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ANNEX II

to the Commission Implementing Decision on the Multiannual action plan for the NDICI-Global Europe thematic programme Global Challenges (Planet) for 2022-2025

Action Document for Global Maritime Technology Cooperation Centres Network project – Phase 2

MULTI-ANNUAL PLAN

This document constitutes the annual work programme within the meaning of Article 110(2) of the Financial Regulation, within the meaning of Article 23 of the NDICI-Global Europe Regulation.

1 SYNOPSIS

1.1 Action Summary Table

1. Title CRIS/OPSYS business reference Basic Act	Global Maritime Technology Cooperation Centres Network project – Phase 2 OPSYS: ACT-61190 Financed under the Neighbourhood, Development and International Cooperation Instrument (<u>NDICI-Global Europe</u>)
2. Team Europe Initiative	No
3. Zone benefiting from the action	The action shall be carried out at global level
4. Programming document	NDICI-Global Europe ‘Global Challenges’ thematic programme Multi-annual indicative programme 2021-2027
5. Link with relevant MIP(s) objectives / expected results	Priority area 2: Planet, Climate change and Disaster Risk Reduction, directly addressing climate change mitigation through greenhouse gas (GHG) emission reduction in international maritime shipping, as well as the green transition. The Action will also result in substantial contributions to the other priority areas of the MIP: People (education and skills); Prosperity (Investment climate, private sector, decent work, employment and trade; Quality infrastructure investments and connectivity); Partnerships (Strategic cooperation with global and multilateral organisations and processes).
PRIORITY AREAS AND SECTOR INFORMATION	
6. Priority Area(s), sectors	Priority area 1 - Climate change and Disaster Risk Reduction DAC sector: Environmental policy and administrative management – 41010 DAC sector: Transport policy and administrative management – 21010

7. Sustainable Development Goals (SDGs)	<p>Main SDG 13: Take urgent action to combat climate change and its impacts (Target 13. 3 ; Target 13.b)</p> <p>Other significant SDGs and where appropriate, targets:</p> <p>SDG 3 Good Health and Well-Being</p> <p>Target 3.9</p> <p>SDG 5: Achieve gender equality and empower all women and girls</p> <p>Target 5.5</p> <p>SDG 7 Affordable and Clean Energy</p> <ul style="list-style-type: none"> • Target 7a • Target 7b <p>SDG 11 Sustainable Cities and Communities</p> <ul style="list-style-type: none"> • Target 11. 6 <p>SDG 14 Life Below Water</p> <p>Target 14.1</p> <ul style="list-style-type: none"> • Target 14.a • Target 14.c <p>SDG 17 Partnerships for the Goals</p> <ul style="list-style-type: none"> • Target 17.6 • Target 17.7. • Target 17.9 			
8 a) DAC code(s)	<p>DAC code 1 – Environmental policy and administrative management– 41010 (50%)</p> <p>DAC code 2 – DAC sector: Transport policy and administrative management – 21010 (50%)</p>			
8 b) Main Delivery Channel	<p>United Nations entities - 41100</p>			
9. Targets	<p><input type="checkbox"/> Migration</p> <p><input checked="" type="checkbox"/> Climate</p> <p><input type="checkbox"/> Social inclusion and Human Development</p> <p><input type="checkbox"/> Gender</p> <p><input type="checkbox"/> Biodiversity</p> <p><input type="checkbox"/> Education</p> <p><input type="checkbox"/> Human Rights, Democracy and Governance</p>			
10. Markers (from DAC form)	General policy objective @	Not targeted	Significant objective	Principal objective
	Participation development/good governance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Aid to environment @	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Gender equality and women's and girl's empowerment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Trade development	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Reproductive, maternal, new-born and child health	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Disaster Risk Reduction @	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Inclusion of persons with Disabilities @	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Nutrition @	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	RIO Convention markers	Not targeted	Significant objective	Principal objective
	Biological diversity @	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Combat desertification @	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Climate change mitigation @	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Climate change adaptation @	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Internal markers and Tags:	Policy objectives	Not targeted	Significant objective	Principal objective
	Digitalisation @	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	digital connectivity digital governance digital entrepreneurship digital skills/literacy digital services	YES <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	NO <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
	Connectivity @	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	digital connectivity energy transport health education and research	YES <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	NO <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
	Migration @ (methodology for tagging under development)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	Reduction of Inequalities @ (methodology for marker and tagging under development)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Covid-19	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

BUDGET INFORMATION	
12. Amounts concerned	Budget line(s) (article, item): BGUE-B2022-14.020241-C1-INTPA Total estimated cost for 2022: EUR 10 000 000 Total amount of EU budget contribution for 2022: EUR 10 000 000
MANAGEMENT AND IMPLEMENTATION	
13. Type of financing¹	Indirect management with International Maritime Organization (IMO, specialized agency of the United Nations), section 4.3.1

