

Oman Low-Carbon Fuel Bunkering



[In Coordination with MTCIT]

سلطنة عُمان
وزارة النقل والاتصالات وتقنية المعلومات
Sultanate of Oman
Ministry of Transport, Communications and
Information Technology



Request for Information From Shipping Companies ("RFI")

17th of September 2024

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1. Introduction

1.1. Project Overview

OQ Alternative Energy LLC (“OQ”), Asyad Group SAOC (“Asyad”) and Sumitomo Corporation Middle East FZE (“SCME”) agreed to form a collaboration and to conduct a feasibility study of low carbon fuel bunkering in Oman (“Feasibility Study”). The aim of the study is to identify key enablers required, to position Oman as a low carbon fuel bunkering hub. OQ, Asyad and SCME is hereunder referred to as the (“Parties”). The Parties are collaborating to support the growth of LC bunkering sector

1.2. Purpose of the RFI

The Parties conducted a high-level assessment on LC bunkering in Oman, to understand the key enablers of establishing Oman as a global LC bunkering hub. Hence, this RFI comes as the next step of the assessment with the aims of gathering information for the implementation of end-to-end Low Carbon (LC) bunkering solutions in Oman. The goal is to ensure a certain demand of LC bunkering fuel to develop an international bunkering hub in Oman.

Given the abundance of renewable resource in Oman, the country is expecting to deliver LC hydrogen/methanol/ammonia at competitive prices for shipping companies. Therefore, understanding the demand requirements could enable a collaboration between the Omani government and key market players to develop policies that facilitate the utilization of LC fuels.

Through this RFI, the Parties are requesting decarbonization strategy highlights, demand forecasts for LC bunker fuels globally and in Oman specifically, acceptable premium, acceptable certifications, acceptable sources of feedstocks and required type of molecules from the participating shipping companies as detailed in Schedule A

Please note this RFI is issued by Asyad, in its capacity as the coordinator and focal point of this exercise, for and on behalf of the Parties.

1.3. Background and Objectives of Feasibility Study

As the Parties assessed the hydrogen strategy in Oman, specifically in Duqm and Salalah. The Parties expect LC fuel supply capacity to be sizable given the currently developed green hydrogen projects in Oman. Furthermore, based on the current bunker demand data in Oman, we estimate green fuel bunker demand in Oman to be promising. Port of Salalah and Port of Duqm have several existing facilities that could be utilized and retrofitted for LC fuel bunkering. the Parties assumes additional infrastructure required to LC fuel bunkering. Lastly, the Parties reviewed regulation for LC fuel bunkering globally, also assessed and identified the preferable certification schemes for sustainable fuels.

Based on the aforementioned assessment, the Parties to execute an in-depth analysis in Feasibility Study, that includes the following:

- Conducting detailed assessment for levelized costs of LC hydrogen, methanol, and ammonia to be produced in Duqm and Salalah.
- Conducting a willingness-to-pay assessment for potential end-users for LC fuels.
- Engaging in detailed discussions with international shipping companies, to explore potential LC fuels demand for bunkering.
- Develop a techno-commercial model for infrastructure required to meet the expected demand.
- Evaluate incentives required to enable LC fuel bunkering in Oman.

2. RFI Milestones and Timeline

The Parties targets to conclude the Feasibility Study within 2024 to accelerate the development of the upcoming phases and to match the initiatives' timeline of other ports, below is the timeline of major milestones of the RFI considering the Feasibility Study timeline:

Milestones	Indicative timelines
RFI issuance to shipping companies	24 th of September 2024
Clarification sessions with interested shipping companies	Within the first month of RFI issuance
Shipping companies to provide information package with the confidentiality undertaking signature	24 th of October 2024
The Parties will provide a summary and the way forward to interested Shipping Companies	31 st of December 2024

3. Confidentiality

By receipt and acknowledgement of this Request for Information Shipping Company agrees and confirms that the information and materials and any supplemental information communicated by the Parties, either directly or indirectly, in connection with the RFI process are to be treated as confidential information and are to be used solely for the purposes of preparing Shipping Company's information package. Shipping Company shall sign on and return the executed Confidentiality Undertaking as set out in Schedule D.

