning, and stakeholder collaboration to create **financially viable and sustainable projects**.

The presentation emphasised the urgent need for climate-resilient investments in the region, given that climate-related losses account for 1%–2% of Caribbean GDP annually. The presenter highlighted IDB's Resilient PPPs Toolkit, which provides a framework to integrate climate risk assessments, innovation, and long-term sustainability into project planning, ensuring that infrastructure is adaptable and green finance-ready.

Focusing on maritime decarbonisation, Mr Periera keyed in on IDB's support mechanisms for port modernisation, renewable energy integration, and onshore power supply solutions. Technical assistance is offered to public and private stakeholders, while financing mechanisms help drive

the adoption of low-carbon technologies in Caribbean ports. These initiatives position PPPs as a key tool for mobilising private capital to accelerate maritime sustainability and resilience.

Following the IDB's presentation, Mr. Darwin Telemaque, representing the Port Management Association of the Caribbean (PMAC), provided insights on accessing financing for port infrastructure upgrades and decarbonisation. Using the Antigua and Barbuda Port Authority's proposal as a case study, he underscored the importance of renewable energy and low carbon and zero and near-zero (ZNZ) fuels in making port development projects financially attractive.

Mr. Telemaque highlighted how renewable energy integration and alternative fuel services, such as shore power and bunkering, can generate new revenue streams and operational cost savings. These potential financial benefits can significantly enhance the bankability of port decarbonisation projects, making them more appealing to investors and funding agencies.

His presentation reinforced the idea that Caribbean ports must adopt innovative business models that leverage sustainable energy solutions. This approach not only supports the region's decarbonisation goals but also provides a compelling economic case for securing the necessary capital to modernise port infrastructure and remain competitive in a low-carbon future.

3.6.1 Open Discussion: Accessing Financing

The finance open discussion on identifying gaps and challenges in accessing climate finance for maritime decarbonisation and exploring opportunities for public-private partnerships (PPPs) to advance technology uptake in the Caribbean maritime sector. Discussions revealed a significant disconnect between financial institutions, maritime stakeholders, and government agencies, which continues to hinder access to critical funding.

Participants highlighted that International Financial Institutions (IFIs), including the Inter-American Development Bank (IDB) and the Caribbean Development Bank (CDB), are funding decarbonisation and infrastructure modernisation projects in some territories, such as Barbados and St. Vincent and the Grenadines. However, there remains a substantial gap in securing funding specifically for maritime decarbonisation. One of the main challenges is that maritime activities are often overlooked or undervalued by financing bodies, resulting in limited funding for decarbonisation initiatives in the sector.

Additionally, participants highlighted the fragmentation between maritime authorities, climate change agencies, and government ministries, which prevents a coordinated approach to accessing available funds. Participants emphasised the need for national action plans and greater government engagement to improve visibility and prioritise maritime decarbonisation within climate financing frameworks.

3.7 Plenary Session 5: Public and Private Partnerships and Regional Collaboration for Maritime Decarbonisation

Mr. Michael Razack, Project Manager of MTCC Caribbean, opened this session with a presentation on the Regional Industry Alliance (RIA) to be formed under the GMN Phase II project. His presentation highlighted the objectives of the RIA, to unite Caribbean maritime stakeholders

to drive maritime decarbonisation. Mr. Razack also highlighted the key activities for the establishment of the RIA and the next steps for the MTCC Caribbean towards the same.

Following the presentation, Captain Sukhjit Singh chaired a round-table discussion on enhancing collaboration to drive sustainable technology adoption in the Caribbean maritime sector. The panellists emphasised the need for a Regional Industry Alliance (RIA) to foster regional cooperation, advocate for policy changes, and improve access to financing for decarbonisation initiatives.

The Need for a Regional Industry Alliance (RIA)

Panellists agreed that collaboration is essential to address shared challenges in maritime decarbonisation. A RIA would:

- Advocate for investment in sustainable port infrastructure and green shipping corridors.
- Ensure stakeholder needs, especially those of ports, are represented.
- Facilitate knowledge sharing and capacity-building across the region.

The panel also highlighted the potential for Caribbean-Latin American collaboration to strengthen advocacy efforts and access international financing.

Challenges to Forming a RIA

Key challenges identified included:

- Ambition misalignment: Competing economic interests among countries.
- Capacity gaps: Limited technical expertise and human resources.
- Policy misalignment: Lack of harmonised regulatory frameworks.
- Resource constraints: Insufficient time and funding for private-sector engagement.

To overcome these barriers, panellists emphasised the need for inclusive policy development and shared costs and benefits.

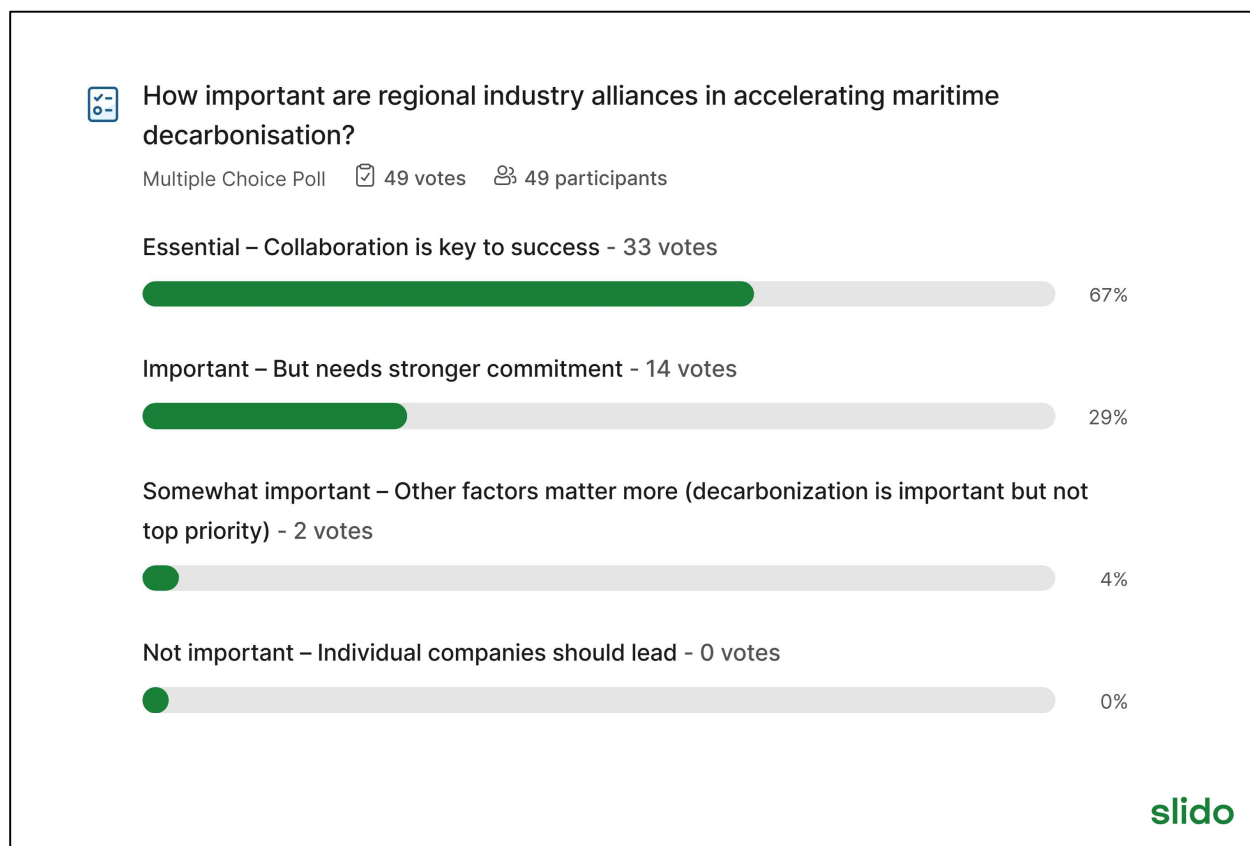
Panellists proposed the following actions to establish the RIA:

- Policy and Legislative Advocacy: Develop a harmonised regulatory framework for the region.
- Working Groups: Form sector-specific groups to address capacity building and financing.
- Roadmap Development: Create a strategic roadmap with clear objectives and stakeholder input.