1.2 Summary of the Action

<p>In line with the external dimension of the EU Green Deal, the EU Energy & Climate Diplomacy, the Initial IMO GHG Strategy and its eventual successor and building on the achievements of the Phase 1 of the project (2016-2021), the Action aims to support developing countries in Africa, the Caribbean and the Pacific (with particular focus on least developed countries and small-island developing states) in meeting the energy-efficiency and greenhouse-gas targets of the International Maritime Organization. The proposed Action contributes to the NDICI-Global Europe ‘Global Challenges’ MIP Priority area 2: Planet, directly addressing climate change mitigation through GHG emission reduction in international maritime shipping, as well as the green transition. It also contributes to Sustainable Development Goals (SDG) 13, 3, 5, 7, 11, 14, 17 and DAC sectors Environmental policy and administrative management and Transport and storage.</p> <p>The project expands technical support, capacity development programmes and geographic outreach to improve maritime energy efficiency in participating regions. Through Regional Maritime Technology Cooperation Centres (MTCCs) in Africa, Caribbean and the Pacific region, target countries are set to achieve substantial reduction in GHG emissions from selected ports and shipping activities across the regions. The project connects international technical expertise with local networks and know-how to foster regional public-private partnerships and knowledge sharing. Phase 2 will retain the regional level focus of Phase 1 and enter a new phase with national demonstration pilots in 2 to 3 partner countries in each region.</p>

2 RATIONALE

2.1 Context

<p>Shipping is a large and growing source of greenhouse gas emissions (GHGE), which cause local port-wise or coast-wise air quality problems and have implications for global warming and ocean acidification. According to the fourth IMO GHG Study 2020², international shipping emissions represented 2.89% of global emissions in 2018 and are projected to increase from about 90% of 2008 emissions in 2018 to 90-130% of 2008 emissions by 2050, due to expected growth of the world economy and associated transport demand. Without swift mitigation measures in place, the GHGE are projected to increase significantly, exacerbating the effects of climate change and hampering the achievement of the Sustainable Development Goals (SDG).</p> <p>European Union (EU) and the International Maritime Organization (IMO) have been committed to the United Nations’ 2030 Agenda for Sustainable Development and the SDGs, developing strategies and programmes to address the effects of climate change on global communities. To this end, in 2018, the IMO adopted an initial GHG strategy (to be revised in 2023), setting out a target to cut annual greenhouse gas emissions from international shipping by at least half by 2050, compared with their level in 2008, and working towards phasing out GHG emissions from shipping entirely as soon</p>
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¹ Art. 27 NDICI

² IMO. *Fourth IMO GHG Study 2020*; International Maritime Organization (IMO): London, UK, 2020.

as possible in this century. The strategy was designed with consideration of broader international conventions and agreements such as United Nations Framework Convention on Climate Change (UNFCCC), the Paris Agreement, United Nations Convention on the Law of the Sea (UNCLOS), as well as the 2030 Agenda, in particular the SDG 13 on Climate Action.

The EU has also reaffirmed its support for the universal aims of the Agenda 2030 and the SDGs and the Paris Agreement, through its ambitious policies, including the EU's flagship European Green Deal, geared to foster global solutions while helping partner countries to roll out the universal agendas. Through its 'Global Challenges' programme of the Neighbourhood, Development and International Cooperation Instrument — Global Europe (NDICI-Global Europe) (2021-2027), the EU is engaged in the delivery of the global commitments to achieve sustainable development through support to and acceleration of the SDG 13, SDG 3 (Good Health and Well-Being), SDG 5 (gender equality), SDG 11 (Sustainable Cities and Communities), SDG 7 (affordable and clean energy) and SDG 14 (Life below water), by supporting the global/trans-regional advocacy, research and innovation, technical assistance, public goods and knowledge and women leadership in climate change; global/trans-regional networks, information and early warning systems; and testing innovative approaches and pilot projects.

As part of this commitment and in line with its principles of multilateralism, from 2016-2022, the EU supported the implementation of the IMO's Global Maritime Technology Cooperation Centre (MTCC) Network (GMN) project. The project aimed to strengthen the national and regional maritime shipping capacities to enable national and regional cooperation to tackle the impact of climate change and reduce greenhouse gas emissions from the maritime shipping industries through technical assistance, capacity-building and pilot demonstrations to foster ship energy efficiency. The project was implemented in five regions of the world, characterized by a significant number of Least Developed Countries (LDCs) and Small Island Developing States (SIDS) – Africa, Asia, the Caribbean, Latin America, and the Pacific in the framework of the EU's flagship "Climate Change Mitigation: Supporting Low Carbon Technology" under the Global Public Goods and Challenges Programme (GPGC) 2014-2020³.

The innovative and strategic GMN project was instrumental for raising awareness on the impact of GHGE, establishing five centres of excellence (MTCCs) and strong institutional networks, strengthening national competencies and skills, identifying threats, gaps and barriers to energy efficiency in maritime and forging strong public-private partnerships. Quality data and research, awareness and visibility actions and technological innovations fostered by the project have led to increased awareness and commitment of public and private actors, contributing to the growing consensus on the next steps towards the decarbonisation of the industry and reducing its impact on climate and environment. The project has been essential for the early uptake of some energy-efficiency technologies, which have already shown tangible and replicable results in terms of actual reduction of emissions in the Pacific and Africa.

However, despite the success of the Phase 1 with the establishment of MTCCs and strengthened capacity in the regions, further action is necessary to sustain the momentum, especially in relation to technological and operational best practices and their demonstrations. Significantly more time and investment is required to further strengthen the established capacities, foster the uptake of energy-efficient technologies and practices, develop and test tangible, replicable and cost-effective solutions, and help countries with their piloting, adoption and implementation to achieve meaningful and sustainable GHGE reduction in the shipping sector.

³ 'Flagship 12: Climate Change Mitigation: Supporting low carbon development' in 'European Commission. 2014. Programme on Global Public Goods and Challenges 2014–2020, Multi-annual Indicative Programme 2014–2017. Brussels: European Commission.'

