



**PetroSA**

**ENQUIRY NO: RFP 0001/ 2023**

**REQUEST FOR PROPOSAL (RFP): PARTNERSHIP FOR DEVELOPMENT, REFURBISHMENT, MODIFICATION, UPGRADE, FUNDING  
AND/OR OPERATION OF THE GTL REFINERY IN MOSSEL BAY**

**ANNEXURE A: RESPONSES TO QUESTIONS**

<b>Item No.</b>	<b>By Whom</b>	<b>Questions</b>	<b>Responses</b>
<b>0</b>	<b>PetroSA</b>	<b>At this stage PetroSA is looking to identify a Partner/s. Once the Partner/s is onboard, PetroSA and the Partner will jointly develop a more detailed business case. The Request for Proposal calls for conceptual proposals, and not detailed bids. Detailed studies will be available to the successful Partner during the business development phase.</b>	

Item No.	By Whom	Questions	Responses
1	[10:30 AM] Tarun Saurabh - INDIAN OIL CORP LTD (Guest)	How are the six strategies given in RFP related with the proposal submission?	Since suspension of production, the PetroSA team has been tasked to maximise the utilisation of the Plant; The six strategies are what PetroSA has previously looked at and are at different levels of development. The details shall only be available to shortlisted entities. PetroSA is open to a conceptual proposal that maximises utilisation of PetroSA infrastructure and which ensures commercial sustainability. Bidders are encouraged to put forth any proposal.
2	[10:31 AM] Greg Abrahams (Guest)	Will this presentation be made available for attendees?	Yes
3	[10:31 AM] Oleg Polotsky (Guest)	Can you please elaborate about your gas feedstock reserves. And why it's so important to have partnership with oil/gas producers as a feedstock supplier?	PetroSA is challenged with feedstock, therefore will require reliable and affordable feedstock to ensure sustainable commercial operation.
4	[10:32 AM] Msibi, Noxolo (on behalf of Mace) (Guest)	May I ask that the clarification presentation be sent to us after the meeting.	Yes; will be sent with minutes of meeting
5	[10:33 AM] Tarun Saurabh - INDIAN OIL CORP LTD (Guest)	Is there any estimated cost for the project? Has any Feasibility Study been done for this?	USD 200 million is the minimum envisaged investment. Although we will give preference to proposals with larger investment proposals. There are some conceptual and feasibility studies for the different options. Information will be shared with the shortlisted partner once the necessary NDA's have been signed

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6	[10:35 AM] W. H. (Brock) Tuppeny III (Guest)	FO field is not shown. Is it included?	Yes, it is included. The Gas Fields include the FO field as shown on slide 2 and 13. There was a drilling campaign on the FO field. Gas has not been fully extracted from the field. The current tail gas from current wells shows that we can still produce gas from it. Current infrastructure allows for both gas and condensate processing
7	[10:41 AM] Tarun Saurabh - INDIAN OIL CORP LTD (Guest)	What are storage capacities of U51 and Voorbaai tank farms	Refinery Tank Farm: (all values in m3) Petrol: 21 000 Diesel: 20 000 Kero: 7 000 LPG: 8 000 Condensate: 50 000 Plus smaller intermediate and component tanks. Voorbaai Tank Farm: (all values in m3) Petrol: 4 x 10 700 Diesel: 2 x 11 300 plus 2 x 6 000 plus 21 500 Kero: 2 x 2 000 import Condensate: 4 x 17 000
8	[10:42 AM] Imran (Guest)	What is PetroSA's preferred identified Strategic Case as per table 1 of the RFP.	No preference.
9	[10:44 AM] Oleg Polotsky (Guest)	What major technology improvements you are looking for in terms of whole facility improvement. Any additional production facility in mind? such as LNG?	PetroSA is open to improvements. Maximisation of value and sustainable commercial operation is preferred.

