

Assignment Notice - GV2050-003

Consultancy title	National Technical Consultant to support development and implementation of pilot projects for low/zero carbon shipping in Malaysia		
Reference	GV2050-003 (Technical Consultant)		
Contract type	Individual consultancy		
Period of contract	40 working days each over a duration of 5 months (February 2022 to June 2022)		
Consultant Rate	USD 400 per day		
Contracting organization	International Maritime Organization (IMO)		
Cooperating agency	Ministry of Transport, Malaysia		
Project title	IMO-Norway GreenVoyage2050 Project		
Date of issue	17 December 2021	Closing date for submission	31 January 2022

Background

The IMO-Norway GreenVoyage2050 Project is supporting developing countries, including Small Island Developing States (SIDS) and Least Developed Countries (LDCs), to reduce Greenhouse Gas (GHG) emissions from shipping through effective implementation of the Initial IMO Strategy on reduction of GHG emissions from ships (resolution MEPC.304(72)) and resolution MEPC.323(74) encouraging voluntary cooperation between the port and shipping sectors to contribute to reducing GHG emissions from ships. Malaysia is a participating country in the Project. For more information on the Project, visit <https://greenvoyage2050.imo.org>.

Brief description of the assignment:

The IMO, in collaboration with the Ministry of Transport and Marine Department, Malaysia, seeks proposals from **a qualified individual national consultant from Malaysia**, who will support implementation of GreenVoyage2050 Project activities in Malaysia in collaboration with the **National Management/Business Development Consultant (GV2050-002)**.

The objective of this assignment is to provide support to the development and potential implementation of low/zero carbon pilot projects for maritime shipping in Malaysia. It is expected that the consultant will be engaged on a longer-term basis and be involved throughout the pilot project inception phase, from pilot project identification through project development. In

undertaking this assignment, the consultant will be expected to work in close coordination with the Ministry of Transport and Marine Department, Malaysia and the GreenVoyage2050 Project Coordination Unit (PCU).

Refer to the **Terms of Reference (ToR)** in Annex I for full details of the assignment.

Presentation of Proposal

Proposal should be submitted in line with the requirements below **no later than 31 January 2022** and must include the following:

- **CV (max. 2 pages)**, outlining relevant professional experience, qualifications, and suitability for the assignment, as well as the contact details (email and telephone number) and two (2) professional references who can certify competencies, professionalism, quality of writing, presentation and overall suitability to this ToR.
- **Brief description of approach to work/technical proposal** of why the individual considers themselves the most suitable candidate for the assignment, and a proposed methodology on how they will approach and complete the assignment; (max 1 page).

All application materials should be submitted, as one consolidated PDF file, by email to greenvoyage2050@imo.org clearly indicating the relevant consultancy reference:

GV2050-003 (Technical Consultant)

These assignments are open to **individual consultants only**. Companies are not eligible to apply.

Queries about the assignment should be directed to greenvoyage2050@imo.org. Queries received via other channels will not be addressed.

If further information is required, a follow-up meeting may be scheduled by the GreenVoyage2050 PCU.

IMO, as the contracting party, will be responsible for undertaking the evaluation of applications.

Criteria for Evaluation of Proposal: Only those applications which are responsive and compliant will be evaluated. Applications will be evaluated according to the strength of the technical proposal where the educational background and experience on similar assignments will be assessed. The contract will be awarded on the basis of this evaluation, subject to acceptance of IMO's General Terms and Conditions.