Building on the achievements of MTCCs established under the EU/IMO GMN project's phase 1, as well as other past and ongoing IMO projects focusing on piloting innovative solutions, such as GreenVoyage2050, Blue Solutions, FINSMART, IMO CARES, TEST BioFouling and NextGEN, the new phase aims to expand its technical support, capacity building programmes and geographic outreach to improve energy efficiency of maritime transport and support implementation of the Initial IMO GHG Strategy and its eventual successor in participating regions. Through MTCCs, target countries will aim to achieve quantifiable reduction in GHGE from selected ports and shipping across the regions, help establish enabling environment (regulatory, financial, and technical) necessary to the transformation, facilitate the introduction of portside energy efficiency measures and technologies, the retrofitting of vessels (under 5,000 GT), and will connect European and international level technical expertise with local networks and local expertise. R&D institutions of the global North, with a focus on EU countries best practices, ongoing scientific projects and developments, will be connected to the MTCCs for the purpose of demonstrating technologies through collaborative efforts. Phase 2 will target Africa, Caribbean and Pacific, while maintaining strategic links with MTCC-Asia (based in China) and MTCC-Latin America (based in Panama).

2.2 Problem Analysis

Developing countries, especially the LDCs and SIDS are particularly vulnerable to the effects of the GHGE and climate change on ecosystems and societies. Ports and shipping are vital to national and local economies of developing countries, which are increasingly involved in international maritime transport activities. Ship-related GHGE in developing countries are growing at a much faster rate than those of industrialised countries and require urgent operational and infrastructure improvements to reduce emissions and costs.

For the full potential of the GHGE reduction measures to be realised, they must be applied within developed and developing regions alike. With that in mind, and in line with its initial Strategy, the IMO has adopted in 2020 more stringent mandatory energy efficiency measures for new build ships to apply as of 2022, thereby accelerating the pace new build ships will improve their energy efficiency. In addition, in 2021, the IMO adopted new technical and operational measures to improve the technical and operational carbon intensity and energy efficiency of existing ships. However, many developing countries in the target regions, especially the LDCs and SIDS, with their aging domestic fleets face considerable barriers that hamper the delivery of improved energy efficiency and emissions reductions measures to control maritime GHGE and prevent them from transitioning to energy efficient and low carbon shipping. These barriers are related to the: (1) lack of institutional capacities to adopt adequate measures, including lack of synergies between industry players and public-private partnerships; (2) lack of reliable information on GHGE, fuel consumption and available mitigation measures, to identify existing potential for fuel efficiency; (3) limited access to advanced technologies and know-how to enable necessary transition to energy efficiency in shipping sector; (4) limited participation in global and regional capacity-building, knowledge sharing and technology cooperation/transfer; (5) policy and regulatory barriers and legal arrangements in developing countries in target regions, especially in the LDC/SIDS, that impede adoption, implementation and/or enforcement of international regulations; and (6) the lack of access to finance, which prevents investments in ship efficiency. As a result of these constraints, programs, instruments, improved operational behaviours or technologies are often insufficiently implemented in the developing regions, therefore global compliance and a shift towards low carbon shipping is unlikely to be achieved without increased and sustained support.

The key stakeholders of this Action are the MTCCs in Africa, Caribbean and Pacific regions that will continue acting as the centres of excellence and clearing houses for innovative solutions related to GHGE reduction in shipping sectors. Through these MTCCs, the project will engage the respective Host Institutions: Jomo Kenyatta University of Agriculture and Technology (JKUAT),

the University of Trinidad and Tobago (UTT) and the Pacific Community (SPC), to coordinate and deliver capacity building activities, provide specialist technical support in the area of port development/port infrastructure, with particular focus on Cold Ironing installation, vessel retrofitting and alternative energy solutions and will backstop the establishment of the Regional Industry Alliances. Maritime Administrations, Port Authorities, relevant governmental agencies/departments/ministries and ship owners /operators/managers or shippers of the Participating Developing Countries (PDCs) will be actively engaged both as the recipients of capacity-development and awareness-raising interventions as well as the champions and owners of the knowledge and technologies fostered through this Action to ensure clearance, buy-in and eventual sustainability of piloted technologies, equipment and practices. Maritime technology service providers will also be proactively engaged for the provision of services on energy efficient and low carbon ships' technologies, practices and systems.

In line with the IMO Gender Strategy and Maritime SheEO Leadership Programme priorities and building on the successful engagement in the GMN Phase 1 of the Regional Women's networks such as Women in Caribbean Association (WIMAC), Women in the Maritime Sector in East and Southern Africa (WOMESA) and Pacific Women in Maritime (PACWIMA), the action will further foster women's participation in the shipping sector and strengthen relevant capacities to empower women as seafarers, administrators and policy-makers.

MTCCs in Asia and Latin America and their respective host institutions (Shanghai Maritime University – SMU and Panama Maritime University – UMIP) will continue to participate in the exchange of knowledge and best practices and potential replication and dissemination of the results of this Action in their respective regions. Other potential stakeholders include the World Maritime University, European Port Authorities, EU Member State authorities, Maritime Decarbonisation Public or Private R&D Centres and EU maritime decarbonisation focused project teams, International Financial Institutions, regional and national development banks and intergovernmental bodies, among others.