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10	[10:47 AM] Imran (Guest)	Please clarify the BBBEE requirements of this RFP, if any.	Once a partner has been appointed, discussions will be held regarding compliance with all regulatory requirements, including BBBEE.
11	[10:50 AM] Колесниченко Илья Игоревич (ЛУКОЙЛ; Старший менеджер) (Guest)	Are the final products from GTL selling only in local market?	Previously, PetroSA sold products to international markets and these were mainly high value products such as chemicals. There will be a national requirement for PetroSA to fulfill local demand for products such as Diesel, Petrol, Kerosene and LPG before considering exports
12	[10:51 AM] Kader Jacobs & Rashaad Carlsen (Guest)	is a site visit possible?	Yes; interest was to be indicated by end of business on Wednesday, 08 Feb 2023. No requests were received.
13	[10:51 AM] Botsengkwala (Guest)	May we please have the list of the attendees for potential partnership discussions	We will announce the successful Partner publicly.
14	[10:52 AM] W. H. (Brock) Tuppeny III (Guest)	<ol style="list-style-type: none"> <li>1. When and How in the process will detailed information about the assets be shared with selected bidders?</li> <li>2. Onshore Process Information</li> <li>3. Utilities</li> <li>4. Opex cost details.</li> <li>4. Opex cost details.</li> <li>5. Mothballing/Preservation reports</li> <li>6. Offshore Subsurface models, Production data, independent reserves reviews</li> </ol>	The successful Partner or Partners who sign NDA's shall have access to all relevant information in order to develop the business case in partnership with PetroSA.

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15	W. H. (Brock) Tuppeny III	FO field is not shown, Is it included?	Yes, refer to Q6
16	[10:53 AM] Kader Jacobs & Rashaad Carlsen (Guest)	Rashaad from Carlsen Petroleum. The timeframe from approval to operation, would this include unfettered access to all facilities at times and timeframes required by our team	Between 3-6 months, including all government approvals. This could be expedited.
17	[10:53 AM] Tarun Saurabh - INDIAN OIL CORP LTD (Guest)	In your views, can the conceptual proposal against the RFP be submitted without visiting the site? Or can a more detailed scope be shared to us, please?	Yes
18	[10:59 AM] Luvuyo Mali (Guest)	Per Mr Bunting's estimate of the project (R200m) are we expected to submit the Credit Guarantee on 20 Feb, when we submit?	The minimum investment is estimated at USD 200 million. And yes, confirmation of the availability of funds must be submitted with the proposal.
19	[11:02 AM] Alexey Lysov (гость) (Guest)	What are technical conditions of FA platform and gas/condensate pipelines to Mossel Bay? Is there any acid gas in produced gas?	The preferred Partner/s will be provided all technical details
20	[11:02 AM] Imran (Guest)	Request for extension of tender closing date to 31 March 2023 to enable a comprehensive tender submission complying to all of PetroSA's requirements.	An extension for the duration requested is not supported. The proposal envisaged in the RFP is not a detailed proposal and does not require prior engineering work. Extension granted until 28 February 2023 at 15H00 CAT.
21	[11:03 AM] SK Jindal (Guest)	Shall we get report of Advisian?	The report will be made available to shortlisted Entity/Partner

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22	[11:03 AM] Gareth Shaw (Guest)	Does your biofuel option Case 6 require a biofuel feedstock state owned provider?	Not necessarily, as bioethanol is not necessarily state-owned unlike gas and crude
23	[11:05 AM] SK Jindal (Guest)	Giving proposal is difficult with information given in RFP. Need more information about the 6 cases.	Kindly send specific query. More details studies shall be available to the successful Partner/s
24	[11:06 AM] W. H. (Brock) Tuppeny III (Guest)	<p>1. What PetroSA team resources will be <b>dedicated</b> to the development effort?</p> <p>2. How much/what information will be available regarding block 11b/12b fluids, reserves, development plans etc.?</p> <p>3. PetroSA Annual report available for 2021 and 2022?</p>	<p>1. PetroSA will make available PetroSA engineers and if necessary can establish a core team for support. Can also recruit from external if required.</p> <p>2. The blocks are being developed by joint venture partners; PetroSA cannot share any detail; We can only share expected/estimated date.</p> <p>3. We will provide the report to the shortlisted party.</p>
25	[11:10 AM] Tarun Saurabh - INDIAN OIL CORP LTD (Guest)	Timelines for None of the six strategy is less than 5 years. So, is it realistic to have year 2023 as delivery date in evaluation criteria	A Partner's own resources can accelerate the Project. Revised timelines can be assessed as per partner requirements
26	[11:12 AM] Gareth Shaw (Guest)	Are there restrictions recommended by PetroSA to Ex PetroSA personnel to assist interested bidders?	There is no restriction.

