



MTCC LATIN AMERICA  
Maritime Technology Cooperation Centre

29-30

MAY  
2025

# REPORT

➤ 1<sup>ST</sup> NATIONAL WORKSHOP OF THE  
GMN PHASE II PROJECT

## EXPLORING SOLUTIONS FOR MARITIME DECARBONIZATION IN HONDURAS

*Working together to promote safer, more efficient and sustainable  
transport*

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## First National Workshop in Honduras – Executive Summary

The Maritime Technology Cooperation Centre for Latin America (**MTCC-LA**), within the framework of the GMN Project (Global Maritime Technology Cooperation Centres Network), in its Phase II, an initiative implemented by the International Maritime Organization (IMO) and funded by the European Union (EU), with the collaboration of the General Directorate of the Merchant Marine of Honduras (DGMM), held the First National Workshop on Exploring Solutions for Maritime Decarbonization in Honduras, at the Hilton Princess Hotel in San Pedro Sula, Honduras, on 29 and 30 May 2025.

The main objective of the workshop was to foster knowledge exchange, strengthen national cooperation, and promote the adoption of innovative and sustainable technologies that reduce greenhouse-gas (GHG) emissions in the maritime and port sector of Honduras, aligning local efforts with the IMO 2023 Strategy for the reduction of GHG from international maritime transport.

### Topics and themes addressed

- National maritime decarbonization strategies
- Technical energy-efficiency measures
- Sustainable alternative marine fuels
- Regulatory compliance and policy harmonization
- Climate finance and investment readiness
- Gender equality and social inclusion
- Industry–academia–government cooperation
- Digitalization and emission-monitoring tools

### Main achievements of the workshop

- ✓ Inter-institutional cooperation: DGMM, the National Port Company (ENP) and MTCC-LA agreed on cooperation for developing a road map for maritime decarbonization in Honduras towards 2050.
- ✓ Identification of challenges and solutions for adopting decarbonization measures in the Honduran fleet and ports.
- ✓ Preliminary design of pilot projects, including a green shipping corridor and the “Green Port of Honduras” certification programme.
- ✓ Promotion of gender equality, with women’s participation and a commitment to integrate the Red MAMLa and WISTA Honduras into future activities.
- ✓ Engagement with financial entities, laying the groundwork for structuring bankable proposals focused on energy efficiency.



The workshop gathered more than 72 on-site and virtual participants, including representatives of the Maritime Administration of Honduras, Port Authority, Ministry of Energy, Ministry of Natural Resources and Environment, Classification Societies, Universities, Maritime Academies, Association of Shipping Companies and Agents, Ship Operators, Energy Providers, NGOs, Research Institutions, International Organizations and other key stakeholders in the sector.

**MTCC-LA** provided technical and organizational support for planning and executing the national workshop, with local assistance from the DGMM of Honduras, in line with the objectives set under the GMN Project Phase II framework.

## 1. Agenda National Workshop

The agenda (Day 1 and Day 2) was structured by **MTCC LA** and the IMO PCU to systematically address the technological, regulatory and social challenges of maritime decarbonization in Honduras. Government, industry, financial and academic experts were invited to discuss:

- Innovative energy-efficiency technologies
- Policies and regulations for decarbonization
- Public-private partnerships and national cooperation
- Success cases and lessons learned
- Promotion of gender equality
- Sustainable financing

**To access the Workshop Agenda, click the following link:**

[Agenda 1st National Workshop Honduras](#)

## 2. Participation in the National Workshop

The workshop gathered 72 attendees, including maritime authorities, the private sector, academia and international organizations. The sectoral distribution was:

Attendance comprised **53 % men and 47 % women**, reaching the 1:1 target set in the 2025 work plan.

### 3. National Workshop Programme

#### 3.1. Inaugural addresses / Opening remarks

The day began with a brief protocol ceremony that framed the objectives of the First National Workshop of the GMN II Project and positioned maritime decarbonization as a strategic priority for Honduras.