The environmental sustainability of the project is anchored to the international policies and regulations on maritime energy efficiency and climate change that it promotes and supports through all its actions. The project will ensure the policy-level sustainability by increasing awareness and strengthening capacities of national and regional stakeholders under the Outputs 1.2 and 1.3. and fostering buy-in and ownership of innovative solutions developed under the Output 1.1. To ensure the institutional and financial sustainability of the project and following the successful examples of MTCC Asia and Latin America, the project will endeavour to further embed the MTCCs in the structures of Host Institutions, while working with external donors and public and private stakeholders to establish funding channels beyond the EU/IMO financing through the activities envisaged under the Outputs 1.2. and 1.3. It is expected that the three participating MTCCs, further strengthened through this action, will be able to develop bankable projects to attract public and private financing and will participate in IMO initiatives and projects aimed at GHG reduction, energy efficiency and climate change.

3 DESCRIPTION OF THE ACTION

3.1 Objectives and Expected Outputs

The Overall Objective (Impact) of this action is **substantial and quantifiable reduction of GHG emissions from maritime shipping in developing countries, especially the SIDS and LDCs in Africa, Caribbean and Pacific to contribute to the achievement of SDG 13.**

The Specific Objective (Outcome) of this action is:

1. Wider implementation of IMO's energy efficiency regulations and the Initial IMO GHG Strategy and its eventual successor, in line with the external dimension of the EU Green Deal, the EU Energy & Climate Diplomacy sector.

The Outputs to be delivered by this action contributing to the corresponding Specific Objectives (Outcomes) are:

- 1.1. Uptake of technologies and infrastructure for increased energy efficiency and low carbon technologies in ports and on ships;
- 1.2. Strengthened capacities of maritime and port authorities, shipping industry and government representatives for maritime energy efficiency, related technologies and measures;
- 1.3. Strengthened public-private sector partnerships for increased promotion, investment and uptake of energy-efficient and low carbon technologies, policies and practices;
- 1.4. Strengthened capacities of regional women's organizations on maritime energy efficiency, related technologies and measures.

3.2 Indicative Activities

Activities relating to Output 1.1

- Assessment of technology needs, identify and engage stakeholders for implementation of energy efficiency and low carbon technologies, including the use of low carbon fuels;
- Formal definition of the "energy efficient and low carbon technologies and operations" pilot projects by MTCCs via stakeholder engagement and funding;
- Implementation of and reporting on the pilot projects on uptake of technologies and infrastructure for increased energy efficiency and GHG emissions reductions in ports and on ships;
- Publications and media campaigns to disseminate results.

Activities relating to Output 1.2:

- Design of workshop materials and guides, including on gender responsive policies;
- Delivery of training courses/workshops and courses on policy development, MARPOL Annex VI ratification, regulatory implementation and enforcement, uptake on energy efficient and low carbon technologies and operations and data collection and reporting;
- Publications and media campaigns to disseminate results.

Activities relating to Output 1.3:

- Identification of public-private partnership opportunities and barriers;
- Identification and mapping of potential public and private partners targeting;
- Delivery of regional and national encounters and publicity campaigns to attract and engage industry representatives, public and private donors, financial institutions;
- Establishment of Regional Industry Alliances (RIA).

Activities relating to Output 1.4:

- Identification of capacity, awareness and visibility gaps and needs for Women in Maritime;
- Design of training, awareness and visibility tools and materials to foster women's participation and leadership;
- Delivery of capacity-building, visibility and awareness actions in participating countries to promote Women in Maritime.

3.3 Mainstreaming

Environmental Protection & Climate Change

Outcomes of the SEA screening:

This action is no or low risk (no need for further assessment)

Outcomes of the EIA (Environmental Impact Assessment) screening:

This action is no or low risk (no need for further assessment)

Outcome of the CRA (Climate Risk Assessment) screening: This action is no or low risk (no need for further assessment)

Gender equality and empowerment of women and girls

As per OECD Gender DAC codes identified in section 1.1, this action is labelled as G1. This implies that the project will address gender equality, with a specific output aiming at strengthening the capacities of regional women's organizations on maritime energy efficiency, related technologies and measures. In addition, the project team has worked to mainstream gender equality throughout the project document, including identifying key indicators and milestones on IMO's gender approach. IMO ensures that gender equality is given due consideration throughout all its projects design and implementation. The action will seek to contribute to the Gender Action Plan III (GAP III, 2021-2025), notably its key thematic area 3.6 "Addressing the challenges and harnessing the opportunities offered by the green transition and the digital transformation", but also and especially the key thematic area "Promoting equal participation and leadership"⁴. The action will also seek to contribute to IMO's gender strategy, namely Goals 4 and 5⁵, which aim to collect gender-differentiated data to monitor, analyse and report gender-relevant data for evidence-based gender policies; communicate and advocate for gender equality as one of IMO's core values; and support networks and establish partnerships within the maritime community to foster gender equality.

Human Rights

While the action does not directly concern with the human rights, the Human rights-based approach and its principles will be ensured throughout the action to ensure participation, non-discrimination, accountability and transparency. The action will have an indirect impact on the citizens of the participating regions and beyond by contributing to their right for safe environment, clear air and water, sustainable and safe transport and transparent information.

Disability

As per OECD Disability DAC codes identified in section 1.1, this action is labelled as D0. This implies that the action does not specifically target disability.

Democracy

Not targeted. The project has not directly engaged on issues around democracy and no negative effects are expected.

Conflict sensitivity, peace and resilience

Not targeted. The project has not directly engaged on issues around conflict sensitivity, peace and resilience, and no negative effects are expected.