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27	<a href="mailto:roy.prince@bbenergy.com">UAE-Roy Prince</a> <a href="mailto:roy.prince@bbenergy.com">&lt;roy.prince@bbenergy.com</a>	<p>“Development Budget from Concept to FID” component. As stated, this budget extends only until the Final Investment Decision (FID) and is therefore separate from the capital required for the project activities, such as the refurbishment, modification, upgrade, funding, and operation of the refinery.</p> <p>Could you please confirm what items does this Development Budget cover? Additionally, what type of document should be used to provide proof or confirmation of budget availability?</p>	<p>The estimate includes some refurbishment but excludes feedstock. Bidders must include total project costs as they deem appropriate. Proposed concept taking into account feedstock, terms and condition for capital would provide us total budget for the project. A letter from a financial institution or from the bidder is sufficient. The entity providing the letter must show proof of available funds (e.g. financial statements etc).</p>

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28	<a href="mailto:greg@participantafrica.com">greg@participantafrica.com</a>	<p>1. FA Platform – What is the current state of the platform? Given its' age it likely to require a major refurbishment or, alternatively, replacement. What can be said in this regard.</p> <p>2. GTLR Plant –</p> <p>a. Are the cryogenic tank, liquefaction plant and regasification system in operable condition? (Or were they prior to preservation maintenance?)</p> <p>b. For recertification of CBM, Subsea equipment, FA Platform, Refinery Units and tank farm maintenance what is the envisaged ballpark budget?</p> <p>c. Has a budget been determined for the 1.4km subsea pipeline replacement that is required to the SPM?</p> <p>3. Voorbaai Storage – what are the volumes of each of the tanks identified in the RFP?</p> <p>4. Mossel Bay Harbour – the RFP mention that PetroSA use this as their base for offshore operations. Does PetroSA have an exclusive use or right to Quay 4 with TNPA? If not, what is the contractual arrangement?</p> <p>5. No mention is made of PetroSA's unfunded/partly funded rehabilitation liability for the offshore component of what is offered in the RFP. Will PetroSA retain the responsibility to fund such a liability, or would it be expected of the entity appointed through this process to assume full or partial responsibility for the liability? Please provide some detail.</p>	<p>1. FA Platform and GTLR are relatively in good condition even though there is a backlog of maintenance that would need to be concluded before resuming full production so as to avoid intermittent production loss.</p> <p>2. a). The cryogenic tank, liquefaction plant and regas system are operable. Inspections and maintenance required.</p> <p>2. b). +R700-R880 million</p> <p>2. c). Budget - R260 million.</p> <p>3. See point 7 above.</p> <p>4. PetroSA currently has the contract to use Quay 4.</p> <p>5. We do not envisage that the Partner will take on PetroSA's rehabilitation liability.</p>



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29	Isak Minnaar <ceo@faratec.co.za>	How much gas is available and how available is it? What will be the cost to utilize the gas? In other words can the gas be extracted through the current wells into the platform and pipeline?	Remaining gas available for extraction without well enhancements and/or new drilling programme is estimated at 100BScf. The minimum investment is estimated at R700-R880 million and that is for reinstating asset integrity