Caribbean maritime administrations (MARADs) expressed their support for the RIA's formation, with a recommendation for MTCC Caribbean to lead stakeholder engagement and initiate the development of a regional roadmap.

During the panel discussion, Captain Singh also invited participants to participate in a series of poll questions. The first question asked participants to rate the importance of the establishment of a RIA in accelerating Maritime Decarbonisation. Figure 5 below presents the results of Poll Question 1.

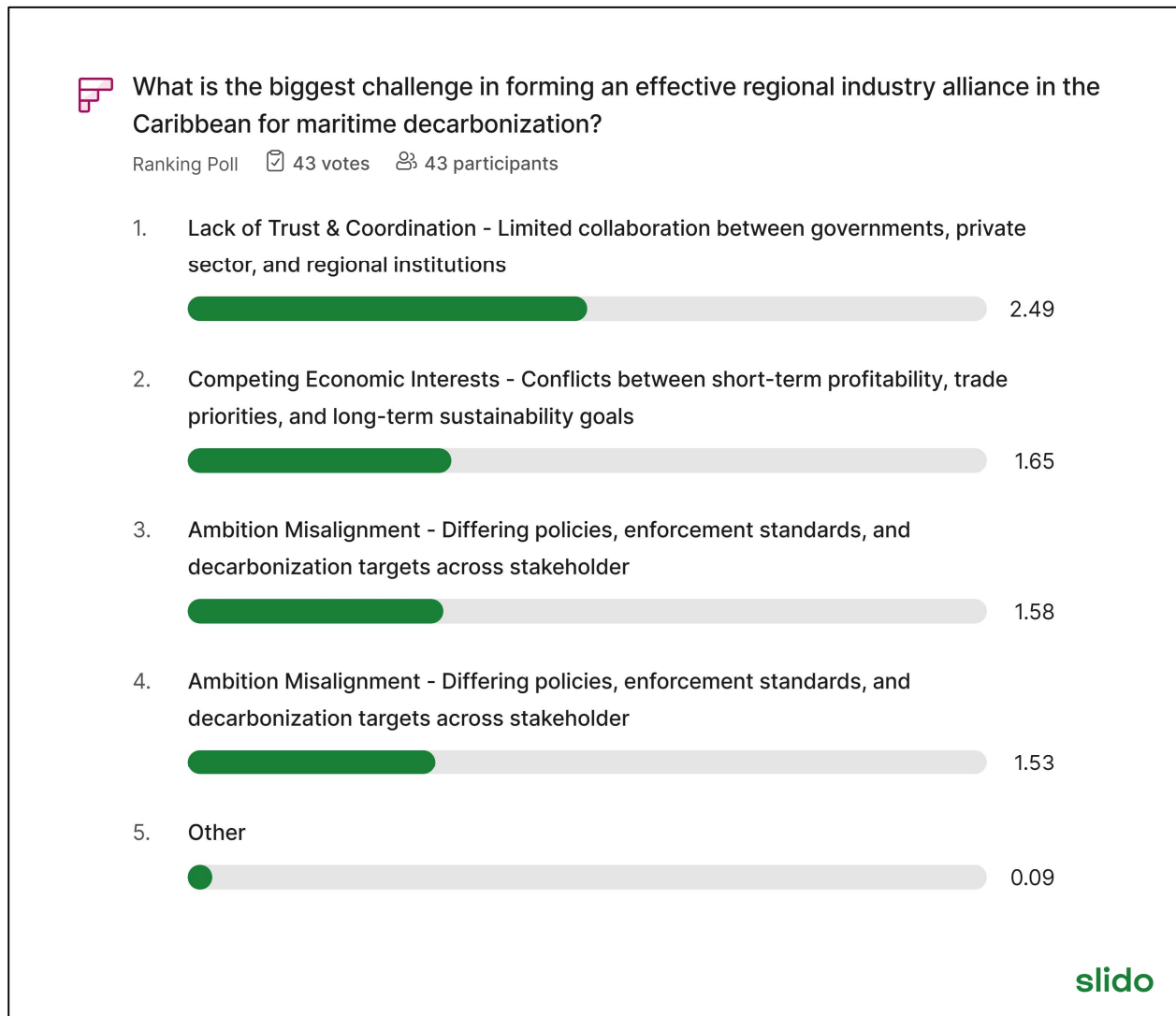
Figure 5: Showing results of Plenary Session 5, poll question 1



With 67% of respondents (n=49), the vast majority of participants agreed that the formation of the RIA is “Essential” to the acceleration of maritime decarbonisation in the region.

The second question posed to participants asked participants to identify the main barrier to the formation of the RIA. This question posed 3 options before the participants, of which they were allowed to select one. Figure 6 below presents the results of poll question 2.