ANNEX I

TERMS OF REFERENCE FOR THE CONSULTANT

NATIONAL TECHNICAL CONSULTANT TO SUPPORT DEVELOPMENT AND IMPLEMENTATION OF PILOT PROJECTS FOR LOW/ZERO CARBON SHIPPING IN MALAYSIA

INTRODUCTION

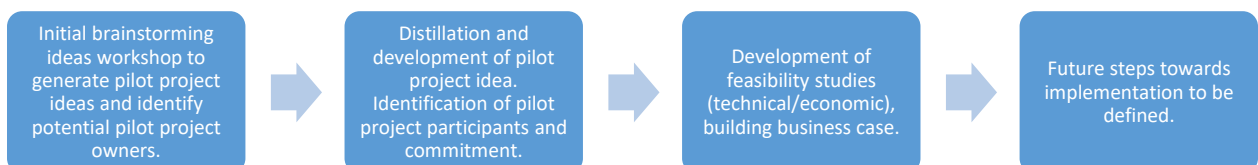
1 The IMO-Norway GreenVoyage2050 Project is an initiative to support shipping's transition towards a low carbon future. The project supports developing countries, including Small Island Developing States (SIDS) and Least Developed Countries (LDCs), to reduce Greenhouse Gas (GHG) emissions from shipping through supporting effective implementation of key IMO policy documents relating to GHG emissions, namely, the *Initial IMO Strategy on Reduction of GHG Emissions from Ships* (Resolution MEPC.304(72)) (hereafter Initial Strategy) and Resolution MEPC.323(74) encouraging voluntary cooperation between the port and shipping sectors to contribute to reducing GHG emissions from ships.

2 The Initial Strategy envisages, in particular, a reduction in carbon intensity of international shipping (to reduce CO₂ emissions per transport work, as an average across international shipping, by at least 40% by 2030, pursuing efforts towards 70% by 2050, compared to 2008); and that total annual GHG emissions from international shipping should be reduced by at least 50% by 2050 compared to 2008.

3 It is recognized that achieving the high level of ambition set out in the Initial Strategy will require the introduction of new technologies, fuels and solutions. Pilot projects are an important mechanism in which these can be introduced and explored, and the experience gained through their implementation can support and catalyse the reduction of emissions from shipping.

4 As one of its primary goals, GreenVoyage2050 is supporting selected partnering countries in the identification of pilot project opportunities which can support the reduction of GHG emissions from shipping and develop these further through stakeholder engagement, initial assessments, and feasibility etc.

5 In particular, the GreenVoyage2050 Project, in collaboration with the Green Shipping Programme of Norway, is supporting partnering countries in the development and implementation of pilot projects, by guiding them through the following process:



OBJECTIVES

6 The objective of this assignment is to drive national efforts, in line with the suggested steps above, and provide support to the development and potential implementation of pilot projects in Malaysia. It is expected that **a team of two national consultants** will be engaged on a longer-term basis and be involved throughout the pilot project inception phase, from pilot identification to project development. The consultants may also be engaged to support the implementation phase, subject to expected timeframe of implementation.

7 For this assignment, a pilot project is considered as the implementation of low / zero emission solutions for the maritime sector, and could involve e.g. ship retrofits and installation of energy efficiency technologies, building of full-electric and hybrid-electric ships, uptake of low or zero carbon fuels etc. It may also include shore-side developments such as infrastructure and upstream technologies to support uptake of alternative low- and zero carbon fuels. Pilot projects can explore emission reduction solutions already tested in the same, or a new segment. It could also demonstrate an innovative or new technology/solution. There should also be potential for upscaling and replication, so that successes can be catalysed and demonstrated elsewhere.

ACTIVITIES

8 In close cooperation with the Ministry of Transport and Marine Department, Malaysia and the GreenVoyage2050 PCU, the team of two consultants will be **responsible for managing the entire inception phase** of the pilot project work in Malaysia, including:

Activity 1: Managing process of identification and development of bankable pilot projects in Malaysia

Pilot project identification

Support process of shortlisting of 2-3 scalable projects that have potential to be linked to a financing mechanism, including, inter alia:

- Undertake research to support initial development of ideas for pilot owners¹ and projects which could reduce GHG emissions from shipping;
- Liaise with authorities, public and private cargo owners and shipowners to identify and better understand needs, barriers and gaps which could potentially be addressed;
- Identify potential cargo owners or ship/ferry owners who may have interest in becoming a pilot owner; and possibly realizing a pilot idea if an initial pilot study provides positive results; and identify other key stakeholders who may have interest in participating in a pilot study;
- Identify potential service providers (technology providers) available to Malaysia;
- Gather information and undertake qualitative and quantitative analysis as appropriate (e.g. optimization analysis, analysis of fleet size, route pattern, cost and profitability analysis);
- Liaise with financing bodies who may have interest to provide funding.