Disaster Risk Reduction

Not targeted. While the action aims to achieve significant reductions in GHGE, which would contribute to mitigating climate change and its negative impacts such as ocean acidification and sea-

⁴ Together Towards a Gender Equal World: EU Gender Action Plan III – An Ambitious Agenda for Gender Equality and Women's Empowerment in EU External Action.

⁵ IMO Gender Equality Strategy 2020-2030

level rise, it will not directly contribute to resilience building through disaster risk reduction and climate change adaptation.

Other considerations if relevant

None

3.4 Risks and Lessons Learnt

Category	Risks	Likelihood (High/ Medium/ Low)	Impact (High/ Medium/ Low)	Mitigating measures
Political	Risk 1: lack of political will or country level focus on GHG emissions mitigation in participating countries	Medium	High	The project will utilize the existing MTCC networks to identify countries with a progressive position on climate action and willingness to engage. In addition, the project will emphasize the win-win aspect regarding economic gains in terms of fuel saving.
Operational	Risk 2: Delays in the procurement and application of pilot demonstration technologies	Medium	High	The project will assess pilot demonstration proposals from MTCCs based on criteria such as feasibility, with an emphasis on access to, and installation of technologies. The project will apply lessons learned and the technical skills developed from the GMN Phase 1 pilots and will establish cooperation, build on other IMO GHG projects achievements, training material, pilots, such as GV2050, Blue Solutions, and GHG SMART projects.
Operational	Risk 3: Continuing travel restrictions due to the Covid-19 pandemic	Medium	Medium	The Covid-19 situation will be closely monitored, and activities assessed, to identify alternative sites, virtual training and pilot demonstration options, employed during the GMN Phase 1.
Operational	Risk 4: Availability of international experts	Low	Low	The project will engage the capacities and expertise built through the Phase 1 of the GMN project, drawing on the knowledge networks used by the MTCC Africa, Caribbean and Pacific, as well as other MTCCs and their primary stakeholders.

Lessons Learnt:

- (1) Cost is one of the most important variables in the shift to green shipping, especially in the aftermath of the pandemic, which have left had an important impact on the shipping industry.

While the awareness and acceptance of the transition towards energy efficient and green shipping has significantly increased since the start of the Phase 1, factoring cost-effectiveness and savings in the proposed solutions significantly increases the potential for uptake and replication;

- (2) Combining different activities such as training, data collection, legal support, pilot demonstrations in a comprehensive package of services adapted to the needs of each specific region increases institutional commitment and capacities and is a more efficient way to achieve the economies of scale.

3.5 The Intervention Logic

The underlying intervention logic for this action is that: to achieve GHGE reductions from shipping sector and foster sustainable and efficient maritime transport, it is imperative to create enabling environments and adequate incentives for the uptake of cost-effective and energy-efficient solutions by developing countries in the target regions, especially the LDCs and SIDS. For this purpose it is important to improve connectivity between the regions to accelerate the transfer and adoption of innovative and cost-effective technological solutions and know-how, while strengthening the relevant institutional and organizational capacities, promoting women leadership and participation at institutional level, supporting the adoption of favorable regulatory and policy frameworks, deepening regional and national public and private partnerships and consistently strengthening awareness on the threats of climate change on the one hand, and on the availability of technological and behavioral solutions, on the other.

To this end, the Theory of Change of the action states that:

If,

- Innovative and cost-effective technological solutions are piloted to increase energy efficiency and emissions reductions in ports and on board of vessels, which can be adapted to specific contexts and replicated beyond the pilot;
- Institutional and organizational capacities of public and private institutions in participating countries are strengthened to develop, adapt, implement and monitor the innovative solutions;
- Public and private stakeholders increase their awareness and are incentivized to engage and finance research, development and implementation of innovative solutions, policies and practices;
- Regular channels are established for robust exchange of knowledge, know-how and latest R&D and innovations on maritime energy efficiency and low carbon measures between North and South and increased connectivity within and between the regions;
- Women participation and leadership is promoted at decision-making level;

Then,

- Developing countries in target regions, especially the LDCs and SIDS have at their disposal innovative, technologically sound, and cost-efficient port and shipping solutions;
- Developing countries in target regions, especially the LDCs and SIDS are able to develop, implement and monitor energy efficiency and low carbon measures in shipping sector;
- National and regional gender-responsive industry networks are established and connected to global industry alliances and knowledge hubs;
- National and regional-level commitment and ownership is increased to scale-up innovative and gender-responsive technological and policy solutions;
- There is a stronger representation of women in the industry and policy-making, including in leadership positions;

- More viable and gender-responsive business solutions are developed that promote the blue economy concepts and the implementation of climate mitigation measures.

Therefore,

- Developing countries in target regions, especially the LDC's and SIDS achieve measurable and sustained decrease of GHGE from shipping contributing to the mitigation of the effects of climate change and in line with the IMO GHG Strategy and EU Neighbourhood, Development and International Cooperation Instrument — Global Europe (NDICI-Global Europe) (2021-2027)
- EU and IMO will contribute to the achievement of the SDG 13, as well as the SDGs 3 (Good Health), SDG 5 (Gender Equality), 7 (Affordable and Clean Energy), 11 (Sustainable Cities and Communities), 14 (Life below Water) and 17 (Partnerships for the Goals).