4. Deliverables

- Schedule A. Information package
- Schedule B. Company profile
- Schedule C. Decarbonization strategy (optional)
- Schedule D. Confidentiality Undertaking

We would appreciate receiving your Deliverables of interest to:

Attention to Asyad
 [Name]: Khalid Jaboub
 [Mobile]: +968 92834834
 [Email]: Khalid.Jaboub@asyad.om

CC to OQ
 [Name]: Ahmed Al Bualy
 [Mobile]: +968 95440404
 [Email]: ahmed.a.albualy@oq.com

CC to SCME
 [Name]: Kyoko Kano
 [Mobile]: +971 504822638
 [Email]: kyoko.kano@sumitomocorp.com

5. Language

All documents shall be drafted in English.

Schedule A – Information Package

Please provide the following information. It is not expected that all questions will elicit a response, neither should the written submissions be constrained by the below questions:

	Description																																											
1	Carbon reduction targets commitment (if any)	By 2030: By 2040: By 2050:																																										
2	Acceptable certification(s)																																											
3	Carbon footprint in Mt CO ₂ eq (in 2020)																																											
4	Total number of vessels (as of 2024)																																											
5	Vessels type selection (Multiple accepted)	<input type="checkbox"/> Container ship <input type="checkbox"/> Bulker carrier <input type="checkbox"/> Chemical tanker <input type="checkbox"/> LNG vessel <input type="checkbox"/> Feeder <input type="checkbox"/> Car carrier <input type="checkbox"/> Roll-on/Roll-off tanker																																										
6	No. and type vessels capable of operating using alternative fuels (by 2030)																																											
7	No. and type vessels capable of operating using alternative fuels (by 2030) which operate in routes crossing / close to Oman																																											
8	Preferable alternative fuel ranking from most to least preferred.	<input type="checkbox"/> Green MeOH <input type="checkbox"/> Blue MeOH <input type="checkbox"/> Green NH3 <input type="checkbox"/> Blue NH3 <input type="checkbox"/> Other (Please Insert:)																																										
9	Current conventional bunker fuel uplift in Oman (in ktpa)	Muscat _____ Sohar _____ Salalah _____ Duqm _____																																										
10	Conventional fuels bunkering frequency in Oman	Muscat _____ Sohar _____ Salalah _____ Duqm _____																																										
11	If 9 is ZERO, what are the reasons? (Multiple selection accepted)	<input type="checkbox"/> Cargo Price <input type="checkbox"/> Route/location <input type="checkbox"/> Infrastructure <input type="checkbox"/> Regulation <input type="checkbox"/> Other (Please Insert:)																																										
12	Potential offtake quantity in Oman (in ktpa)	<table border="1"> <thead> <tr> <th></th> <th>Green MeOH</th> <th>Blue MeOH</th> <th>Green NH3</th> <th>Blue NH3</th> <th>Other</th> </tr> </thead> <tbody> <tr> <td>2027</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2028</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2029</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2030</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2035</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2040</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		Green MeOH	Blue MeOH	Green NH3	Blue NH3	Other	2027						2028						2029						2030						2035						2040					
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asyad.om

		2045					
		2050					
13	Potential alternative fuel bunkering frequency in Oman						
14	If 12 is Zero, what are the reasons? (Multiple selection accepted)	<input type="checkbox"/> Cargo Price <input type="checkbox"/> Route/location <input type="checkbox"/> Infrastructure <input type="checkbox"/> Regulation <input type="checkbox"/> Other (Please Insert:)					
15	Acceptable CO2 sources (Multiple selection accepted)	<input type="checkbox"/> Industrial CO2 <input type="checkbox"/> Biogenic CO2 <input type="checkbox"/> Direct Air Capture <input type="checkbox"/> Other (Please Insert: -----)					
16	Acceptable Premium level (in US\$/ ton)		Green MeOH	Blue MeOH	Green NH3	Blue NH3	Other
		2027					
		2028					
		2029					
		2030					
		2035					
		2040					
		2050					
17	What is the key factor for you to define the quantity, port, price for LC bunkering.						

