



# **EXPRESSION OF INTEREST (EOI) FOR THE SUPPLY OF METHANOL AS A MARINE BUNKER FUEL IN THE PORT OF SINGAPORE**

Issued on 14 December 2023

**Maritime and Port Authority of Singapore**  
**460 Alexandra Road mTower #19-00**  
**Singapore 119963**  
[www.mpa.gov.sg](http://www.mpa.gov.sg)

**Disclaimer:**

The information contained in this document is subject to change and shall not be treated as constituting any advice to any person. It does not in any way bind the Maritime and Port Authority of Singapore (“**MPA**”) to grant any approval, award or official permission for any matter. MPA reserves the right to change its policies and/or to amend any information contained in this document without prior notice. Persons who may be in doubt about how the information in this document may affect them or their commercial activities are advised to seek independent legal advice or any other professional advice as they may deem appropriate. MPA shall not be responsible or liable for any consequences (financial or otherwise) or any damage or loss suffered, directly or indirectly, by any person resulting or arising from the use of or reliance on any information contained in this document. Participation in this EOI does not oblige MPA to grant, and should not be construed as amounting to any representation or warranty that MPA will grant, any right, authorisation, permit or licence to that Participant and/or partners.

## METHANOL BUNKERING IN THE PORT OF SINGAPORE

### EXPRESSION OF INTEREST FOR THE SUPPLY OF METHANOL AS A MARINE BUNKER FUEL IN THE PORT OF SINGAPORE

#### 1 INTRODUCTION

- 1.1 The Maritime and Port Authority of Singapore (“**MPA**”) views methanol as a potential alternative fuel when produced through sustainable means (e.g. green methanol), to meet mid-to-long term needs of the international and domestic shipping community in line with the revised IMO GHG Strategy agreed at MEPC 80. There has been increasing interest among shipowners to use methanol, especially green methanol, as a marine fuel and an increasing number of ports expressing interest to promote the uptake, production, storage and supply of methanol.
- 1.2 MPA is preparing to position Singapore as a hub for the supply of methanol, including green methanol, as a marine fuel to the international and domestic shipping community. There is potential for methanol demand volume in the Port of Singapore to exceed 1 million tons per annum (MTPA) before 2030, subject to developments on supply, infrastructure and regulation globally. Currently, MPA is already capable of facilitating methanol bunkering operations in Singapore on a case-by-case basis.

#### 2 PURPOSE OF EXPRESSION OF INTEREST

- 2.1 MPA is launching this Expression of Interest (“EOI”) to invite interested parties (each, a “Participant”) to submit a proposal(s) (“Proposal”) that would allow MPA to better understand a) the sources of methanol supply for the Port of Singapore, and b) the feasibility of developing an end-to-end<sup>1</sup> bunkering supply solution for methanol procurement, storage, sale and delivery as a marine fuel in Singapore at commercial scale from 2025. The EOI may also allow MPA to understand alternatives to physical transfers of the methanol molecules to Singapore, and explore the regulatory frameworks to facilitate and implement such processes.
- 2.2 Thereafter, MPA may take into account the Proposals received in response to this EOI to develop a licensing framework for methanol bunkering in the Port of Singapore, and to consider exploring collaborative opportunities for MPA to co-create with the industry essential aspects of the methanol bunkering ecosystem in Singapore. MPA may approach one or more Participant(s) directly after the EOI closes to seek further clarifications on the Proposals submitted.
- 2.3 Please note the following:
  - a) This EOI is not a tender for the supply or sale of methanol to MPA or any other user in Singapore and should not be construed as such.
  - b) MPA’s receipt of information or Proposal(s) submitted shall not be construed as amounting to any representation or warranty that MPA will grant any licence or authorisation to any Participant.

---

<sup>1</sup> The end-to-end methanol bunkering supply solution required for the eventual licence application minimally includes all the requirements found under paras 3.3 and 3.4 of this EOI, respectively.

### 3 EOI REQUIREMENTS

3.1 The EOI requirements are split into three (3) sections as follows: -

- a) Section 1: Methanol supply
- b) Section 2: Methanol bunkering operating model in Singapore; and
- c) Section 3: Alternative methods to physical transfer of methanol molecules to Singapore that is trusted on a global scale.