For this vision of change to hold, the following **assumptions** have to hold:

- Key stakeholders are aware and in agreement of the proposed action and provide relevant political support and buy-in;
- Key stakeholders in PDCs are committed to proactively take part in supporting the MTCCs activities throughout the project;
- Effective monitoring and reporting procedures are established, communication and feedback channels are set and due diligence carried out;
- Appropriate risk mitigation measures are discussed and agreed upon with EU/IMO, MTCCs and key stakeholders;
- Sufficient quality information, guidance, templates, procedures are made available to MTCCs by IMO, EU, WMU and/or other relevant knowledge sources to ensure timely implementation of the action.

3.6 Logical Framework Matrix

This indicative logframe constitutes the basis for the monitoring, reporting and evaluation of the intervention.

On the basis of this logframe matrix, a more detailed logframe (or several) may be developed at contracting stage. In case baselines and targets are not available for the action, they should be informed for each indicator at signature of the contract(s) linked to this AD, or in the first progress report at the latest. New columns may be added to set intermediary targets (milestones) for the Output and Outcome indicators whenever it is relevant.

- At inception, the first progress report should include the complete logframe (e.g. including baselines/targets).
- Progress reports should provide an updated logframe with current values for each indicator.
- The final report should enclose the logframe with baseline and final values for each indicator.

The indicative logical framework matrix may evolve during the lifetime of the action depending on the different implementation modalities of this action.

The activities, the expected Outputs and related indicators, targets and baselines included in the logframe matrix may be updated during the implementation of the action, no amendment being required to the Financing Decision.

PROJECT MODALITY

Results	Results chain (a): Main expected results (maximum 10)	Indicators (a): (at least one indicator per expected result)	Baselines (values and years)	Targets (values and years)	Sources of data	Assumptions
Impact	Quantifiable reduction of GHG emissions from maritime shipping in developing countries in target regions, especially in the SIDS and LDCs in Africa, Caribbean and Pacific.	1 # Estimated GHG reduction (%) from the application of policies, practices and pilots supported by the action compared to current situation	1. Baseline 0 (2022)	1. Target To be defined during inception stage	Pilot Project Reports Monitoring and Evaluation reports, IMO, country statistics	Not Applicable
Outcome 1	1. Wider implementation of IMO's energy efficiency regulations and the Initial IMO GHG Strategy and its eventual successor, in line with the external dimension of the EU Green Deal, the EU Energy & Climate Diplomacy sector	1.1 # countries that adopt energy-efficient and low carbon technologies and/or progress policies and/or practices with support from project interventions	1.1. Baseline 0 (2022)	1.1. 0 (2023) 0 (2024) 0 (2025) 9 (2026)	Pilot Project Reports Monitoring and Evaluation reports	Commitment of governments and industries to adopt EE technologies and politics
Output 1 relating to Outcome 1	1.1 Uptake of Technologies and infrastructure for increased energy efficiency and low carbon technologies in ports and on ships	1.1.1 # of Pilot Projects developed and implemented as a result of project intervention	1.1.1. Baseline 0 (2022)	1.1.2. Target 0 (2023) 0 (2024) 0 (2025) 9 (2026)	Pilot Project Reports Monitoring and Evaluation reports	Enabling conditions and buy-in from key stakeholders
Output 2 relating to Outcome 1	1.2. Strengthened capacities of maritime and port authorities, shipping industry and government representatives for maritime energy efficiency, related technologies and measures	1.2.1 # of National and Regional Workshops conducted	1.2.1. Baseline 0 RW; 0 NW (2022)	1.2.1. Target 3 RW, 12 NW (2023) 0 RW, 12 NW (2024) 0 RW, 12 NW (2025) 3 RW, 12 NW (2026)	1.2.1 Workshop reports Pre- and end-of workshop assessment surveys	Easing of travel restrictions; Active participation of key stakeholders in project organized workshops and courses
Output 3	1.3. Strengthened public-private sector partnerships	1.3.1. # of Regional Industry	1.3.1 Baseline 0 (2022)	1.3.1. Target 0 (2023) 0 (2024)	Monitoring and	Interest and commitment of private

Results	Results chain (a): Main expected results (maximum 10)	Indicators (a): (at least one indicator per expected result)	Baselines (values and years)	Targets (values and years)	Sources of data	Assumptions
relating to Outcome 1	for increased promotion, investment and uptake of energy-efficient and low carbon technologies, policies and practices	Alliances (RIA) established		0 (2025) 3 (2026)	Evaluation reports	and public entities to enter partnership agreements
Output 4 relating to Outcome 1	1.4. Improved capacities, awareness and visibility of regional women's organizations;	1.4.1. # of awareness, visibility and capacity-building initiatives implemented	1.4.1. Baseline 0 (2022)	1.4.1. Target 15 (2023) 12 (2024) 12 (2025) 15 (2026)	Workshop reports Monitoring and evaluation reports	Commitment of stakeholders to foster women's participation and leadership in maritime

4 IMPLEMENTATION ARRANGEMENTS

4.1 Financing Agreement

In order to implement this action, it is not envisaged to conclude a financing agreement with partner countries.

4.2 Indicative Implementation Period

The indicative operational implementation period of this action, during which the activities described in section 3 will be carried out and the corresponding contracts and agreements implemented, is 72 months from the date of adoption by the Commission of this Financing Decision.

Extensions of the implementation period may be agreed by the Commission's responsible authorising officer by amending this Financing Decision and the relevant contracts and agreements.