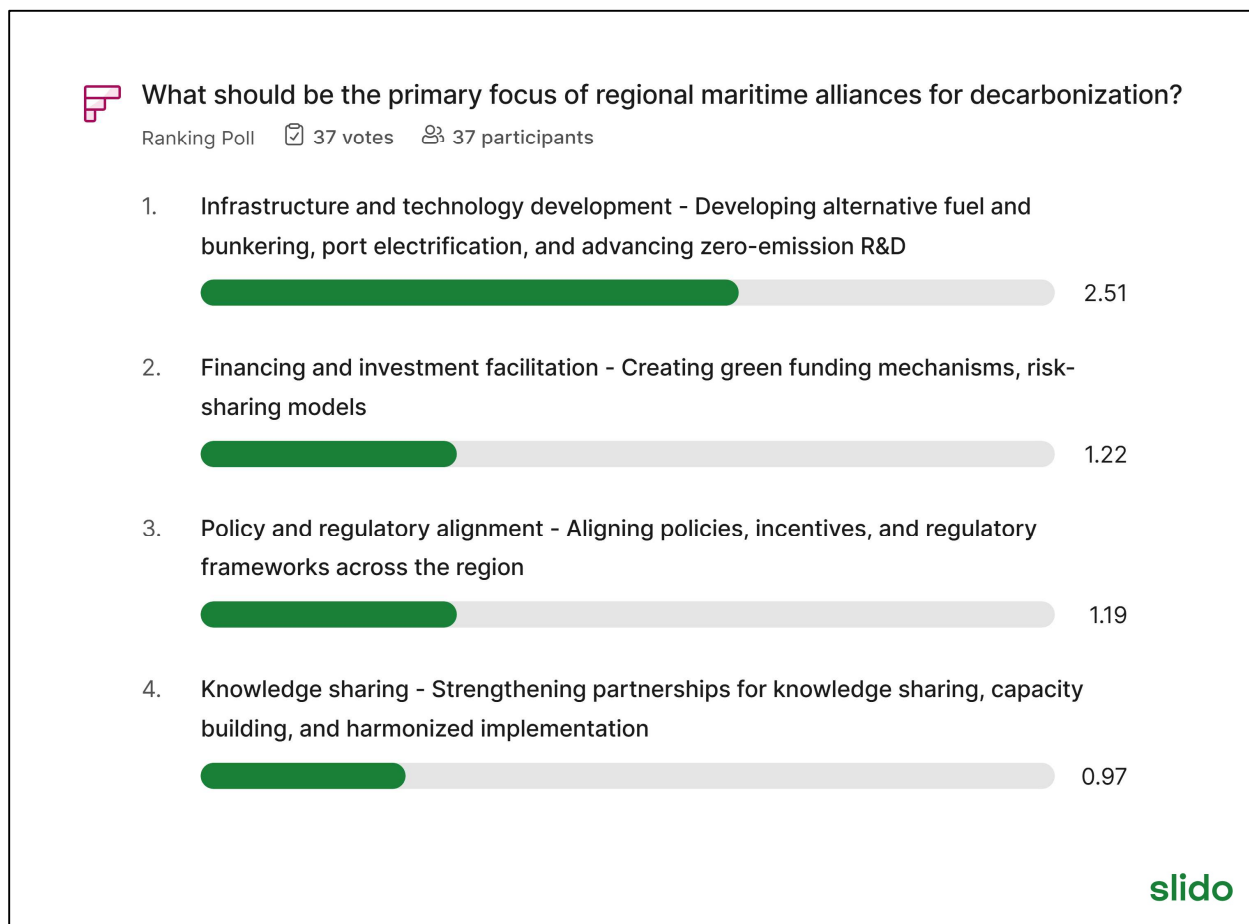
Figure 6: Showing results of Plenary Session 5, poll question 2



Due to the duplication of option 3, Figure 6 does not accurately reflect the poll results. When the duplicate options are combined, approximately 31% of poll participants (n=43) identified ambition misalignment as the most significant barrier to forming the Regional Industry Alliance (RIA). Additionally, competing economic interests were viewed as another major barrier, receiving approximately 25% of the votes.

The third question asked participants to select what they believe should be the main focus of the RIA when established. Poll participants were asked to select one out of the four options presented. Figure 7 below shows the results of poll question 3.

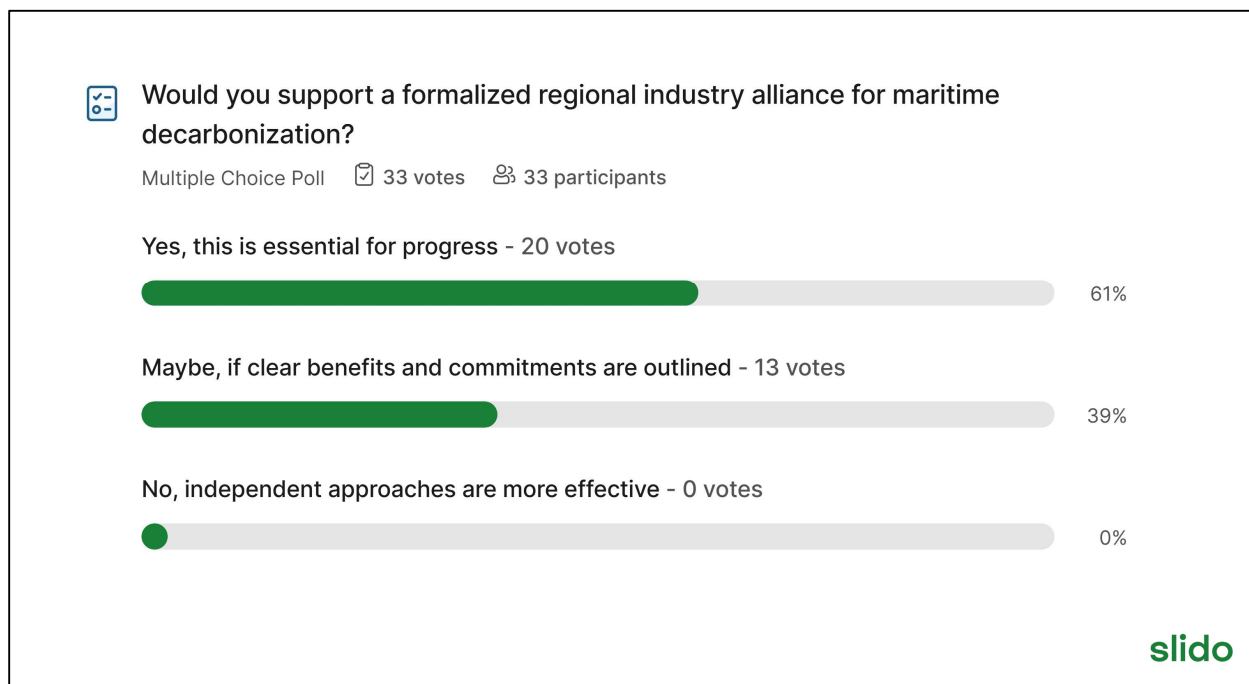
Figure 7: Showing results of Plenary Session 5, poll question 3



With 25% of poll participants (n=37), “infrastructure and technology development” was identified as the primary focus of the RIA. It should also be noted that the remaining 75% of votes were almost evenly distributed among the other options, regarding them as relevant to the RIA.

Finally, participants were asked if they would support a formalised RIA for the Caribbean Region. Figure 8 below presents the results of poll question 4.

Figure 8: Showing results of Plenary Session 5, poll question 4



This poll showed majority support for the formalised RIA, with 61% of participants voting “yes.” There is, however, some reservation present, with 39% indicating “maybe.”

3.8 Plenary Session 6: Sustainable Shipping Imperatives for the Caribbean

The final session of the workshop, Sustainable Shipping Imperatives for the Caribbean, provided a platform for industry leaders to discuss key priorities and challenges in aligning the region’s maritime sector with global decarbonisation goals. This round-table discussion was moderated by Mrs. Vivian Rambarath-Parasram, Director and Head of MTCC Caribbean, and involved representatives of the Caribbean Centre for Renewable Energy and Energy Efficiency (CCREEE), the Caribbean Shipping Association (CSA), IMO and WiMAC.

The session began with a presentation by Ms. Ayanna Evelyn, representing CCREEE, which focused on accelerating the decarbonisation of the energy sector in the Caribbean. Ms. Evelyn highlighted the organisation’s work in supporting countries like St. Kitts and Nevis in achieving 100% decarbonisation of the energy sector. She emphasised the importance of Integrated Resource Plans (IRPs), which provide a strategic framework for national energy transition efforts. Additionally, she introduced Energy Report Cards (ERCs), which offer insights into energy production, consumption, and policy implementation across CARICOM states, and the CARICOM Energy Knowledge Hub, a platform designed to facilitate knowledge sharing and collaboration.