¹ A pilot owner is a partner in the project with the intention to implement the pilot if the initial pilot study provides positive results, i.e., not too expensive and with environmental gains.

Pilot project analysis/feasibility

Develop, document, coordinate, and monitor development of minimum one bankable pilot project, including, inter alia:

- Assist in analyzing and evaluating **technology solutions** for pilot projects and their proposed approach for implementation, and in particular:
 - Prepare topic specific expert inputs on technology and support pilot project feasibility studies;
 - Be present in technical discussions if required and provide necessary country/technology specific information.
- Assist in analyzing the **policy, legal, and regulatory barriers** to development and deployment of pilot project, and in particular:
 - Undertake analysis of pilot project deployment in relation to legal and regulatory issues, summarize unique challenges and risks posed by the project, and identify measures needed to strengthen, safeguard and address related issues to mitigate risks;
 - Review policies, programs, and initiatives formulated and implemented internationally to promote, encourage, and accelerate technology demonstration and deployment and critically evaluate the roles assumed by various stakeholders, including governments, in these efforts;
 - If / where needed, support efforts to obtain necessary licenses and permits for deployment.
- Assist in identifying, assessing, and recommending appropriate **financial mechanisms** for development and deployment of the pilot project in Malaysia, and in particular:
 - Undertake analysis of the pilot project in relation to finance issues, summarize unique challenges and risks posed by the project, and identify measures needed to improve project bankability and address related issues to mitigate risks;
 - Review finance policies, programs, and initiatives formulated and implemented internationally to promote, encourage, and accelerate demonstration and deployment and critically evaluate the roles assumed by various stakeholders, including governments, in these initiatives;
 - Where needed, assist in preparation of draft procurement documents, review evaluation reports, draft contracts for goods and related services.

Stakeholder management

Collaborate with project partners and implementing organization(s) throughout the project inception phase, including, inter alia:

- **Organize and facilitate meetings** with relevant national and international stakeholders and interested parties with a view to scoping the pilot projects and coordinate efforts.

Communication and results dissemination

Report on project progress, including, inter alia:

- Disseminate information with respect to project progress to relevant stakeholders;
- Share experience and showcase the pilot project, with a view to raising awareness and promoting development and implementation of future projects.

Activity 2: Mapping of low/zero carbon shipping finance opportunities in Malaysia, and on-going scalable projects in low/zero carbon shipping

Finance opportunities

- Facilitate dialogue with potential financiers for low/zero carbon shipping (public and private sector actors, e.g. development banks, international financial institutions, public funding initiatives etc.);
- Assess current landscape of funding sources for ongoing projects in Malaysia, including projects by NGOs, government, and international community;
- Assess barriers faced by Malaysia in accessing climate finance and challenges for scale-up;
- Develop list of innovative, viable financing ideas through consultation with local stakeholders, experts, and desk review;
- Make recommendations on how to strengthen capacity of stakeholders to access funding.

On-going scalable projects in low/zero carbon shipping

- Identify ongoing and planned (state-funded) projects.
- Identify relevant stakeholders engaged in each project.

9 It is expected that the duties set out in the tasks above will be coordinated accordingly between the two consultants. The following table outlines the expected role of each consultant.

Management/Business Development Consultant	Technical Consultant
This role aims to coordinate and lead the development of potential pilot projects in Malaysia.	This role will provide technical expertise and support the development of potential business cases for pilot projects.