#### Professor Víctor Luna Barahona – UMIP President

The official opening of the First National Workshop of the GMN Phase II Project was marked by a protocol ceremony attended by high-level institutional representatives, who delivered key messages on the international, national and academic commitment to the decarbonization of maritime transport in Honduras. The welcome words were delivered by Professor Víctor Luna Barahona, Rector of the UMIP, the host institution of MTCC-LA. In his speech, Professor Luna reaffirmed UMIP's firm commitment to environmental sustainability and its willingness to continue promoting the training of highly qualified professionals capable of leading technological transformation processes in the maritime sector. He highlighted the importance of spaces such as this workshop to enhance knowledge transfer, the exchange of regional experiences and the consolidation of strategic alliances aimed at common climate-mitigation objectives.

*Speaker 1*



**Cdr. Edgar Soriano Ortiz**, Director General of the Honduran Merchant Marine Directorate (DGMM), underlined the strategic role of the Maritime Administration in implementing public sustainability policies. He recalled that, following the ratification of MARPOL Annex VI, Honduras is actively assuming responsibility for adopting measures that contribute to the reduction of greenhouse-gas (GHG) emissions in maritime transport, working in coordination with multilateral organizations, industry and academia. Soriano invited those present to identify “finance-ready” pilot projects, such as establishing a green shipping corridor and introducing differentiated port fees for vessels with superior energy performance.



*Speaker 2*

**Ing. Wendy Revelo**, Superintendent of Puerto Cortés at the National Port Company (ENP), emphasized the vision of Honduras's main port to become a low-carbon regional benchmark. She detailed investments aimed at installing OPS (On-shore Power Supply) systems and electrifying gantry cranes, as well as the pilot project for photovoltaic pavement in the container yards. These actions will cut fuel consumption by more than 20 % and position Honduras as a sustainable logistics hub in Central America, inviting shipping lines to join the “Puerto Verde Honduras” initiative.

*Speaker 3*

On behalf of the European Union, **Alfredo Gadea**, Head of Cooperation at the EU Delegation in Honduras, highlighted the relevance of collective leadership in the face of climate change and noted that, by prioritizing the development of initiatives such as the GMN II Project, regional technical capacities are strengthened, cooperation is fostered, and progress is made toward inclusive and concrete solutions. He stressed the role of climate finance and innovation as catalysts for effective action, inviting MTCC-LA and DGMM to present a portfolio of bankable projects aligned with the Global Gateway strategy.



*Speaker 4*

The messages shared underscored the urgency of acting decisively, innovatively and cooperatively to achieve the decarbonization objectives of the Honduran maritime sector, reaffirming that only through joint, coordinated effort will it be possible to move toward a sustainable and resilient maritime-transport model in the country.

### 3.2. Presentation of the GMN Phase II Project and objectives of the national workshop

**Eng. Ervin Vargas Wilson – Director, MTCC-Latin America**

*Speaker 4*

Eng. Vargas opened his presentation by stressing that the GMN II Project represents a significant evolution from the previous stage, with a strengthened focus on regional integration, regional cooperation and alignment with the IMO 2023 Strategy on GHG reduction. He explained that, under the new 2024-2027 framework, the MTCCs will serve as technical bridges between maritime administrations, industry and academia, facilitating the replication of energy-efficiency pilot projects and the adoption of alternative fuels. He highlighted the programme's four structural pillars: Technological Pilots, Capacity Building, Public-Private Partnerships and Promotion of Gender Equality.

1. Green shipping corridors between strategic national ports, with continuous measurement of Carbon Intensity (CII).
2. Port electrification and deployment of OPS systems in Puerto Cortés.

3. Development of a National Emissions-Monitoring System based on IMO-DCS standards and MTCC-LA digital tools.

He then presented the workshop objectives:

- i) identify local technical, regulatory and financial challenges.
- ii) prioritize mitigation technologies and measures tailored to the Honduran context.
- iii) lay the groundwork for a 2025-2050 Decarbonization Road Map.

### 3.3. Session 1 – Overview of the maritime and port sector in Honduras

The first technical session of the **1st National Workshop of the GMN II Project** focused on presenting the current progress of the Honduran maritime-port sector in the face of the decarbonization challenge. Moderated by **Eng. Ervin Vargas**, the panel brought together representatives of the state port company, the maritime administration and the private logistics industry. The purpose was to strengthen the dialogue on public policies, share good practices and outline the challenges that must be addressed in the forthcoming national decarbonization road map.

#### Speakers

- **Eng. Wendy Revelo – Superintendent of Puerto Cortés National Port Company (ENP)**



Speaker 5

**Laura Rivera Carbajal – Deputy Director DGMM**



**Roberto López Lemus – Grupo AVANZA**





*Speaker 6**Speaker 7*

## Main topics addressed

- **Port profile and ENP road map**
  - Upcoming investments: OPS system on one Berth and expansion of the container yard applying low-carbon-infrastructure criteria.
  - Implementation of green port tariffs to incentivize vessels with better energy ratings.
- **Regulatory framework and national MRV system**
  - Draft EEXI/CII Regulation for the cabotage fleet
  - Design of a CO<sub>2</sub> Measurement, Reporting and Verification (MRV) system linked to IMO-DCS reports and to a future logistics observatory.
- **Perspective of the shipping and logistics industry**
  - Average age of the domestic fleet: 28 years; urgency for retrofits or repowering and access to green financing.
  - Need for a one-stop shop to import dual-fuel equipment and request temporary tax exemptions.
  - AIS observatory proposal to optimize cabotage routes and reduce consumption.

## Identified challenges

- Scarcity of fuel-consumption data for small vessels and tugs.
- Limited access to climate financing for shipping sector.
- Shortage of certified technical personnel in energy efficiency and OPS operation.

## Results and agreements

1. National Maritime GHG Inventory: managed by the ENP and DGMM of Honduras in charge of collecting data with **MTCC-LA** technical support.
2. National Technical Decarbonization Group: to be established to meet quarterly and align pilot projects for funding through financing mechanisms.
3. Specialized training: **MTCC-LA** will offer a technical course on EEXI/CII calculation and management for local operators and shipowners.

During the session, the audience highlighted the willingness of stakeholders to advance and create eco-financing mechanisms that accelerate the energy transition. The session concluded by noting that port modernization, proactive regulation and green financing are pillars for positioning Honduras as a benchmark for sustainable maritime transport in Central America.

### 3.4. Session 2 – Use of Sustainable Alternative Marine Fuels: Experiences and Lessons Learned

The second technical panel of the workshop addressed one of the pillars of the maritime energy transition: the adoption of low- and zero-carbon fuels. The space allowed tangible technological advances, structural barriers and sustainability criteria to be put into perspective, conditioning the viability of these solutions in the Honduran context.

#### Moderator:

**Martín Rousseaux** – General Manager, Rousseaux



*Speaker 8*

#### Speakers

**Edilberto Peralta – Lloyd’s Register***Speaker 9***José Alberto Rosas – ABL Group***Speaker 10***Carlos Rivera Garín – CROWLEY***Speaker 11***Italo Bonilla – DGMM***Speaker 12***Highlighted technical contents**

Topic	Summary of the intervention
<b>Global trends and ammonia</b>	Peralta drew on the <b>Fuel for Thought – Ammonia</b> report to illustrate its “zero-carbon” potential, as well as toxicity, cryogenic and IGF-certification challenges. He proposed pilots on coastal dual-fuel bulk carriers and a safety training programme.
<b>Methanol: commercial experience</b>	Rosas showed European conversion cases with CAPEX 20 % lower than LNG and rapid scaling to e-methanol. He suggested a Roatán – Puerto Cortés pilot corridor based on a grey/green methanol blend and fixed-price supply contracts.

Topic	Summary of the intervention
<b>LNG as a bridge fuel</b>	Rivera Garín described CROWLEY's LNG barge operations in the region (-25 % CO <sub>2</sub> ; almost zero SO <sub>x</sub> /PM) and the possibility of replicating a mobile bunkering service in Puerto Cortés.
<b>Honduran regulatory framework</b>	Bonilla detailed the launch of the national CO <sub>2</sub> MRV system. He announced a draft package of fiscal incentives for dual-fuel retro-fits (tariff exemption + accelerated depreciation).

## Main findings

- No single solution exists: decarbonization will depend on multiple technological pathways adapted to the national operational and economic reality.
- Comparative viability:
  - Methanol emerges as a commercially feasible option 2026-2030.
  - LNG acts as a bridge fuel while the necessary infrastructure is consolidated.
  - Ammonia could be adopted in the medium term, subject to safety and availability.
- Critical challenges: lack of supply infrastructure, high conversion CAPEX, shortage of specialized personnel.