Following this, Captain Rawle Baddaloo (CSA), Mr. Darwin Telemaque (PMAC), Dr. Evette Smith Johnson (WiMAC), and Captain Sukhjot Singh (IMO Representative) engaged in discussions,

exploring maritime decarbonisation from various stakeholder perspectives. Key themes included the alignment of regional shipping strategies with IMO regulations, the role of ports in facilitating the transition to cleaner fuels, and the importance of gender inclusivity in climate action. The discussion reinforced the need for collaboration between governments, industry, and financial institutions to address investment barriers, scale up renewable energy adoption, and develop a unified regional strategy for sustainable shipping.

The session emphasised the need for stronger regional cooperation, supporting greater investment in technology and infrastructure, and enhanced policy frameworks to position the Caribbean as a proactive player in global maritime decarbonisation efforts.

4 Participant Feedback

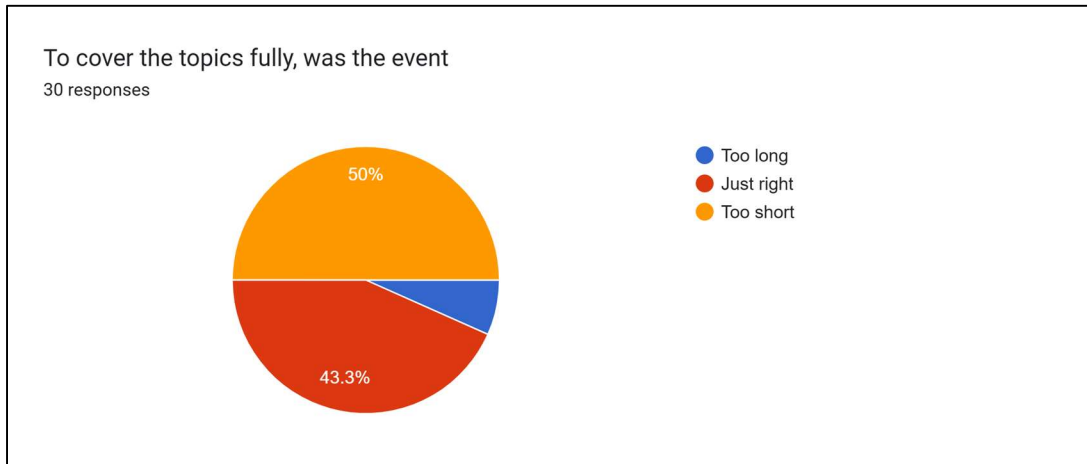
Following the completion of the regional workshop, MTCC Caribbean invited participants to provide feedback on the workshop through the completion of a survey. The survey was administered online and amassed a total of 30 responses. The feedback gathered from participants at the recently concluded regional workshop highlights both the strengths and areas for improvement.

The feedback survey was distributed online via email post the conclusion of the event and may have been the key factor for the low response rate. For future capacity-building events, MTCC Caribbean will include the distribution of participant feedback surveys as part of the agenda to ensure higher response rates.

4.1 Workshop Duration and Content

Participants expressed a balanced view regarding the duration of the workshop, with 50% feeling that the event was "just right," 43.3% finding it "too short," and 6.7% believing it was "too long" (see figure 9). This suggests that while the workshop was generally well-paced, some participants felt that additional time would have allowed for deeper exploration of topics.

Figure 9: Pie Chart showing participant feedback on the workshop duration



When asked about ways in which the workshop can be improved, some participants suggested increasing the workshop duration from 2 days to 3 days. Below are a few quotes from some of the responses that make this suggestion.

“The work could be 3 days instead of 2 also include the private sector in advance”

“The agenda was a bit ambitious. More time would have been beneficial.”

“The workshop was compact 3 days could work”

With respect to the presentations, they received mostly positive feedback, with 63.3% agreeing that they were relevant to the workshop objectives (see figure 10), and 63.3% of participants confirming that the content met their expectations (see figure 11). Notably, 70% of respondents would recommend participation in MTCC Caribbean activities to other stakeholders, reflecting a strong endorsement of the workshop's value (see figure 12).