4.3 Implementation Modalities

The Commission will ensure that the EU appropriate rules and procedures for providing financing to third parties are respected, including review procedures, where appropriate, and compliance of the action with EU restrictive measures⁶.

4.3.1 Indirect Management with a pillar assessed entity: IMO (International Maritime Organization)

This action will be implemented for its entirety in indirect management with IMO (International Maritime Organization, a specialised agency of the United Nations).

IMO is a pillar assessed organisation that is being selected for the implementation of this action on the basis of the following criteria: relevant organisational mandate; substantial technical competence

⁶ www.sanctionsmap.eu. Please note that the sanctions map is an IT tool for identifying the sanctions regimes. The source of the sanctions stems from legal acts published in the Official Journal (OJ). In case of discrepancy between the published legal acts and the updates on the website it is the OJ version that prevails.

in dealing with the international shipping sectors, including on maritime GHGE; and substantial project track record – including the successful implementation of a related EU action over the past five years. IMO is the EU’s partner of choice in the international maritime shipping sector, as the specialised agency of the United Nations and the regulator of the global shipping industry, representing 174 Countries. Through the Kyoto Protocol, IMO has been mandated to reduce GHGE from international shipping. The IMO is best placed to fulfil the above-mentioned objectives due to its international recognition and global character as well as the experience of implementing the Phase 1 of the GMN project which serves as the foundation of this Action.

The Action will contribute to the implementation of the Initial IMO GHG Strategy and its eventual successor for the maritime sector and to the EU’s Fit-for-55 package. It aligns with external dimension of the European Green Deal and EU Energy & Climate Diplomacy objectives and with the Global Gateway key approaches and investment priorities on Climate and energy and Transport. Through this action, IMO and the EU will contribute to an effective reduction in maritime shipping GHGE at global level by providing access to developing countries in target regions (especially the SIDS and LDCs in Africa, Caribbean and Pacific) to global capacity development, knowledge sharing and technology cooperation/transfer initiatives to control maritime GHGE, as well as by enabling the promotion of a regulatory, financial, and technical environment for GHGE reduction.

At the time of the drafting of this action document, IMO is undertaking a pillar-assessment procedure. In case it is not yet successful at the contracting phase, supervisory measures should apply until completion of the separate pillar assessment of the entity covering all pillars. No contribution agreements are to be signed without such supervisory measures.

In case the envisaged entity would need to be replaced, the Commission’s services may select a replacement entity using the same criteria. If the entity is replaced, the decision to replace it needs to be justified.

4.3.2 Changes from indirect to direct management mode (and vice versa) due to exceptional circumstances

If the foreseen implementation modality under indirect management above cannot be implemented due to circumstances outside of the Commission’s control, the action may be implemented through a direct Grant, according to the conditions set out in article 195 of the Financial Regulation. The selection criteria are spelled out under section 4.3.1.

4.4 Scope of geographical eligibility for procurement and grants

The geographical eligibility in terms of place of establishment for participating in procurement and grant award procedures and in terms of origin of supplies purchased as established in the basic act and set out in the relevant contractual documents shall apply.

The Commission’s authorising officer responsible may extend the geographical eligibility on the basis of urgency or of unavailability of services in the markets of the countries or territories concerned, or in other duly substantiated cases where application of the eligibility rules would make the realisation of this action impossible or exceedingly difficult (Article 28(10) NDICI-Global Europe Regulation).

4.5 Indicative Budget

Indicative Budget components ⁷	EU contribution (amount in EUR)
Implementation modalities – Indirect Management with a pillar assessed entity: IMO	
OC/SO Wider implementation of IMO's energy efficiency regulations and the Initial IMO GHG Strategy and its eventual successor, in line with the external dimension of the EU Green Deal, the EU Energy & Climate Diplomacy.	
OP 1.1 Uptake of Technologies and infrastructure for increased energy efficiency and GHG emissions reductions in ports and on ships	6,507,722
OP 1.2 Strengthened capacities of maritime and port authorities, shipping industry and government representatives for maritime energy efficiency, related technologies and measures	2,022,890
OP 1.3 Strengthened public-private sector partnerships for increased promotion, investment and uptake of energy-efficient and low carbon technologies, policies and practices	877,827
OP 1.4 Improved capacities, awareness and visibility of regional women's organizations;	591,561
Evaluations/audits	May be covered by another decision
Totals	10,000,000

4.6 Organisational Set-up and Responsibilities

The governance structure of the Action partly replicates the successful experience of the Phase 1 with minor modifications. Overall project **oversight** is the responsibility of a Project Steering Committee (PSC). The PSC will be established for the duration of the project and will be composed of representatives from the EU and IMO. The PSC will meet at least twice per year, with meetings either in London or Brussels, or remotely if necessary. The PSC tasks include:

- Monitoring performance;
- Taking major decisions (e.g., approval and/or changes to workplans, approval of pilot projects, membership of Technical Advisory group, etc.);
- Review and approval of project reports, including annual, final and evaluation reports.

