



**ENERGY FIJI LIMITED**

**TENDER NO: MR 71/2025**

**SUPPLY OF TWO (2) PORTABLE  
DISSOLVED GAS ANALYSER FOR  
TRANSFORMER OIL ANALYSIS**

## INVITATION TO TENDER

The Energy Fiji Limited ("The Employer") invites sealed bids from suitable companies for the Supply, Packing and transporting of "Portable Dissolved Gas Analyser"

All tenders for the contract shall be submitted on the appropriate forms provided and shall include the completed price schedule, technical schedule etc. The bid shall be on the basis of a lump sum contract based on firm prices.

The tender submissions close on **Wednesday, 19<sup>th</sup> February, 2025 (local) Fiji Time.**

Further information for this tender may be acquired from:

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Manager Procurement, Inventory and Supply Chain,  
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# **1 INSTRUCTIONS TO TENDER**

***Notes to Bidders:** This section provides detailed information necessary for Bidders to prepare their Bids, in accordance with the requirements specified by EFL. It also provides information on Bid submission, opening, and evaluation, and on the award of contract.*

## **1.1. General**

The entity of the EFL invites Bids for the Supply of Two (2) Portable Dissolved Gas Analyser for Transformer Oil Analysis as described in the Bidding Document.

## **1.2. Compliance with Instructions**

The Tender shall be submitted in accordance with these Instructions and the letter of invitation to tender. All the necessary forms and schedules need to be completed and submitted with the tender.

## **1.3. Compliance with Specification**

The tender shall be based on the equipment and work specified and shall be in accordance with the Technical Specification. It should be noted that unless departures from specifications are detailed in Schedule I of the Technical Specification, the tender would be taken as conforming to the Specification in its entirety. The Tenderer shall tender for the whole of the equipment included in the Specification.

## **1.4. Currency**

The tender shall be in the currency of the Tenderer's home country. All local companies registered in Fiji shall bid in VEP. For overseas currencies, bid are to be in DDU or CIF to EFL Navutu Depot and all duties, VAT and customs clearance charges shall be paid by EFL.

## **1.5. Signature of Tenderer**

A tender submitted by a Partnership shall be signed by one of the members of the Partnership and shall be accompanied by a certified authorization of all the partners authorizing the individual partner to sign on behalf of the Partnership. A tender submitted by a Corporation to the Contract and shall be accompanied by a certified resolution of the Board of Directors authorizing the individual to sign on behalf of the Corporation.

## **1.6. Information forming part of the Tender**

The Tenderer shall supply with each set of the tender copies of the technical, price and information schedules of the Tender Documents duly completed with all missing information and shall also supply requisite drawings. A copy of the Tenderer's covering letter (if any) shall be submitted with each tender and each tender shall be accompanied by a full set of supporting matter which the Tenderer wishes to have considered by EFL as supporting information for his tender. It is a mandatory requirement to submit the following documents as part of the tender proposal:

1. Tender Covering Letter with signature/seal of authorised signatory
2. Price & Payment Schedule
3. Technical specification of the product with brochures
4. Instruction and Operation Manual of the product.
5. List of utility companies using the bidders suggest product
6. Confirmation of Insurance Policies

### **1.7. Non-Conforming Tenders**

A tender which does not comply with the Conditions of Tendering or in which the technical price information schedules requiring information to be inserted by the Tenderer have not been completed in all respects may be considered informal will be rejected for these reasons.

### **1.8. Validity Period of Tenders**

Tenders shall remain valid for acceptance within **90 days** from the date of opening of tenders and a Tenderer shall not withdraw or amend his tender prior to the expiration of the Validity Period. In exceptional circumstances prior to expiry of the original tender validity period, EFL may request the Tenderer for an extension in the period of validity. The request and the response thereto shall be in writing. A tenderer agreeing to the request will not be permitted to amend his tender price.

### **1.9. Mandatory Lodgment of Tender**

The tender bids SHALL be submitted electronically at the following location <https://www.tenderlink.com/efl>

Register your interest and submit a soft copy response by viewing 'