



(A subsidiary of Oil and Natural Gas Corporation Ltd)

EXPRESSION OF INTEREST (EOI)

For

Supply of Non -Edible Biological Oil for Biojet.



EOI NO.: MRPL/2021/PP/009





Mangalore Refinery and Petrochemicals Limited (MRPL) is a subsidiary of M/s Oil and Natural Gas Corporation Limited (ONGC). MRPL proposes to invite Expression of Interest.

EOI Details as follows

EOI No	MRPL/2021/PP/009
EOI on Website	From 08.04.2021 To 15.05.2021
Closing date for submission of	Up to 17:00 Hrs. (IST) on 15.05.2021
EOI Documents available at	www.mrpl.co.on/eoi

Please contact below mentioned personnel for further details

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All credentials/ Documents shall be addressed to

Group General Manager Materials Department Mangalore Refinery & Petrochemicals Ltd. Kuthethur PO, Via Katipalla, Mangalore – 575030. Karnataka - India

The envelope containing the document shall be superscribed <u>"Documents For Supply, Non-Edible Biological Oil for Biojet"</u>





1. <u>INTRODUCTION</u>

Mangalore Refinery & Petrochemicals Limited (MRPL), a subsidiary of Oil and Natural Gas Corporation Limited) and a Schedule "A" Company is a grass root crude oil refinery located at Mangalore, a coastal city of Karnataka. MRPL is involved in the business of Refining and Marketing of Petroleum and Petrochemical products and has a nameplate capacity of 15 MMTPA.

2. BACKGROUND

As part of the United Nations plan to offset aviation emissions, a scheme in the form of the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) is being implemented to address any annual increase in total CO2 emissions from international civil aviation (i.e. civil aviation flights that depart in one country and arrive in a different country) above the 2020 levels, taking into account special circumstances and respective capabilities. The scheme is launched in phases i.e., a Pilot phase (from 2021 through 2023) and first phase (from 2024 through 2026) would apply to States that have volunteered to participate in the scheme; and a Second phase (from 2027 through 2035) would apply to all States that have an individual share of international aviation activities in Revenue Tonne-Kilometres (RTKs) in year 2018 above 0.5 per cent of total RTKs or whose cumulative share in the list of States from the highest to the lowest amount of RTKs reaches 90 per cent of total RTKs, except Least Developed Countries (LDCs), Small Island Developing States (SIDS) and Landlocked Developing Countries (LLDCs) unless they volunteer to participate in this phase. Based on the growth prospects of Indian aviation sector, India will be participating in the mandatory phase of the scheme which will be starting from 2027 onwards. As a part of the mission to reduce the CO2 emissions from the aviation sector India will resort to the blending of biojet along with the jet fuel derived from crude oil to reduce the net CO2 emissions. As an initial step India will be setting up Bio-ATF plants to produce the required quantity of biojet for blending purpose within India. The Ministry of Petroleum & Natural Gas has chosen MRPL to set up the bio-jet plant in the country. MRPL will be following Hydroprocessed Esters of Fatty Acids (HEFA) route for producing biojet at its Mangalore site.

3. OBJECTIVE

MRPL is desirous of ascertaining availability of quality and quantity of feedstock available to be supplied at Mangalore by quality suppliers for production of biojet. In this regard, prospective suppliers of non-edible biological oil such as, but not limited to the following are requested to submit information sought in section 4 below:

- 1. Used cooking oil
- 2. Sal (Shorea robusta) oil,
- 3. Neem (Azadirachta indica) oil,
- 4. Mahua (*Madhuca longifolia*) oil,
- 5. Karanj (*Pongamia pinnata*) oil
- 6. Kokum (Garcinia indica) oil
- 7. Jatropha (*Jatropha curcas*) oil





- 8. Kusum (Schleichera) oil,
- 9. Pilu (Salvadora oleoides) oil,
- 10. Bhikal (Prinsepia utilis) oil,
- 11. Undi (Calophyllum inophyllum) oil,
- 12. Thumba (Citrullus colocynanthis) oil,
- 13. Jojoba (Simmondsia Chinensis) oil,
- 14. Palm fatty acid distillate,
- 15. Palm stearin,
- 16. Any other tree-borne non edible oil,
- 17. Any other biological origin non-edible oil that can meet CORSIA eligibility

4. INFORMATION TO BE SUBMITTED BY THE APPLICANT 4.1 Other information as tabulated below:

1. Ge	1. General Information					
1.1	Name of the BIDDER / Firm					
1.2	Nature or legal status of the Firm					
1.3	Name and address of associated companies to be involved in the project with relationship and role, if any.					
1.5	Registered Address of Firm					
1.6	Contact Person					
1.7	Designation and address of Contact person					
1.8	Email					
1.9	Turnover & Net worth of the Firm during last three financial years (Please enclose copy of audited annual reports)	Year	Turn Over (INR)	Net Worth (INR)		
		2019-20				
		2018-19				
		2017-18				
1.10	In case firm is a subsidiary, indicate the role of parent company					
2. Inf	ormation regarding the supply	•				
2.1	Category of the bidder	Primary bio-oil supplier/ Secondary bio-oil supplier/other (please specify)				
2.2	Name of the oily feed to be supplied					
2.3	Tentative cost (per litre or per kg) of the bio- oil feedstock on landed cost basis at MRPL Mangalore (feedstock wise for multiple cases)					





2.4	Proposed supply (kilo-litre or kilo-tonne) per month basis for each bio-oil type in next five years to MRPL Mangalore	
2.5	Mode of supply and indicative parcels per day to MRPL Mangalore	
2.6	Locations of current operation	
2.7	Details of bio-oil handled in last five financial years	
2.8	Details of current usage/purpose of bio-oil produced/supplied	

4.2 Applicants shall report the physical properties of the bio-oil as tabulated below (multiple tables to be filled in case of multiple feed):

S.No	Property	Preferred Range	Applicant's feed
1	Density	800-940kg/m3	Report
2	Average Molecular weight	600-900 amu	Report
3	Total Acid Number (TAN)	0-10 KOH/g	Report
4	Boiling point	200°-295°C	Report
5	Sulfur	0-10 ppmw	Report
6	Kinematic Viscosity	50-60 cSt @40°C	Report
7	Dynamic Viscosity	40-60 cP @40°C	Report
8	Color	Colorless to yellow	Report
9	Metal analysis	<1 ppmw of all metals	Report
		individually	

5. Disclaimer

MRPL has prepared this document to give interested parties background information on the project. While MRPL has taken due care in the preparation of the information contained herein and believes it to be accurate, neither MRPL nor any office authorities, officers, employees, agents/and advisors gives any warranty or make any representations, express or implied as to the completeness or accuracy of the information contained in this document or any information contained in this document or any information which may be provided in connection therewith.

The information is not intended to be exhaustive. Interested parties are required to make their own inquiries and respondents will be required to confirm in writing that they have done so and they do not rely on the information provided in the Expression of Interest (EOI) document in submitting their response. The information is provided on the basis that it is non —binding on MRPL or any of its authorities or agencies or any of their respective officers, employees, agents or advisors.





MRPL reserves the right not to proceed with the project, to alter the timetable reflected in this document or to change the process or procedure to be applied for listing of enquiry partners. It also reserves the right to decline to discuss the project further with any party expressing interest. No reimbursement of cost of any type whatsoever will be paid to persons, or entities, expressing interest in the project.