Schedule B – Company Profile

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Schedule C – Decarbonization Strategy (Optional)

Schedule D – Confidentiality Undertaking

We, ([Shipping Company]), confirm our understanding that the Confidential Information disclosed and to be disclosed under the RFI dated [date] by OQ Alternative Energy LLC (“OQ”), Asyad Group SAOC (“Asyad”), Sumitomo Corporation Middle East FZE (“SCME”) (collectively, the “Parties”) confidential and we undertake to maintain the confidentiality of such Confidential Information in accordance with the terms of this Confidentiality Undertaking.

1. As used in this Undertaking, the term "Confidential Information" shall mean any and all information in any written form received by us which emanates directly or indirectly from any of the Parties which information is not publicly known, including any compilation of otherwise public information in the form not publicly known.
2. It is understood that the term "Confidential Information" does not include:
 - (a) information which, after disclosure, has become publicly known, other than as a result of any breach of this Undertaking;
 - (b) information known to us prior to its disclosure by any of the Parties; and
 - (c) information available or obtained from a third party not under an obligation of confidentiality to any of the Parties.
3. We acknowledge that the Parties have a proprietary or other similar interest in maintaining the confidentiality of the Confidential Information and, in consideration of the disclosure by any of the Parties to us of the Confidential Information, we agree that we will not disclose or use the Confidential Information for any purpose whatsoever, except only for the purpose of responding to this RFI and then only in such manner as to protect fully the confidentiality of such Confidential Information.
4. We further agree:
 - (a) to limit the disclosure of the Confidential Information to those of our or our affiliates’ employees, officers, secondees, or directors to whom such disclosure is necessary for the preparation of our response to the RFI;
 - (b) to ensure that such employees, officers, secondees, or directors are bound by equivalent obligations in respect of the Confidential Information to those set out in this Undertaking; and
 - (c) to ensure that they abide by such obligations which we shall enforce diligently.
 - (d) In the event that we employ any agent, consultant, advisor, contractor or subcontractor we may disclose Confidential Information to such entity if such disclosure is necessary to prepare our response to the RFI and we will obtain from such agent, consultant, advisor, contractor or subcontractor a Confidentiality Undertaking in the same form as that set out herein and produce the same to the Parties immediately on request.

We are liable for and hereby indemnify the Parties against all claims, losses, damages and expenses (including legal expenses) suffered or incurred by any of the Parties as a result of or in connection with any breach by us of this Undertaking.

5. Upon request from the any of the Parties, we shall immediately destroy any and all materials which contain any Confidential Information including (but not limited to) all documents, plans, samples, drawings, specifications, notebooks, computer software and any other materials whatsoever and all copies made of them.
6. If we develop a product or a process which might have involved the use of any of the Confidential Information we shall forthwith notify the Parties of such development and shall upon the request of the Parties, supply such information as the Parties may require to establish whether the Confidential Information has been so used. Any such product or process shall belong to the Parties and we shall do all acts necessary to ensure that title to such product or process passes to the Parties at our cost.
7. This Confidentiality Undertaking shall remain in force for seven (7) years from the date of signature hereof. This Confidentiality Undertaking shall be governed by and construed in accordance with the laws of England and Wales.
8. We acknowledge that any breach of the obligation of confidence contained in this Undertaking will result in unquantifiable loss to the Parties and therefore, in the event of any such breach, will submit to an interlocutory injunction or give undertakings to the competent Court to prevent further breaches, without prejudice to the Parties' rights to pursue other forms of relief.

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For and behalf of [*Shipping Company*]

Signature

Name

Title

Date