3.2 The Participant has the option to submit its Proposal for any or all the section(s) of this EOI.

#### 3.3 Section 1: Methanol Supply

3.3.1 The Participant shall propose methanol product(s) with a carbon intensity (CI) not greater than 90 gCO<sub>2</sub>e / MJ (well-to-wake)<sup>2</sup> for bunkering in Singapore, specifying details including, but not limited to the following:

- a) Carbon equivalent intensity of product(s)
- b) Composition/blend of product(s) to be sold and sourced (to be elaborated in 3.3.3)
- c) Associated FOB price of product(s) and the estimated landed cost in Singapore.
- d) Grade and purity of methanol product(s)
- e) Proposed process for certification
- f) Secured offtake agreements and associated volumes (if applicable)

3.3.2 The Participant shall provide projected total annual production volumes of proposed product(s) from 2025 to 2030.

3.3.3 The Participant shall provide details of all methanol sources for product(s) listed in paragraph 3.3.1, including but not limited to:

- a) Location of production plant and export terminal, and plans for transportation of product to Singapore (if applicable);
- b) Project status (i.e. feasibility study, FEED, FID) and commencement date of production;
- c) Carbon equivalent intensity and production pathway(s);
- d) Annual production volumes (Tonnes per annum) up to 2030 and volumes available for export to Singapore; and
- e) Other stakeholders involved (if applicable).

#### 3.4 Section 2: Methanol bunkering operating model in Singapore

3.4.1 The Participant shall detail the required storage infrastructure in Singapore and plans to build, develop or otherwise secure such facilities. Associated requirements for methanol storage in Singapore should be included in the Proposal, such as the capacity, jetty, safety considerations, vapour return and handling, and quantity assurance.

---

<sup>2</sup> The CI limit is referenced to the approximate CI of conventional marine fuels, as methanol provided as a marine bunker fuel should not incur a higher carbon intensity than business-as-usual.

- 3.4.2 The Participant shall provide the volumes that can be delivered to receiving vessels as methanol bunkers in Singapore and the estimated timeline for the physical delivery of said volumes of methanol bunkers.
- 3.4.3 The Participant shall propose the optimal bunkering supply and delivery model for the Port of Singapore, including details on the full specifications of the methanol bunker tankers, maximum pumping rate and number of methanol bunker tanker(s) that would be used.
- 3.4.4 The Participant shall detail the quality and quantity assurance plans for the product(s) when delivered as bunkers in Singapore.
- 3.4.5 The Participant shall detail the safe handling proposal when the methanol is transported as bunker fuel and delivered to the receiving vessel, including management of methanol vapour at shoreside facility and onboard the bunker tanker, as well as the vapour received from the receiving ship.
- 3.4.6 The Participant shall propose the onboard emergency response measures (e.g. early detection, immediate responses, mitigating actions, PPE etc.) for emergencies such as leaks and fires relating to the storage, transfer and bunkering of methanol fuel.
- 3.4.7 The Participant shall provide the manpower, availability and expertise required for methanol bunkering operations in the Port of Singapore.
- 3.4.8 The Participant shall provide a five (5)-year business plan from 2025 with a forecast of the methanol bunker sales volumes based on the Participant's business and operating models.
- 3.4.9 The Participant shall lay out potential and / or actual ways to contribute to the continued development of Singapore as a hub for methanol activities in various aspects (e.g. physical distribution, pricing, trading, deal making, crew training and certification, etc).
- 3.5 Section 3: Alternative methods to physical transfer of methanol molecules to Singapore that can be further developed on a global scale
- 3.5.1 The Participant shall detail the accounting strategy and methodology, with the necessary safeguards and transparencies required (e.g. mass balancing).
- 3.5.2 The Participant shall propose potential trials to validate and develop such systems applicable for the Port of Singapore.
- 3.5.3 The Participant shall include means to measure, report and verify the accounting methods and be willing to work with the Maritime and Port Authority of Singapore to further develop the system.

- 3.6 Participants should note that MPA reserves the right, at any time after the publication of this EOI, to remove, revise or add to any of the requirements set out under this EOI through the publication of a clarification notice on the MPA website.
- 3.7 Participants should consider the following in its Proposals for each of the three (3) sections referred to in this paragraph 3:
- a) Section 1: Readiness and suitability of methanol supply, as set out in paragraphs 3.3.1 to 3.3.3.
  - b) Section 2: Strength and completeness of the supply model to operationalise methanol bunkering in Singapore, as set out in paragraphs 3.4.1 to 3.4.9.
  - c) Section 3: Robustness and feasibility of the alternative models to physical transfers in the context of the Port of Singapore, as set out in paragraphs 3.5.1 to 3.5.3.
- 3.8 To reiterate, Participants are not required to submit Proposals that cover all three sections.

#### **4 ADMINISTRATIVE DETAILS**

- 4.1 Participants are to submit their Proposals, together with the completed **Annex A** of this EOI, in softcopy via email to:

[methanol\\_bunkering\\_EOI@mpa.gov.sg](mailto:methanol_bunkering_EOI@mpa.gov.sg)

- 4.2 The soft copies of Proposals shall be submitted in both Microsoft WORD and PDF format. Each email shall be below 20MB and multiple emails are permitted given this limit. Participants must communicate clearly the references to the Proposals if multiple emails are submitted.
- 4.3 All Proposals must reach MPA via email no later than 3.00pm (Singapore Time) on 29 February 2024 ("**Closing Date**"). Any submissions sent after the Closing Date will not be considered by MPA. Any extension of the Closing Date is at the sole discretion of MPA.
- 4.4 MPA will acknowledge receipt of all Proposals submitted electronically by 5.00pm Singapore time on 4 March 2024. Please promptly contact Mr Ryan Sim ([ryan\\_sim@mpa.gov.sg](mailto:ryan_sim@mpa.gov.sg)) if you do not receive an acknowledgement of your Proposal by then.
- 4.5 Should a Participant wish to make any changes to its Proposal after submitting via email but *before* the Closing Date, the Participant should submit a fresh Proposal. The fresh Proposal must clearly state that the fresh Proposal supersedes the earlier Proposal, failing which MPA reserves the right to reject both Proposals.
- 4.6 For the avoidance of doubt, this is a non-binding EOI.
- 4.7 Together with the submission of its Proposal, each Participant must also appoint and authorise an official point-of-contact, who shall be responsible for and authorised to liaise with, receive instructions from and give information to MPA on

all matters in connection with this EOI. Documentary proof of such authorisation must be provided.

- 4.8 An industry briefing will be arranged for interested Participants of the EOI. Please note that attendance at the industry briefing is **not mandatory**. Due to limited space constraints, please register your attendance with MPA via email to [methanol bunkering EOI@mpa.gov.sg](mailto:methanol_bunkering_EOI@mpa.gov.sg) by 10 January 2024. The details of the briefing are as follow:

Date:	15 January 2024
Time:	10.00am – 11.00am (SGT)
Venue:	460 Alexandra Road, mTower, #18-00 L18 Excellence Room Singapore 119963

- 4.9 MPA reserves the right at any time to withdraw this EOI at its absolute discretion and shall not be liable to any person in respect of the same whatsoever.

## 5 CLARIFICATIONS

- 5.1 All enquiries/clarifications relating to the EOI should be submitted via email at least seven (7) working days before the Closing Date to [methanol bunkering EOI@mpa.gov.sg](mailto:methanol_bunkering_EOI@mpa.gov.sg).
- 5.2 After the Closing Date, MPA may invite Participants to make presentations to MPA with regard to their Proposals. Details of such presentations, if necessary, will be arranged by MPA. In the event MPA requests for written clarification with regard to any aspect of the Participant's proposal, the Participant shall use reasonable endeavour to provide full and comprehensive responses within seven (7) working days of such a request. MPA may decline to assess the Proposal(s) of any Participant(s) that fails to respond to any such invitation for a presentation or to provide written clarification.

## 6 CONFIDENTIALITY

- 6.1 MPA reserves the right to share any information submitted by Participant(s) with its employees, officers, directors, consultants, and/or advisors for the purposes of assessing the Participant's Proposal(s).
- 6.2 MPA reserves the right to share aggregated or anonymised information publicly on a need-to basis, for the purposes of benefitting Maritime Singapore's multi-fuel transition.
- 6.3 Nothing in this EOI shall prohibit MPA from disclosing any information to any Ministry, Department, Agency, administrative or statutory body or corporation under the control of the Government of Singapore in compliance with MPA's internal reporting and approval requirements.