## Debate and agreements

During the Q&A session, concerns arose about technology certification, regulatory flexibility and eco-financing mechanisms (blue and green bonds). It was agreed:

1. Prepare a feasibility study for mobile LNG/MeOH bunkering in Puerto Cortés.
2. Design a national training programme on Maritime Decarbonization.
3. Incorporate a technological-prioritization matrix (LNG → Methanol → Ammonia) in the 2025-2050 Road Map.

## Session closing

The panelists concurred on the urgency of reinforcing dialogue among industry, regulators and research centers to accelerate the adoption of sustainable fuels, stressing that Latin America must develop its own capacities to lead a just, inclusive and technically sound energy transition.



### 3.5. Session 3 – Decarbonization in Action: Regional Initiatives and Lessons Learned

The third workshop session presented practical decarbonization cases already under way in Latin America and other comparable regions, with the aim of extracting useful lessons for Honduras. The session was moderated by Roberto López Lemus, who steered the dialogue toward the transferability of good practices and the creation of national pilot projects.

#### Panelists

- **Dr. Gabriel Fuentes-Lezcano – Norwegian School of Economics (NHH)**



*Speaker 13*

- **Javier Díaz – Project Manager – MTCC-Latin America**



*Speaker 14*

- **Dhunnoo Kailash – Mauritius Ports Authority (MPA)**



*Speaker 15*

## Content developed

1. **Training for maritime decarbonization** – Javier Díaz presented the curriculum-transformation initiative geared toward the skills required for decarbonizing the maritime and port sector, known as **MEDTI**. It combines energy-efficiency modules, simulators, alternative-fuel use and hands-on practice in port terminals. He suggested replicating the programme, stressing that “without trained personnel there is no possible transition.”
2. **Green shipping corridors** – Gabriel Fuentes showed preliminary results for a potential green shipping-corridor route between Puerto Cortés (Honduras) and Colón (Panama). He proposed a joint pre-feasibility study by the ENP, the Honduran DGMM and the Panama Canal Authority.
3. **Pre-project “Green Port Honduras”** – Dhunnoo Kailash closed the panel by outlining a project that combines equipment electrification, an OPS system, Eco-Port certification and an educational module that involves green financing through different stakeholders.

## Key findings

- Integral approach: specialized education, operational data and demonstrative pilots are inseparable pillars of a national road map.
- Information deficit: the lack of reliable metrics on domestic-fleet fuel consumption is the main technical obstacle.

## Session agreements

1. MEDTI curriculum in Honduras: DGMM and ENP will coordinate with **MTCC-LA** technical support to adapt the training programme in the medium term.
2. Shipping corridor between Puerto Cortés – Colón: **MTCC-LA**, together with ENP and DGMM, will initiate discussions to develop a pre-feasibility study.

## Expected results

- Understand decarbonization methodologies applicable to Honduras.
- ✓ *Achieved:* two axes (education and corridors) and one flagship project (“Green Port Honduras”) were defined.
- *Identify replicable initiatives in Latin America.*
- ✓ *Achieved:* cooperation was agreed among DGMM, ENP, **MTCC-LA** and NHH to adapt good practices and digital tools.

## Session closing

The moderator concluded that pilot action backed by data and local talent is the fastest path to demonstrate benefits and attract financing. The audience rated the relevance of the content at 98 % and requested that the “Green Port” become a flagship project to coordinate investments and technical training over the next three years.

## 3.6. Session 4 – Regional Industry Alliance in Latin America (RIALA)

The fourth workshop slot focused on laying the foundations to form the Regional Industry Alliance in Latin America (RIALA), conceived as a collaborative mechanism that enables shipping lines, ports, agents and academia to coordinate decarbonization projects and access green financing. The discussion was guided by Eng. Ervin Vargas Wilson, Director of **MTCC-LA**.