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30	<a href="mailto:garethshaw100@gmail.com">garethshaw100@gmail.com</a>	<p>1. How will a proposal for biofuels be evaluated if it is accepted that no state owned oil company is required as part of a biofuels proposal?</p> <p>2. Does the proposal need to include an owner of biofuel feedstock (such as ethanol) to meet the criteria of feedstock security?</p> <p>3. Please can you provide a GTLR refinery block flow diagram with unit design capacity of each block. This can also be provided as a historical 3x3 train operation flowrate snapshot from Pi software typically captured by PetroSA in 'The Works' spreadsheet.</p> <p>4. Please can you provide the following flow limitations:</p> <ul style="list-style-type: none"> <li>o Design flowrates for the alcohol pipeline between the GTLR site and the Voorbaai tankfarm.</li> <li>o The Voorbaai and GTLR site tankfarm heavy and light alcohol tanks capacities.</li> <li>o The Unit 20/21 (Condensate/Synthol Light Oil splitter) design capacities - including the design petrol, diesel and kerosene production capacity.</li> </ul> <p>5. Please can you provide the status of the gasloop - refinery decoupling activities?</p> <p>6. Please can you advise what design power production capacity has been used for the PetroSA fast power project and the assumed tailgas flow required for this power production?</p>	<p>1. Can be considered if it has merit, e.g. sufficient capacity.</p> <p>2. Ethanol is considered as feedstock for some of PetroSA's Technology.</p> <p>3. Will be provided to shortlisted bidders.</p> <p>4. Refinery: 4 x 1500 + 2 x 1 250 alcohol tanks Voorbaai: 6 tanks with a total capacity of 21 500 currently in diesel service. Other information will be available to shortlisted bidders.</p> <p>5. Project cancelled. Not implemented.</p> <p>6. Will be provided to the successful Partner</p>

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31	Indian Oil	Details of Block 9: water depth, hydrocarbon quality (specific gravity, TAN, GOR, sulphur/CO2 content etc.), reservoir depth, reservoir type, date of discovery, date of start of production, date of expiry of license, primary/secondary recovery method(s), any upside potential.	Water Depths in Block 9 vary from 50m in the northwest to up to 1500m in the southeastern part of the block. The hydrocarbons in the different fields vary from dry gas (FO field) to condensate rich gas, to oil with associated gas. Low Sulphur content. The reservoirs vary in depth between 2300m and 3700m below sea level in water depths of 100 to 140m. All reservoirs are sandstone reservoirs with mainly structural traps but some have combination structural and stratigraphic traps. All fields were discovered in the 1980 and 1990's. The FA field was the first to be brought into production in 1992. Recovery is mainly from primary depletion. There is various upside potential available with associated reserve audit and internal reports that will be available to selected partners from this RFP in the subsequent data room.
32		2. Initial and remaining reserves in Block 9 with field wise break-up. If the same has been certified by any reserve certification agency.	This will be made available to successful Partner/s from this RFP in the subsequent data room.
33		3. Current rate of production and production forecast for Block 9 with field wise break-up.	Currently only fuel gas is being produced for the offshore FA platform.
34		4. Cost of production of oil / gas from Block 9 with line items.	This will be made available to successful Partner/s from this RFP in the subsequent data room.

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35		5. What production facilities are installed in Block 9 with their date of commission?	FA Field commenced production in 1992 EM Field commenced production in 2001 South Coast Gas Fields commenced production in 2007. FO Field commenced production in 2014
36		6. Field Development Plan of present Operator, if any. If there is no Field Development Plan then what is future of the Operator.	This will be made available to successful Partner/s from this RFP in the subsequent data room.
37		7. Historical Capex and Opex investments made in the Project and future projections of the same.	This will be made available to successful Partner/s from this RFP in the subsequent data room.
38		8. Asset integrity report.	This will be made available to successful Partner/s from this RFP in the subsequent data room.
39		9. Operational/environmental challenges, if any?	Pending Clean Fuels II Regulation
40		10. Sale price of produced hydrocarbons and sales agreement, if any.	Partner to make proposals. Product prices will be competing with market prices and imports
41		11. Presence of any other prospective Block nearby (to the GTL refinery/Block 9) to meet the feedstock requirement of GTL refinery? If yes, then details of these field(s) are requested as in point 1 above)	Yes the Luiperd and Brulpadda discoveries made by the TotalEnergies Joint Venture. PetroSA is not a partner in this Joint Venture and does not have the technical details of these fields.