## FORM OF PROPOSAL

*Instructions: Annex A shall be completed and submitted with the Proposal, together with any supporting documents, justifications or key assumptions where applicable.  
An editable version of Annex A can be found at this [link](#).*

S/N	Items	Please complete with the necessary details, or indicate the reference in the Proposal.
<b>Background information</b>		
1	Participant's name and registered business address.	
2	Profile of Participant and its partners, if any, in the consortium, and details of relevant experience. If the Participant consists of a consortium of companies, the Participant shall also list the key personnel from each company.	
3	An up-to-date original or certified true copy of your Company Profile/Business Information printout from the Accounting and Corporate Regulatory Authority (ACRA) of the Participant and its partners, if any, in the consortium.	
4	Operational experience (if any): Proven track record in the area of methanol handling (which could include production, delivery, distribution, and usage or storage of methanol and is not limited to the supply of methanol as a marine fuel). Provide details on prior and/or current experience in methanol bunkering activities, and/or any other methanol-related activities.	



## REQUIREMENTS SPECIFICATIONS MET

### EOI Requirements (refer to Paragraph 3 for details)

You may submit the Proposal for any or all three sections, as applicable. Do indicate the applicable sections in the table below.

EOI Requirements	Please indicate with a "X" the section(s) that the scope of your proposal covers.
Section 1	
Section 2	
Section 3	

For each requirement in each section, please indicate if the specific requirement clause is met and reference it to the page number of the Proposal.

### Section 1: Methanol supply

<u>Requirements Clause</u>	<u>Met (Y/N)</u>	<u>Reference in Proposal</u>
3.3.1		
3.3.2		
3.3.3		

### Section 2: Methanol bunkering operating model in Singapore

<u>Requirements Clause</u>	<u>Met (Y/N)</u>	<u>Reference in Proposal</u>
3.4.1		
3.4.2		
3.4.3		
3.4.4		
3.4.5		
3.4.6		
3.4.7		
3.4.8		
3.4.9		

### Section 3: Alternative methods to physical transfer of methanol molecules

<u>Requirements Clause</u>	<u>Met (Y/N)</u>	<u>Reference in Proposal</u>
3.5.1		
3.5.2		
3.5.3		

**PARTICIPANT'S OFFICIAL POINT-OF-CONTACT**

<b>Participant Name</b>	
<b>Name of Contact Person</b>	
<b>Designation</b>	
<b>Telephone Number</b>	
<b>Fax Number</b>	
<b>Email Address</b>	

Any representations made by the Participant's contact person shall be taken by MPA to be made at the express instruction of the Participant and shall bind the Participant.

## STRUCTURE AND ORGANISATION OF PARTICIPANT(S)

Full Name of Participant / Members of Consortium <sup>3</sup>	
Legal Ownership of Participant / Members of Consortium <sup>4</sup>	
Registered Address	
Corporate Entity <sup>5</sup>	
For consortiums <sup>6</sup>	
For Participants or in the case of consortiums, members, that are part of a group of companies, corporate shareholding charts showing the shareholdings up to the ultimate parent company or shareholder	

<sup>3</sup> In the case of a consortium, names of all members MUST be included.

<sup>4</sup> Participants and all members of a consortium shall provide full information on their ownership, including: (i) the name and address of any person, company or corporation which owns, whether directly or indirectly, at least 50% of the total number of shares in the Participant (and in the case of an Participant comprising of a consortium, of each member of the consortium); (ii) the number, percentage and class of shares held by such person, company or corporation. This requirement applies not only to the direct shareholders of the Participant or the consortium members, but to all of their upstream shareholders as well.

<sup>5</sup> For example, company limited by shares, limited liability partnership, partnership, consortium or joint venture, etc. Please provide certified true copies of documents evidencing the legal status of the Participant e.g. the ACRA business profile search or like documents.

<sup>6</sup> Information must be submitted with respect to (i) the legal relationship among the members of the consortium (ii) the role and responsibility of each member of the consortium; and (iii) the address of the consortium to which the Authority may send any notice, request, clarification or correspondence. Please also provide certified true copies of documents evidencing (i) and (ii) (e.g. shareholders agreement, consortium agreement etc.).