## Panelists

### Alexis Xavier Rodríguez – A. P. Møller-Maersk



Speaker 16

### Adolfo José Becerril – AHCORENA



Speaker 18

## Profesor Víctor Luna Barahona – UMIP President



*Speaker 19*

### Session development

#### 1. Foundations of the alliance:

Eng. Vargas explained that RIALA seeks to articulate the Latin American maritime ecosystem under a governance framework: MTCC-LA technical secretariat, thematic working groups and a seed fund for pilot projects. He emphasized that the alliance does not replace national chambers but rather coordinates supra-regional efforts and facilitates access to climate finance.

#### 2. View of the global industry:

Alexis Rodríguez presented Maersk's strategy to achieve net-zero emissions by 2040 and argued that RIALA can speed up the adoption of green methanol through aggregated purchasing and regional supply contracts.

#### 3. Honduran national perspective:

Adolfo Becerril underlined the interest of local shipping agencies in joining the alliance, conditional on it providing tangible benefits: technical training, access to green credit lines and a platform for exchanging operational data that reduces bureaucratic burden.

#### 4. Role of academia:

Víctor Luna proposed that the UMIP and related centers act as RIALA's technical observatory, generating performance metrics and professional-competence certifications in alternative fuels, recognized at the regional level

### Key findings

- There is consensus that public-private collaboration is essential to mobilize investment in maritime and port infrastructure.
- Academia positions itself as guarantor of technical capacity and knowledge transfer.



## Agreements and next steps

1. A draft term of reference will be drawn up to formally launch RIALA by MTCC-LA in the coming months.
2. The creation of a financial vehicle, funded by voluntary contributions from founding partners and counterpart funding, will be explored, aimed at pre-feasibility studies of green corridors and OPS systems in Honduran ports.

## Session closing

The moderator concluded that creating RIALA offers a concrete avenue for collaborative action, combining the industry's innovation capacity, the regulatory legitimacy of administration and the knowledge of academia. The audience endorsed the initiative and will await the draft terms of reference to align commitments from the various key actors in Honduras's maritime industry.

## 3.7. Session 5 – Practical Workshop: Decarbonization Technological Solutions – Group Presentations

The final technical activity of the day took participants from theory to practice. Through a guided exercise, attendees applied calculation and visualization tools to design proposals for technological solutions aimed at reducing emissions from Honduran vessels and terminals.

## Moderator

**Eng. José Mauricio Ávila Franco – Operadora Portuaria Centroamericana (OPC–ICTSI Group)**



*Speaker 20*

**Experts: Eng. Martín Rousseaux and Eng. Ervin Vargas Wilson**

## Workshop development

### 1. Methodology and tools.

Four mixed groups worked with a Life-Cycle Assessment template for fuels and a digital dashboard, comparing a cabotage vessel in three scenarios (baseline diesel, diesel + EEXI measures, conversion to methanol).

## 2. Interactive demonstration.

Rousseaux guided participants in using speed, fuel and power data to calculate the Carbon Intensity Indicator (CII).

## 3. Real-time visualization.

Vargas explained to the working groups how to analyze return on investment for operational and technical measures such as slow steaming, shaft generators and switching to alternative fuels.

## 4. Presentation of results.

During the session, each group presented its project proposal in five slides (objective, technology, cost, CO<sub>2</sub> reduction, timeline). Highlights included:

- Dual-fuel methanol retrofit for a national Ro-Ro vessel, financed via blue bonds and accelerated depreciation.
- OPS system on Berth 5 of Puerto Cortés accompanied by a green port tariff.

## Key findings

- Up-to-date data is essential to justify projects to financial entities.
- Combining technical and operational measures offers a considerable CO<sub>2</sub> reduction.
- Local ports and shipping lines need continuous training in Life-Cycle Assessment (LCA) of fuels and CII to formulate “effective” proposals

## Agreements reached

1. **OPS technical table:** OPC will convene DGMM and ENP to define specifications for the first OPS point in Puerto Cortés.
2. **LCA-CII course:** training sessions will be developed, and work will begin on creating an open technical course for the industry.

## Closing

The moderators stressed that simple, visual tools turn climate goals into projects with clear numbers. The activity received a 96 % rating for practical usefulness, and participants requested that this type of training be repeated.

## 3.8. Session 6 – Field Visit to Puerto Cortés

## Objective

Verify the port's energy-efficiency initiatives and identify new opportunities for the decarbonization road map.