Figure 10: Pie Chart showing participant feedback on presentation relevance

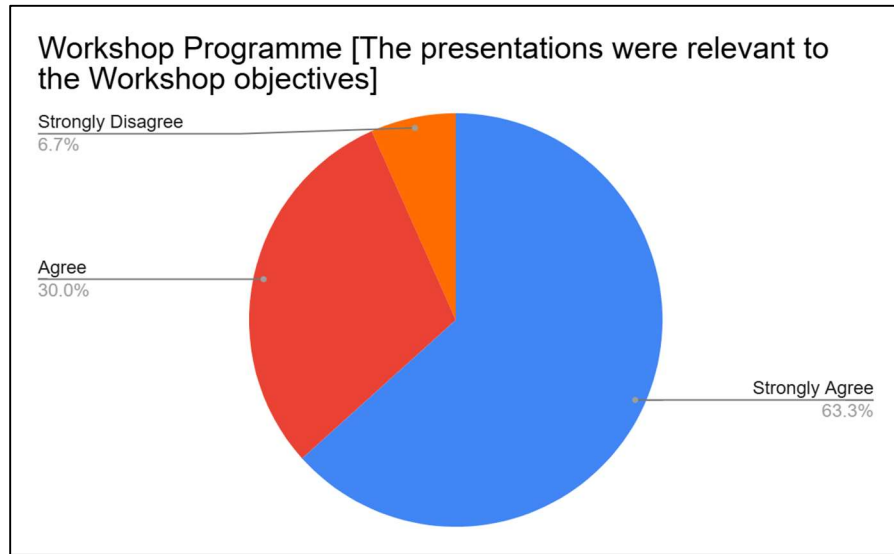


Figure 11: Pie Chart showing participant feedback on workshop content

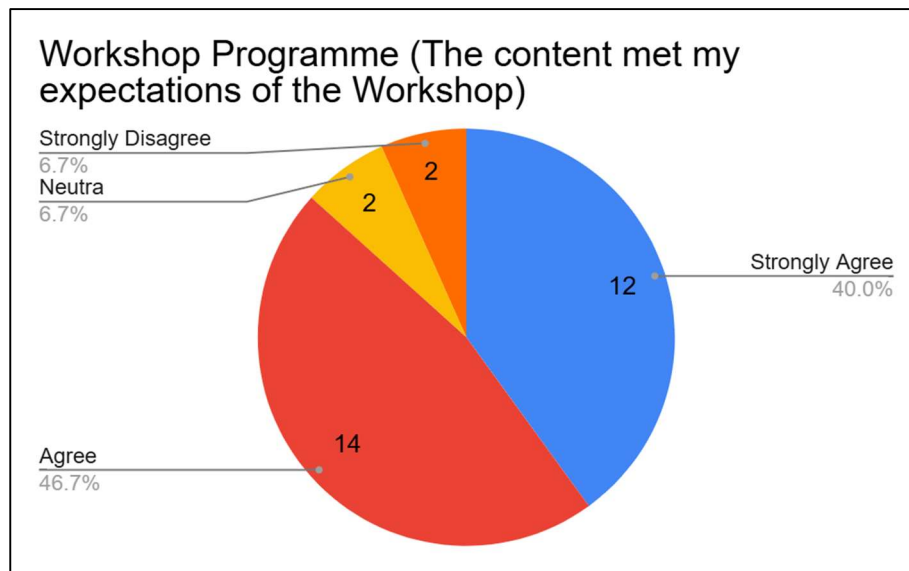
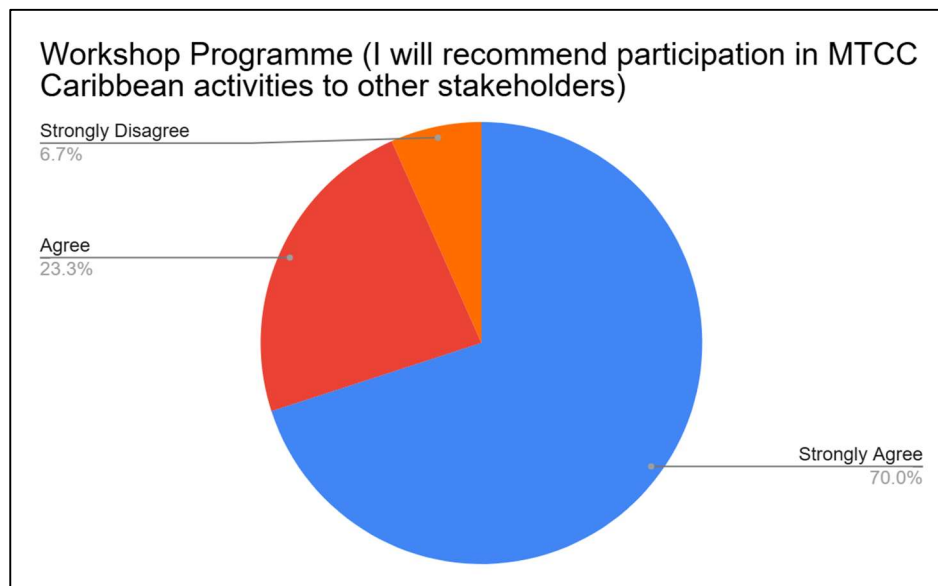
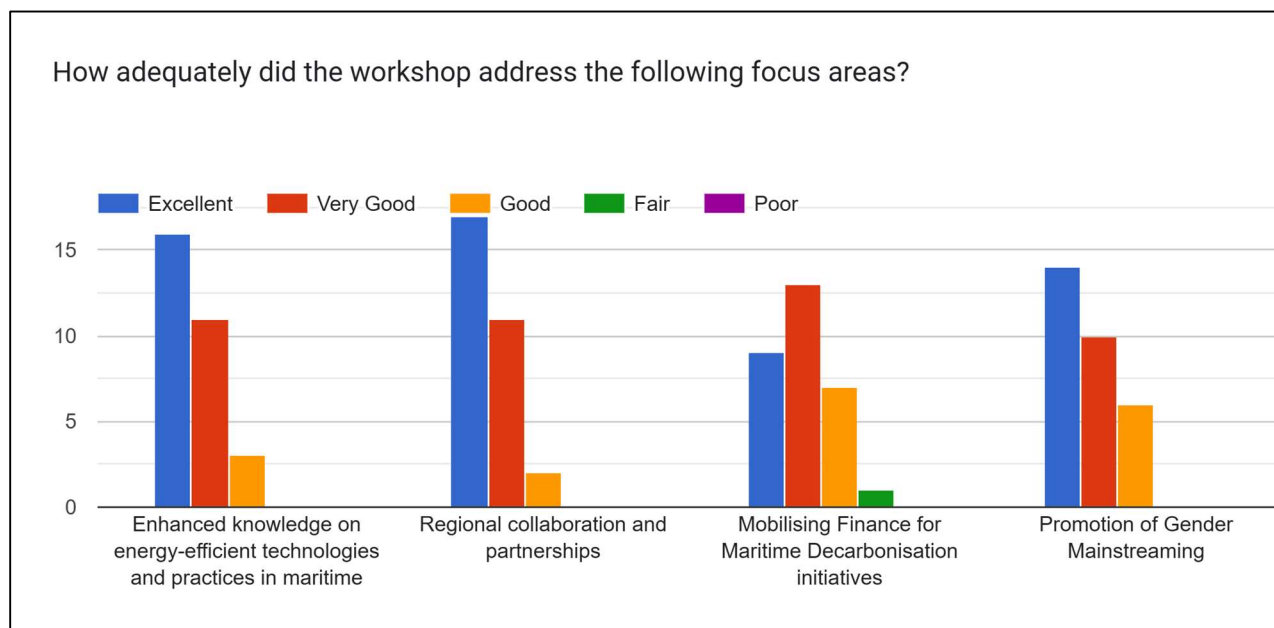


Figure 12: Pie Chart showing participants' willingness to recommend stakeholder participation in future MTCC Caribbean activities



The participants were also asked to rate how adequately the workshop addressed four areas of focus. These areas included: energy-efficient technologies, regional collaboration and partnerships, mobilising finance and promoting gender mainstreaming. Figure 13 below shows the results.

Figure 13: Bar Graph showing participants' feedback on the focal areas of the workshop



The workshop was highly effective in enhancing participants' knowledge of energy-efficient technologies and practices in maritime. A strong majority of participants (90%) rated this area as either "Excellent" or "Very Good," indicating that the workshop successfully conveyed important insights into energy efficiency.

Concerning “regional collaboration and partnerships”, participants found the workshop to be particularly successful in addressing this focal area. A significant 93.3% of participants rated this focus area as "Excellent" or "Very Good." This indicates that the session on regional collaboration was particularly well-received, highlighting the importance of collective action in the Caribbean maritime sector. The workshop evidently provided participants with valuable insights into the importance of partnerships for advancing decarbonisation initiatives.