Project **management and coordination** will be the responsibility of the IMO Secretariat through a dedicated Project Coordination Unit (PCU) established within the Department for Partnerships and Projects (DPP). The PCU will be composed of two technical officers (Project Manager – UN P-4 level and Technical Officer – UN P-2 level) and one administrative support staff (UN G7 level). In addition, a temporary staff (UN G-5 level) may be required to support specific tasks on an ad-hoc basis. The PCU will work under the overall management of the Head of Projects within DPP and will provide day-to-day management of the project and will act as the liaison/focal point for the MTCCs and IMO member states. The PCU will be responsible for all reporting aspects of the project, including the preparation of financial reports to the EU and will act as the secretariat to the PSC on all project matters. It will be supported by a Technical Advisory Group (TAG), composed of

⁷ N.B: The final text on audit/verification depends on the outcome of ongoing discussions on pooling of funding in (one or a limited number of) Decision(s) and the subsequent financial management, i.e. for the conclusion of audit contracts and payments.

technical experts with oversight from various organizations to be selected by the PSC. The TAG will provide technical inputs and will review and approve pilot projects under the output 1.1.

Under supervision of the PCU the MTCCs in Africa, Caribbean and the Pacific will be in charge of **implementation** of activities, delivery of project inputs and achievement of outputs as per established LFM and annual workplans.

As part of its prerogative of budget implementation and to safeguard the financial interests of the Union, the Commission may participate in the above governance structures set up for governing the implementation of the action.

5 PERFORMANCE MEASUREMENT

5.1 Monitoring and Reporting

The day-to-day technical and financial monitoring of the implementation of this action will be a continuous process, and part of the implementing partner's responsibilities. To this aim, the implementing partner shall establish a permanent internal, technical and financial monitoring system for the action and elaborate regular progress reports (not less than annual) and final reports. Every report shall provide an accurate account of implementation of the action, difficulties encountered, changes introduced, as well as the degree of achievement of its results (Outputs and direct Outcomes) as measured by corresponding indicators, using as reference the logframe matrix (for project modality).

The Commission may undertake additional project monitoring visits both through its own staff and through independent consultants recruited directly by the Commission for independent monitoring reviews (or recruited by the responsible agent contracted by the Commission for implementing such reviews). In addition, a human rights-based approach (HRBA) and gender considerations will be taken into consideration for the monitoring set-up.

Roles and responsibilities for data collection, analysis and monitoring:

- The project will be continuously evaluated by the established Results Oriented Monitoring system within IMO or through an independent entity/expert(s).
- The Steering Committee, composed of the European Commission and IMO, will amongst others monitor the performance. In addition, the coordinating entity will submit detailed annual project reports including any measures to correct any deviations in the project implementation if needed. The Inception Report prepared by the coordinating entity and approved by the Steering Committee will set out a detailed timetable.
- The Project Manager will hold overall responsibility for project monitoring and reporting, including on tracking progress against logistical framework indicators, management risks and safeguard risks.

The progress data will be collected from Regional Maritime Technology Cooperation Centres (MTCCs) in Africa, Caribbean and the Pacific, scientific research teams, local private sector stakeholders and other partners as relevant.

5.2 Evaluation

Having regard to the nature of the action, a mid-term and a final evaluation will be carried out for this action via independent consultant(s) contracted by the IMO.

The mid-term evaluation will be carried out for problem solving and learning purposes, in particular with respect to the possible corrective actions to be taken.

The final evaluation will be carried out for accountability and learning purposes at various levels (including for policy revision), to capitalize on the combined results and lessons of two phases of the project and assess the viability and replicability of energy efficiency technologies piloted in the framework of the project.

All evaluations shall assess to what extent the action is considering the human rights-based approach as well as how it contributes to gender equality and women's empowerment. Expertise on human rights and gender equality will be ensured in the evaluation teams.

The evaluation reports may be shared with the partners and other key stakeholders following the best practice of evaluation dissemination. The IMO and the Commission shall analyse the conclusions and recommendations of the evaluations and, where appropriate, apply the necessary adjustments.

The financing of the evaluation may be covered by another measure constituting a Financing Decision.

5.3 Audit and Verifications

Without prejudice to the obligations applicable to contracts concluded for the implementation of this action, the Commission may, on the basis of a risk assessment, contract independent audit or verification assignments for one or several contracts or agreements.

6 STRATEGIC COMMUNICATION AND PUBLIC DIPLOMACY

The 2021-2027 programming cycle has adopted a new approach to pooling, programming and deploying strategic communication and public diplomacy resources.

Action documents for specific sector programmes are no longer required to include a provision for communication and visibility actions promoting the programmes concerned.

However, in line with Article 46 and subject to Article 47 of the NDICI Regulation, all entities implementing EU-funded external actions shall take all reasonable measures to publicise the European Union support. This obligation will continue to apply equally, regardless of whether the actions concerned are implemented by the Commission, partner countries, service providers, grant beneficiaries or entrusted or delegated entities such as UN agencies, international financial institutions and agencies of EU member states.

Appendix 1 REPORTING IN OPSYS

An Intervention (also generally called project/programme) is the operational entity associated to a coherent set of activities and results structured in a logical framework aiming at delivering development change or progress. Interventions are the most effective (hence optimal) entities for the operational follow-up by the Commission of its external development operations. As such, Interventions constitute the base unit for managing operational implementations, assessing performance, monitoring, evaluation, internal and external communication, reporting and aggregation.

Primary Interventions are those contracts or groups of contracts bearing reportable results and respecting the following business rule: ‘a given contract can only contribute to one primary intervention and not more than one’. An individual contract that does not produce direct reportable results and cannot be logically grouped with other result reportable contracts is considered a ‘support entities’. The addition of all primary interventions and support entities is equivalent to the full development portfolio of the Institution.

The present Action identifies as Single Action:

Contract level		
<input checked="" type="checkbox"/>	Single Contract 1	Delegation agreement