## Highlights

- Presentation of the installed Onshore Power Supply (OPS) system and the electric gantry cranes in operation.
- Technical exchange among ENP, DGMM and participants on costs, returns and regulatory requirements.

## Key findings

- The port has functional low-carbon infrastructure and verifiable metrics, facilitating access to green financing.
- There is potential to expand OPS at the port and in other terminals to electrify additional yard equipment.
- Obtaining and disseminating energy data strengthens the future national MRV platform.

## Next steps agreed

- Prepare pre-feasibility studies for OPS expansion and further electrification at the port.
- Share the port's energy metrics with **MTCC-LA** to analyze their impact on emission-reduction quantification.

### 3.9. Session 7 – Interactive Workshop: Way Forward to Develop a National Decarbonization Strategy

In this session, participants worked on a SWOT matrix specially designed for the Honduran maritime sector. The exercise, led by Ervin Vargas and Martín Rousseaux, aimed to identify the strategic elements that will underpin the Maritime Decarbonization Road Map for Honduras 2025-2050.

## Sectors analyzed and discussion guides

### 1. Group 1 – Maritime transport (cabotage, fishing, tourism)

- **Strengths:** fleet capabilities, operational experience, existing routes.

- **Weaknesses:** technical limitations, regulatory gaps, lack of training.
- **Opportunities:** available technologies or financing; regional alliances.
- **Threats:** transition costs, international competition, regulatory risks.

## 2. Group 2 – Ports and green logistics

- **Strengths:** existing sustainable infrastructure and practices; advanced ports.
- **Weaknesses:** urgency for modernization, insufficient logistical preparedness.
- **Opportunities:** new technologies, inter-terminal cooperation.
- **Threats:** energy demand, resistance to change, impact on competitiveness.

## 3. Group 3 – Regulation, education and financing

- **Strengths:** current legal frameworks.
- **Weaknesses:** regulatory voids, shortage of qualified staff and resources.
- **Opportunities:** regulatory improvement, updated curricula, international support.
- **Threats:** difficulty aligning sectors, obstacles to green financing.

## Main conclusions of the groups

- There is sectoral willingness, but urgent investment in port infrastructure and access to green financing are required.
- Fuel and activity data for the domestic fleet remain the largest gap for measuring and reporting progress.
- Regional cooperation (e.g. Puerto Cortés–Colón) and the creation of fiscal incentives can accelerate the adoption of alternative fuels.

Each team drafted three priority proposals for the potential National Maritime Decarbonization Strategy; those most voted for in the plenary were:

1. Complete the MRV-CO<sub>2</sub> inventory and establish a national open-data system (short term).
2. Expand OPS systems in Puerto Cortés accompanied by a green port tariff (medium term).

## Evaluation and next steps

The moderators compiled the information generated by the working groups and delivered it to DGMM for analysis in creating the Maritime Decarbonization Road Map for Honduras. The session received a 97 % satisfaction rating for its practical usefulness and for clarifying immediate actions for authorities, ports and shipping lines.



### 3.10. Session 8 – Panel discussion: the role of financial institutions and the banking sector in supporting maritime decarbonization projects

This session addressed how to mobilize monetary capital for decarbonization initiatives in Honduras and Central America. It brought together a governmental climate-finance specialist and a development-bank executive, who offered perspectives on instruments, requirements and lessons learned.

#### Moderator

**Yaninn Giselle Martínez Torres – Ministry of Finance, Honduras**



*Speaker 21*

#### Speaker

**Ing. Fausto Arroyo Crejo – Principal Executive, CAF-Development Bank of Latin America and the Caribbean**



*Speaker 22*

#### Dialogue content

##### 1. Overview of green financing in Central America

It was explained that Honduras has a Sustainable Bond Framework and climate facilities from the IDB and the Green Climate Fund; however, maritime projects still account for less than 2 % of the national climate-investment portfolio.

##### 2. Requirements for bankable projects

The criteria for ports and fleets were listed:

- GHG inventory

- cost-benefit analysis
- clear governance and local co-financing. it was noted that “proposals fail when they lack verified operational data and impact metrics.”

### 3. Questions and debate

The audience asked about sovereign guarantees, exchange rates and the possibility of issuing a Honduran blue bond. Both panelists agreed that a small pilot project (OPS + green tariff) can “open the door” to the sustainable-capital market.