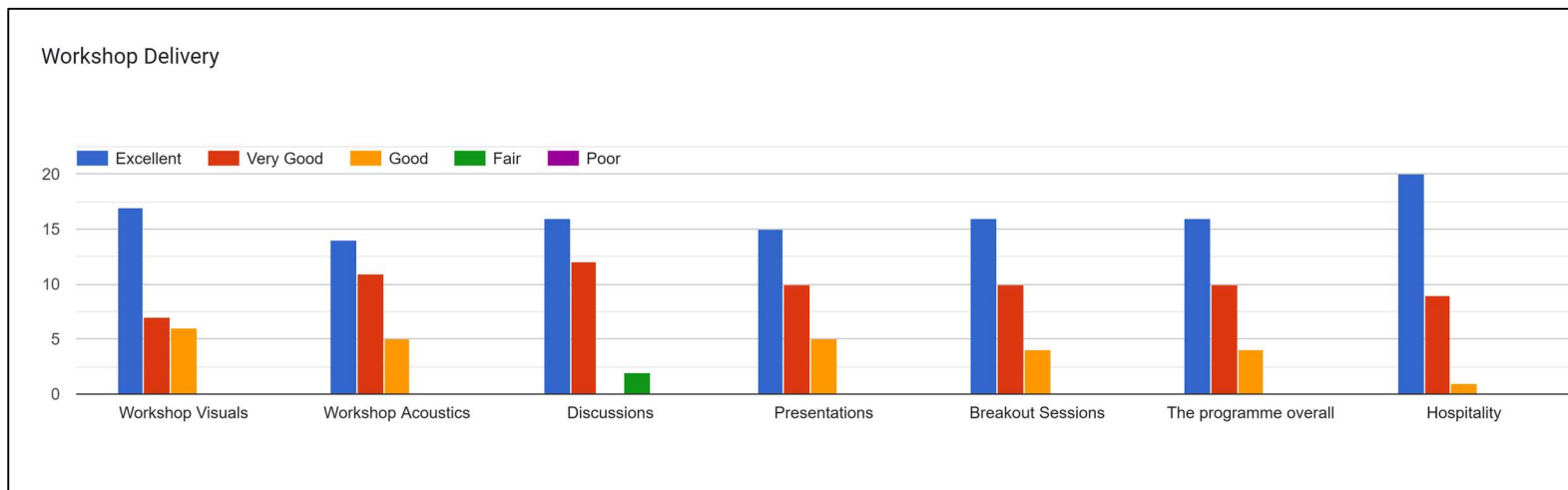
In the area of “mobilising finance for maritime decarbonisation initiatives” participant feedback was mixed but still largely positive, with 73.3% of participants rating it as "Excellent" or "Very Good." While the majority of participants found the session on mobilising finance useful, there were some participants (23.3%) who rated it as "Good," and one participant (3.3%) rated it "Fair." This suggests that although the session was informative, there may have been gaps in the level of detail or practical application provided regarding financing mechanisms for maritime decarbonisation. The area could benefit from more specific guidance on accessing financing opportunities.

The workshop was also effective in promoting gender mainstreaming, with 80% of participants rating this area as "Excellent" or "Very Good." This shows that the content was well-received, emphasizing the importance of integrating gender considerations into maritime decarbonisation efforts. The session likely provided participants with a solid understanding of the need for gender inclusivity in the maritime sector. However, some participants (20%) rated it as "Good," indicating there may be opportunities to deepen the discussion or provide additional examples of gender mainstreaming in practice.

4.2 Workshop Delivery and Organization

In terms of the workshop's delivery, the visuals and acoustics were rated highly, with 17 participants marking the visuals as excellent, and 14 praising the acoustics (see figure 14). Discussions and presentations were also positively received, with the programme overall being rated well, demonstrating effective organisation and clear communication. However, several participants suggested improvements such as more time for breakout discussions, clearer visuals, and involvement of additional stakeholders, particularly from financial organisations and government entities.

Figure 14: Bar Chart showing participant feedback on the delivery of the workshop



4.3 Suggestions for Improvement and Opportunities for Future Learning

A recurring suggestion for improvement was the need for more in-depth discussions on accessing finance for decarbonisation projects, as well as longer sessions for hands-on learning and practical applications. Some participants also recommended extending the workshop duration to three days to allow for a more comprehensive exploration of the subject matter. Some also suggested adding a tour of local ports or involving more government officials and financial organisations to facilitate deeper engagement with regional stakeholders. Below are some quotes from participants making the mentioned suggestions

“Presentations on how to get funds to tackle the Maritime decarbonization. Finance seems to be a challenge for most Caribbean states”

“Add another day to event. Explore what UTT/ MTCC is doing from a project level at the University. or Site visit at some companies that spoke.”

“Involvement of more financial organisations and government officials”

“More time for open discussions”

When asked about topics for future workshops/ webinars, participants expressed a keen interest in areas related to financing maritime decarbonisation efforts, innovative technologies for port decarbonisation, and alternative fuels. Many respondents also highlighted the importance of exploring collaborative efforts across the Caribbean region to advance decarbonisation initiatives.

5 Challenges

Several challenges arose during the planning and execution of the workshop:

Limited Regional Representation:

Despite extensive outreach efforts, not all Maritime Administrations (MARADs) under the MTCC Caribbean umbrella were represented at the workshop. Countries such as Cuba and the Dominican Republic remain difficult to engage, and MTCC Caribbean’s request for assistance from the IMO to facilitate their participation was unsuccessful. Additionally, Grenada, a consistent participant in past workshops, was absent, likely due to the relatively short notice provided. MTCC Caribbean remains committed to strengthening engagement with these states through future project activities.

Procurement and Financial Processes:

Delays in the disbursement of project funds created challenges in meeting the host institution’s procurement requirements, which mandate proof of available funding before processing any procurement-related documents. The initial transfer of funds from the IMO was returned due to issues with the host institution’s account, causing further delays. MTCC Caribbean worked closely with the procurement and finance departments to expedite these processes.

Another significant challenge was the host institution's delayed payment to service providers. Although the MTCC Caribbean team promptly submitted all required documentation and obtained necessary approvals, severe delays were still experienced. This was particularly evident in the case of catering services, which represented a significant portion of the event budget. MTCC Caribbean continues to engage with the host institution to improve payment timelines and ensure more efficient financial processing in future activities.

6 Summary & Looking Ahead

The MTCC Caribbean 1st Regional Workshop—Progressing Maritime Decarbonisation in the Caribbean Region—successfully achieved its objectives by fostering dialogue, sharing insights, and identifying actionable pathways toward a low-carbon future for the Caribbean maritime sector. Over the two-day workshop, participants from 14 countries and 39 organizations engaged in comprehensive discussions on technology adoption, policy alignment, financing strategies, and the empowerment of women in maritime.

Summary of Workshop Outcomes & Actions

Session Title	Outputs/Outcomes	Next Steps	Owner(s)
Plenary Session 1: Status of Maritime Decarbonisation in the Caribbean Region	- Provided an overview of maritime decarbonisation efforts in Caribbean ports and shipping.	<ul style="list-style-type: none"> - Develop regional research proposals aligned to identified gaps. - Support MARADs in proposal development to access climate financing. 	MTCC, MARADS
	- Highlighted challenges such as limited digital infrastructure, policy gaps, high costs.		
	- Emphasised need for research-driven strategies and proactive policy development.		
Breakout Session 1: Identifying Maritime Decarbonisation Priorities	- Identified access to finance, outdated infrastructure and policy gaps as major barriers to port decarbonisation	- Conduct port readiness assessments	MTCC, Port Authorities, MARADS
	- Strengthened regional voice needed internationally	- Promote regional collaboration initiatives	MTCC
Plenary Session 2: Summary of Decarbonisation Strategies	- Highlighted strong leadership examples (e.g., Barbados), but general need for stronger legislative and policy frameworks.	<ul style="list-style-type: none"> - Support Legislative reviews and integration of IMO standards into national law - Facilitate knowledge sharing among Caribbean countries 	MARADS, Regional Governments, MTCC
Plenary Session 3: Advancing SDG 5 in the Maritime Domain	- Identified Gaps in workplace culture, gender bias and career barriers for women	<ul style="list-style-type: none"> - Update MTCC Caribbean's Gender Action Plan to guide gender inclusivity in maritime decarbonisation efforts. - Address the identified gaps in future gender focused activities 	MTCC
	- Agreed Priorities: mentorship, visibility and policy strengthening	- Advocate for gender-responsive policies in national maritime frameworks	MTCC, WiMAC, MARADS
Plenary Session 4: Financing Maritime	- Identified Public-Private Partnerships as a critical instrument to unlocking finance for decarbonisation initiatives	- Include more representatives from the private sector in maritime decarbonisation discussions	MTCC