10 The Consultants are expected to work closely together and in coordination with the National Focal Point and National Project Coordinator of the GreenVoyage2050 Project in Malaysia and the GreenVoyage2050 PCU and should provide regular updates on project progress.

11 Regular feedback (every two weeks as feasible) through email, and/or video or phone calls must be maintained between the team of consultants, the Ministry of Transport and Marine Department, Malaysia, and the PCU during the completion of this Assignment.

12 All work shall be performed from the consultant’s place of business. All eventual meetings are expected to be conducted by conference call.

Reporting

13 The Consultant is required to deliver the following outputs within the deadlines stated below:

#.	Deliverables/ Outputs	Estimated completion days (as a team of two)	Target Due Dates
D-1	An inception report (max 2 pages) detailing work plan, timeline, mode of engagement with partners, a list of	5	Q1 2022, Date TBD

	national government institutions, private sector and other stakeholders to be consulted.		
D-2	<p>Project identification and scoping:</p> <ul style="list-style-type: none"> • Identification of 2-3 scalable pilot projects that have potential to be linked to a financing mechanism • Project implementation plan for one selected bankable project and corresponding financing mechanism 	10	Q1 2022, Date TBD
D-3	Coordination and monitoring throughout pilot project identification and development phase	35	Throughout
D-4	Mapping report (10 pages max) on current finance opportunities and ongoing scalable projects in low/zero-carbon shipping (refer to Task 2)	10	Q1 2022, Date TBD
D-5	Support preparation of launch of pilot project including facilitation of any necessary MOU, LOA, grants, or any other contractual agreements with financing stakeholders, implementing organizations, etc.	10	Q2 2022, Date TBD
D-6	Presentation to relevant stakeholders on barriers for financing and interim results of Pilot project	5	Q2 2022, Date TBD
D-7	<p>Final project report (10 pages max) on the implementation of pilot projects in Malaysia, including:</p> <ul style="list-style-type: none"> • Any relevant meeting notes (including list of participants) • Outcome of any research undertaken • Relevant contacts • Main challenges faced and lessons learned (e.g. in identifying pilot project opportunities, identifying and connecting with relevant stakeholders, data and information gaps etc.) • Recommendations on how pilot projects can be catalyzed in the future (including guidance or tools which would have been useful) • Any other relevant information 	5	Q2 2022, Date TBD

14 The deliverables, as defined in paragraph 13 (above), shall be submitted as the collective work of the team, and must be submitted to Ms. Astrid Dispert, Project Technical Manager, Department of Partnerships and Projects, IMO.

ANNEX II

REQUIRED COMPETENCES FOR THE NATIONAL TECHNICAL CONSULTANT

Personal Qualities

Must have strong analytical skills and understanding of technical and economic concepts. In addition, the candidate must be based in Malaysia and have comprehensive understanding of local conditions.

Education

University degree OR equivalent training/experience in relevant discipline, such as Maritime Transport, (Marine) Engineering, Transport, Environmental Sciences, Economics, Development Studies, International Development, Political Sciences, or other closely related field

Fluency in English with excellent written communication skills, and strong experience writing reports is required.

Qualifications

- **Experience in developing and evaluating business models**
 - Experience with business development
 - Experience developing and evaluating business models for new products or services for the transport sector would be an asset
 - Experience in providing technical and strategic advice to clients looking to sustainable transport solutions would be an asset
- **Expertise in maritime transport and low-carbon shipping**
 - Strong knowledge of the transport/energy sectors, ideally with focus on maritime transport
 - Strong knowledge and interest on sustainable transport/low-carbon transport
- **Analytic capacity and ability to synthesize relevant collected data and findings**
 - Experience in information collection, quantitative and qualitative analysis
 - Experience in undertaking research/examining future trends/emerging technologies for the transport sector would be an asset
 - Ability to present technically challenging data in verbal and written form
 - Strong IT skills – Microsoft Office (Excel in particular)