### Session closing

The panel made it clear that attracting investment requires solid climate policies and business models. The moderator urged that at least two bankable projects be presented: the OPS point at Puerto Cortés and the methanol conversion of a cabotage Ro-Ro vessel. The session was rated 94 % useful for understanding how to turn ideas into fundable proposals.

### 3.11. Session 9 – Round table: Promoting gender equality for maritime decarbonization in Honduras

The workshop’s final session brought together leaders of women’s professional networks to discuss how gender equality can accelerate the climate transition and contribute to SDG 5. The conversation was guided by **Aricel Araúz**, administrative coordinator of **MTCC-LA**.

### Moderator – Aricel Araúz



Speaker 23

### Magdalena Santos Polanco



### Natalí Molina Moncada



Speaker 24

**Laura Rivera Carbajal Neida**

Speaker 26

Speaker 25

**Yolibeth Medina Turcios,  
Presidenta WISTA-Honduras**

Speaker 27

**Key topics**

1. Current gaps: low female participation in technical port positions and no gender indicators in green projects.
2. Leadership examples: the team managing the OPS pilot in Puerto Cortés includes women; the Red MAMLa mentoring programme has trained 25 environmental inspectors since 2022.
3. Training and visibility: the proposal to prepare a port-gender census to track progress year by year was announced.
4. Gender-lens finance: ESG credit lines exist that lower financial costs when the project incorporates parity targets; a “Equitable Port” label combining carbon metrics and workforce balance was proposed.

**Agreed proposals**

- Include indicators on female participation, wage gap and managerial positions in the 2025-2050 Decarbonization Road Map (DGMM, ENP and MTCC-LA).
- Prepare the first port-gender census and set a 40-60 % parity target for 2030.

**Closing**

The speakers agreed that including women drives the innovation and technological adoption needed for a low-carbon maritime transition. The audience rated the panel 97 % useful and recommended organizing a specific green-finance-with-gender-focus workshop in 2026.

**Summary of results and actions of the National Workshop – GMN Project II (Honduras)**

Session Title	Results / Conclusions	Next Steps	Responsible(s)
1. Overview of the maritime and port sector in Honduras	Emissions and capacities baseline.	Conduct the MRV-CO <sub>2</sub> inventory.	DGMM – ENP
	Identification of challenges and opportunities (data, OPS, retrofits).	Establish the National Technical Decarbonization Group.	MTCC-LA as Technical Support
2. Use of Alternative Marine Fuels	Feasibility matrix (methanol > LNG > ammonia).	Study on the mobile LNG/MeOH bunkering in Puerto Cortés.	DGMM – ENP – Shipping companies
	Barriers: infrastructure and CAPEX.	Design tax incentives for dual-fuel retrofits.	MTCC-LA as Technical Support
3. Decarbonization in action – initiatives and lessons	MEDTI-Honduras model (training).	Preliminary project “Green Port Honduras”.	DGMM – ENP
	Preliminary project “Green Port Honduras”	Action plan for MEDTI Curriculum Pre-feasibility of Cortés-Colón green corridor.	MTCC-LA as Technical Support
4. Regional Industry Alliance (RIALA)	Consensus to formalize the alliance. Identification of stakeholders.	Present the ToR for its governance.	MTCC-LA
	Identification of stakeholders		
5. Practical workshop – technological solutions	Two ship case studies on retrofits and methanol as fuel, analyzed in the workshop.	Development of Fuel Life Cycle (LCA) Course and Carbon Intensity Indicator (CII) for inspectors.	MTCC-LA
	Life Cycle Analysis (LCA) of fuels and Digital Dashboard of the Carbon Intensity Indicator (CII).		
6. Field visit to Puerto Cortés	Verification of OPS and electric cranes.	Pre-feasibility studies for OPS expansion.	ENP – DGMM
	Identification of expansion needs for RTG and bulk cargo crane facilities.	Integrate energy metrics into the MRV dashboard.	
7. Interactive workshop – SWOT strategy	SWOT matrix presented and agreed by participants.	Results of the SWOT analysis	DGMM – ENP
		Quarterly meetings of the Technical Group.	MTCC-LA as Technical Support
8. Climate Finance Panel	Presentation of proposals based on bankable criteria.	Financial structuring guide.	Secretariat of Finance of Honduras
	Opportunity for blue and green bonds.		