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42		12. Midstream infrastructure from any such prospective Block to the GTL refinery. If present/developing the details of such are requested.	No
43		13. Farm in opportunity, if available in such identified prospective Block(s). Details of pre-qualification criteria, if any.	PetroSA not a partner in surrounding blocks.
44		RFP 0003/2023 and RFP 0004/2023 for upstream assets not accessible on website). Please share.	Bidder advised to contact the Mr Fortuin following the briefing session
45		Details of domestic market obligations/local content, if any	There is an expectation that local content is maximised where possible
46		GTL refinery is typically consisting of “Fischer–Tropsch” process. Kindly provide Block flow diagram for GTL & Gas Loop Facilities to understand GTL refinery unit/technology.	PetroSA has both High Temperature Fischer-Tropsch and Low Temperature Fischer Tropsch. More details to be made available to the successful Partner
47		PetroSA refinery existing configuration is not available in the RFP. Refinery configuration may please be made available for better understanding of refurbishment scope.	
48		It is requested to clarify the expected amount of Gas & Condensate post development in 2027/28.	Current name plate allow is 46,000bbl/d however bidders are encouraged to make indicative proposal to increase condensate production.

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49		Whether the feed and product logistic & demand assessment also shall be in scope of RFP?	There is currently SPM and CBM facility connected with Refinery with limited throughput for the current nameplate. Should the bidder propose to increase refinery capacity, there is likely to be a need to upgrade the capacity of the import/export pumps and/or Buoy sizes
50		Scope includes feedstock security in addition to funding of the project. Feedstock security scope may kindly be clarified in detail.	Bidders need to reflect that they have ownership or legal access to feedstock for the proposal they are advancing.
51		Whether refurbishment and modification also include subsurface and reservoir engineering?	Not for this RFP
52		Expected feed processing capacity post refurbishment may kindly be clarified (Tentative capacity upgradation of existing GTL facility)	<p>Condensate: PetroSA remains Open. We believe there is adequate land to use increase condensate capacity to +200kbd in medium to long term.</p> <p>Gas Loop: is critical for chemical production and power generation to support condensate production. It needs to run at full capacity</p>
53		It is requested to mention design processing capacity of NG and condensate. Also requested to provide the details of the products/fuels under 36,000 bpd of fuels.	From Gas Loop we get chemicals and power. From condensate section: we get the traditional products from crude refinery depending on the feedstock.

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		Is the maximum capacity to process condensate in GTL Refinery 18,000 bpd?	Total current nameplate when feeding both gas and condensate is 46 000bbl/d. Refinery was also previously run at 18,000 bbl/d at low turndown rate of 68Mmscf/d of gas
55		25. Kindly share Advisian report on feedstock strategies	This will be made available to selected partners from this RFP in the subsequent data room.
56		With respect to Case-5 of Strategic cases (Page-4 of RFP), "CF2" specifications to be clarified and detailed scope of envisaged refinery may please be shared.	Refer to attached Petroleum Products Act
57		Block flow diagram for Synthol & Reformer may be shared to understand the facility.	Will be made available to shortlisted entities
58		Job scope related to PetroSA Gas Resources, FA Platform and Tank Farm need to be clarified.	FA is currently online with one well flowing. The GTL Refinery is offline except the units linked to flare system. We are looking at those that have an interest on how to best extract value from this assets
59		Feed gas and condensate properties/composition processed in GTL Refinery to be shared to understand the facility.	<p><b>Gas</b> - previously used natural gas from own block. We have also attempted an option to supplement gas feedstock with LNG and that is technically feasible. The challenge is price of LNG.</p> <p><b>Condensate:</b> - PetroSA crude basket includes Alba, Yoho, Bonny Light, Omen Lange, Kuff, Eagle Ford chem, Yamal</p>

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60		Properties/composition along with fuel emission standard of saleable products like petrol, diesel, alcohol and specialty distillates etc. to be shared.	For Diesel the Standard is SANS 342 For Petrol the Standard is 1598 Refer to attached Petroleum Products Act
61		It is also to be clarified whether, emission norms need to be upgraded during the refurbishment.	There is a pending regulation for Clean Fuel II which needs to be considered should one be considering upgrading crude nameplate
62		Details of the Tank Farm located in Voorbaai including numbers of tanks/cryogenic tanks for finished product storage/intermediate storage, their capacity, material handed in these tanks and other offsite facilities to be shared to understand the extent of job scope.	See answer 7
63		Details of the Power & utility infrastructure to be shared.	More details to be made available in the next phase to the successful Partner.