Session Title	Outputs/Outcomes	Next Steps	Owner(s)
Decarbonisation Initiatives	-Emphasised the need for innovative business models that leverage sustainable energy solutions	-Conduct technology feasibility studies for major ports in the region	MTCC, MARADS
Open Discussion 3.6.1: Financing Gaps and PPPs	-Identified research, financing, and capacity building as core regional needs	-Develop proposals that can address the identified regional needs	MTCC, MARADS
	- There is a need for a coordinated approach to accessing finance for maritime decarbonisation initiatives -Increased dialogue between maritime authorities, climate change agencies, government ministries and financial institutions	-Facilitate cross-ministerial dialogue (National Workshops)	MTCC, MARADS
	-Lack of prioritisation of maritime decarbonisation in National Action Plans -Need for capacity building for the development of bankable projects and proposals to access funding for port development.	-Engage national government agencies in maritime decarbonisation dialogue -Facilitate training or technical assistance in proposal development	MTCC, MARAGS, Regional Governments and Government Agencies
Plenary Session 5: Regional Industry Alliance (RIA)	- Support for the formation of a Regional Industry Alliance (RIA) for regional collaboration and sustainable maritime decarbonisation.	- Initiate formal discussions to establish the RIA and create a strategic roadmap.	- MTCC, Regional Governments, Private Sector, Industry Leaders
	- Identification of key challenges in forming the RIA, including ambition misalignment and resource constraints.	- Address policy misalignment and advocate for a harmonised regulatory framework in the region.	
Plenary Session 6: Gender Inclusivity	- Need for a regional consensus and voice to adequately advocate for the region in key international dialogue	-Facilitate opportunities for regional dialogue (progress, challenges, and lessons learned) -Engage ports, vessel operators and other key maritime stakeholders for research opportunities	MTCC and other Regional Institutions (Maritime Focused), Academic institutions, MARADS, Regional Governments
	-Strengthening of local policy and legislative frameworks is identified as key to better reflect international commitments and support the adoption of sustainable shipping practices		
	-Emphasis on the need to increase research, data collection and knowledge sharing to support decision making and inform funding proposals		
Participant Feedback Session	- Positive feedback on the workshop's content and sessions.	- Utilise feedback to improve future workshop structure and content.	MTCC
	- Suggestions to extend the workshop and include more practical applications.	- Consider extending workshop duration for more in-depth discussions and case studies.	MTCC

Next Steps

Building on the workshop's insights, MTCC Caribbean remains committed to facilitating regional collaboration and advancing maritime decarbonisation. Key follow-up actions include:

- **Establishment of a Regional Industry Alliance (RIA):** MTCC Caribbean will initiate discussions with key stakeholders to formalise the RIA, ensuring an inclusive platform to address common regional priorities and advocate for access to climate financing.
- **Development of a Gender Action Plan:** Insights gathered from the working group session will guide the formulation of a comprehensive Gender Action Plan, with a focus on strengthening policies, promoting mentorship, and increasing access to technical training for women.
- **Capacity Building and Knowledge Sharing:** MTCC Caribbean will continue to provide technical assistance and research, supporting MARADs and industry stakeholders in developing and implementing decarbonisation strategies tailored to the Caribbean's unique needs.
- **Policy Advocacy and International Engagement:** MTCC Caribbean will work to bridge the gap between the region and international bodies, advocating for regional interests within the IMO and other forums, while fostering stronger ties with international financial institutions.

The workshop underscored the urgent need for collaborative action, targeted investments, and strategic partnerships to accelerate maritime decarbonisation. MTCC Caribbean, will continue to play a pivotal role in uniting stakeholders and driving sustainable progress toward a cleaner, more inclusive maritime future for the Caribbean.

KPIs as per MTCC Caribbean's Work plan

	KPIs Agreed	KPIs Achieved
Preparation for 1 in-person Regional Workshop for the Caribbean	- 50 Participants - 1:1 Male to Female Participant Ratio	- 103 Participants - 46.6% Female Attendance
Hosting 1 in-person Regional Workshop for the Caribbean	- 1 Regional Workshop Hosted	- 1 in-person Regional Workshop hosted
Submission of Regional Workshop Report	- 1 Workshop Report	- 1 Workshop Completion Report submitted

7 Annex I- Workshop Agenda

MTCC Caribbean Regional Workshop Progressing Maritime Decarbonisation in the Caribbean

Day 1: Thursday 20th February 2025

0830hrs - 0900hrs *Networking and Registration*

0900hrs – 1200hrs **Opening Ceremony**

0900hrs - 0905hrs *Opening Protocols*

- **National Anthem**
- **Emergency procedure briefing**

0905hrs- 0910hrs *Welcome and Opening Remarks*

- **Mrs. Vivian Rambarath-Parasram** (Director and Head, MTCC Caribbean)

0910hrs – 0935hrs *Greetings*

- **Professor Stephen Joseph** (President, The University of Trinidad and Tobago)
- **Professor Clément A.C. Imbert** (Chairman, Board of Governors, The University of Trinidad and Tobago)
- **Capt. Sukhjit Singh** (Technical Officer, International Maritime Organization)
- **H.E. Peter Cavendish** (Ambassador, Delegation of the European Union to Trinidad and Tobago)
- **Mr. Ronald Alfred** (Director, Ministry of Works and Transport Maritime Services Division)

0935hrs – 0945hrs *Group Photo*

Coffee Break (0945hrs-1000hrs)

1000hrs – 1200hrs **Plenary Session 1: Status of Maritime Decarbonisation in the Caribbean Region**

1000hrs - 1020 hrs *Status of Maritime Decarbonisation in the Caribbean*

- **Mrs. Vivian Rambarath-Parasram** (Director and Head, MTCC Caribbean) & **Mr. Stephan Nanan** (Deputy Director and GHG Advisor, MTCC Caribbean)

1020hrs – 1030hrs *GMN Phase I to GMN Phase II- The Transition and Expectations*

- **Capt. Sukhjit Singh** (Technical Officer, IMO) & **Mr. Michael Razack** (Project Manager, MTCC Caribbean)

1030hrs – 1050hrs *Energy-efficient technologies and operational measures*

- **Ms. Hanna Sukhu-Maharaj** (Director of Marketing and Logistics, PROMAN)
- **Pilot John Paul Pantin** (Pilot Master, Trinidad and Tobago Pilots' Association)

1050hrs – 1110hrs *Decarbonising strategies and initiatives- technology uptake*

- **Ms. Michelle Scipio-Hosang** (VP, Port and Estate Management, National Energy)
- **Mr Terrence Boodoosingh** (Manager, Operations, La Brea Industrial Development Company) (LABIDCO)

Key Outcomes:
Overview of Maritime Decarbonisation Initiatives in ports and Maritime shipping in the Caribbean

1110hrs – 1150hrs Accelerating the Implementation of Maritime Decarbonisation Initiatives