Session Title	Results / Conclusions	Next Steps	Responsible(s)
9. Gender equality and energy transition Round Table	Gaps: 14% women in technical positions.	Include gender indicators in all GMN Phase II Project activities	MTCC-LA
		Publish port gender census.	Red MAMLa – WISTA-Honduras – REMPORT – DGMM
Feedback Session	Overall positive assessment (94%) of the workshop's content and dynamics.	Integrate the feedback to optimize the structure and topics for the next edition.	MTCC-LA
	Recommendations to extend the duration of the panels and to deepen practical applications.	Evaluate inclusion of additional open-question blocks and advanced practical exercises.  Recommendations to extend panel durations and deepen practical applications.	

## 4. Challenges

During the preparation and execution of the First National Workshop of the GMN Phase II Project, several challenges were identified that provide valuable lessons for organizing future national and regional events. The main observations are summarized below:

- Multisectoral coordination prior to the event: although wide representation of key maritime actors was achieved, the need to strengthen early articulation and dissemination mechanisms among DGMM, ENP, shipping lines, academia and financial entities is acknowledged.
- Heterogeneity of participants' technical level: national differences in technological adoption and institutional capacities revealed knowledge gaps on decarbonization, reinforcing the convenience of continuing to promote differentiated and specialized training.

- Logistics and coordination of simultaneous sessions: the hybrid format (in-person/virtual) required additional logistical and technical efforts to ensure a smooth, high-quality experience for both local and international attendees.
- Time management in discussion panels: in certain sessions, high interaction reduced the time available for questions and answers; it is suggested to readjust the structure of thematic blocks or extend their duration in future editions.
- Cross-cutting integration of key approaches: although topics such as gender equity and technological innovation were addressed in specific blocks, there is an opportunity to mainstream these axes in all presentations and debates.

These challenges did not hinder the event's success; on the contrary, they reflect the complexity and richness of a high-level meeting. Addressing them proactively will strengthen the organizational capacity of **MTCC-LA** and its partners, consolidating their leadership in promoting spaces for reflection and action toward a just energy transition in the Honduran maritime sector.

## 5. Next steps

The First National Workshop of the GMN Phase II Project has provided a clear, consensus-based road map for advancing the decarbonization of Honduras's maritime sector and for guiding the wider region. Below are the agreed lines of action, the technical justification for each and the suggested time frame.

- ✓ Strengthening the technical capacity of the DGMM and other key stakeholders
- ✓ Launch of emblematic pilot projects
- ✓ Formalization and operation of the Regional Industry Alliance (RIALA)
- ✓ Mobilization of climate finance
- ✓ Cross-cutting integration of gender equality (WISTA, REMPORT, Red MAMLa)
- ✓ Creation of a national open-data system on emissions and efficiency.

### Key Performance Indicator (KPIs) for the 2025 work plan

Description	KPI agreed	KPI achieved (2025)
Preparation of the 1st national workshop (call-out and logistics)	≥ 50 participants – M:F ratio ≥ 1:3	72 participants – 46 % female attendance
Development of the 1st national workshop	1 in-person national workshop organized	1 in-person national workshop held
Delivery of the national workshop report	1 Report requested by IMO	1 Report submitted to IMO
Women's integration in the 1st national workshop	1 women-integration session – 40 % female participation in the national workshop	1 women-integration session held and 47 % female attendance

Description	KPI agreed	KPI achieved (2025)
Stakeholder outreach for preparing a road map to establish RIALA	≥ 2 shipping companies participating	4 shipping companies participating with interest in joining RIALA

## 6. Annexes

### 6.1. National Workshop Presentations

To access the Workshop Presentations, click the following link:

[Click here to view the presentations](#)

### 6.2. Event photos









## Acknowledgements

The successful holding of the First National Workshop of the GMN Phase II Project in Honduras was made possible thanks to the commitment and collaboration of many actors who contributed their expertise, time and effort to achieving the stated objectives.

This event not only served as a platform for sharing best practices and decarbonization solutions for Honduras's maritime sector, but also consolidated a community committed to innovation, climate action and sustainability.