- Round Table Discussion
 - Chair- **Capt. Rawle Baddaloo** (Co-Leader, Caribbean Marine Environment Protection Association CARIBMEPA)
 - Panellist:
 - **Mrs Vivian Rambarath-Parasram** (Director and Head, MTCC Caribbean),
 - **Capt. Sukhjot Singh** (Technical Officer, IMO),
 - **Ms. Michelle Scipio-Hosang** (VP, Port and Estate Management, National Energy),
 - **Mr. Terrance Bodoosingh** (Manager, Port and Estate Operations (ag), LABIDCO)
 - **Chief Ervin Vargas Wilson** (Technical Director, MTCC Latin America)
 - **Pilot John Paul Pantin** (Pilot Master, Trinidad and Tobago Pilots' Association),

1150hrs – 1200hrs Poll

Networking Lunch Break (1200hrs-1300hrs)

1300hrs – 1430hrs **Breakout Session 1: Identifying Maritime Decarbonisation Priorities in the Caribbean**

1300hrs - 1430hrs Discussion among Participants

- Status of Maritime Decarbonisation Projects in the territories
- Current challenges faced with respect to the implementation of decarbonising strategies/initiatives
- MTCC Caribbean's role in advancing decarbonisation initiatives

Key Outcomes:
Insights on the challenges and opportunities for advancing decarbonisation initiatives in the region

Coffee Break (1430hrs-1445hrs)

1445hrs – 1700hrs **Plenary Session 2: Summary of Decarbonisation Strategies in the Region**

1445hrs - 1535hrs Presentation of Maritime Decarbonisation Priorities & Strategies by Selected Countries

- **St. Kitts & Nevis**
- **Trinidad and Tobago**
- **Jamaica**
- **Belize**
- **Barbados**

Key Outcomes:
Enhanced understanding of decarbonisation strategies applicable to the needs of the region

1535hrs – 1635hrs Discussion/ Q&A

1635hrs – 1645hrs Poll

1645hrs - 1700hrs Summary of Day 1

- **MTCC Caribbean/ IMO**

Day 2: Friday 21st February 2025

0845hrs – 0900hrs Registration

0900hrs – 1010hrs **Plenary Session 3: Advancing SDG 5 in the Caribbean Maritime Domain**

0900hrs – 0905hrs Welcome to Day 2

- **Mr. Michael Razack** (Project Manager, MTCC Caribbean)

0905hrs – 0920hrs Strategies for empowering women's maritime networks

- **Ms. Mariana Noceti** (Principal Programme Assistant, Women in Maritime Programme, IMO)

0920hrs – 1000hrs Challenges and Opportunities for Women in Maritime Decarbonisation

- Round Table Discussion
 - Chair: **Suzette Balkaran** (VP Research and Development, WiMAC)
 - Panellist-
 - **Ms. Mariana Noceti** (Principal Programme Assistant, Women in Maritime Programme, IMO)
 - **Dr. Evette Smith Johnson** (President, Women in Maritime Association Caribbean) (WiMAC)
 - **Pilot Jean-Paul Pantin** (Pilot Master, Trinidad and Tobago Pilots' Association),
 - **Ms. Anu-Radha Maharaj** (Crewing Officer, Centre for Maritime and Ocean Studies, University of Trinidad and Tobago)
 - **Mr. Michael Razack** (Project Manager, MTCC Caribbean)
 - **Ms. Stacey Charles-Mc Kenzie** (Chief Mate, Nautical Institute)

Key Outcomes:
Identification of gaps and opportunities to advance SDG 5 in the Caribbean maritime industry

1000hrs – 1010hrs Poll

Coffee Break (1010hrs – 1025hrs)

1025hrs – 1200hrs Working Group Session

- Gaps and challenges with to advancing SDG 5 in the Caribbean Maritime Sector
- Existing initiatives for advancing SDG 5
- Identification of priorities for the Gender Action Plan

Lunch Break (1200hrs-1300hrs)

1300hrs – 1430hrs **Plenary Session 4: Financing Maritime Decarbonisation Initiatives & SIDS**

1300hrs – 1340hrs Accessing Finance for Maritime Decarbonisation Initiatives in Caribbean SIDS

- **Mr. Pablo Periera** (Operations Specialist, the Infrastructure and Energy Division forced on Public and Private Partnerships, Inter-American Development Bank (IDB))

Key Outcomes:
Insights on applicable mechanisms and strategies for accessing financing for

	<ul style="list-style-type: none"> • Mr. Darwin Telemaque (Chairman, Port Management Association of the Caribbean (PMAC))- <i>"Experience of Ports in accessing finance"</i> 	maritime decarbonisation initiatives in the region
1340hrs - 1430hrs	<u>Working Group Session</u> <ul style="list-style-type: none"> • Gaps and challenges with accessing climate finance for maritime decarbonisation • Opportunities for advancing Public and Private partnerships for advancing technology uptake 	
Coffee Break (1430hrs – 1440hrs)		
1440hrs – 1500hrs	Plenary Session 5: Public and Private Partnerships and Regional Collaboration for Maritime Decarbonisation	
1440hrs – 1500hrs	<u>Regional Industry Alliance</u> <ul style="list-style-type: none"> • MTCC Caribbean 	
1500hrs – 1530hrs	<u>Enhancing collaboration for the uptake of sustainable technologies</u> <ul style="list-style-type: none"> • Round Table Discussion <ul style="list-style-type: none"> ○ Moderator- Capt. Sukhjit Singh (Technical officer, IMO) ○ Panellist- <ul style="list-style-type: none"> ▪ Ms. Patricia Persad (Divisional Operations Manager, Trinidad and Tobago Port Authority (PATT)) ▪ Mr. Gerrel Traboulay (HSE Manager, Point Lisas Industrial Port Development Corporation (PLIPDECO)) ▪ Mr. Jesse Walker (Managing Director, Delta Logistics) ▪ Pilot Jean-Paul Pantin (Pilot Master, Trinidad and Tobago Pilots' Association) ▪ Chief Ervin Vargas Wilson (Technical Director, MTCC Latin America) ▪ Ramps Logistics 	<u>Key Outcomes:</u> Identification of opportunities for regional collaborative efforts for advancing decarbonisation initiatives
1530hrs – 1540hrs	<u>Poll</u>	
Coffee Break (1540hrs – 1550hrs)		
1550hrs – 1700hrs	Plenary Session 6: Sustainable Shipping Imperatives for the Caribbean	
1550hrs - 1620hrs	<u>Round Table Discussion</u> <ul style="list-style-type: none"> • Moderator- Mrs Vivian Rambarath-Parasram (Director and Head, MTCC Caribbean) • Panellist <ul style="list-style-type: none"> ○ Captain Rawle Baddaloo (Chairman, Decarbonisation Committee, Caribbean Shipping Association) 	<u>Key Outcomes:</u> Identification of next steps to advancing maritime decarbonisation initiatives in the Caribbean region

-
- **Ayanna Evelyn** (Project Analyst (Data management and Communications), Caribbean Centre for Renewable Energy and Energy Efficiency (CCREEE))
 - **Mr. Darwin Telemaque** (Chairman, PMAC)
 - **Capt. Sukhjit Singh** (Technical Officer, IMO)
 - **Dr. Evette Smith Johnson** (President, WiMAC)

1620hrs – 1640hrs [Q&A and Poll](#)

1640hrs - 1700hrs [Workshop Summary](#)

Mr. Stephan Nanan (Deputy Director and GHG Advisor, MTCC Caribbean)

Closing Remarks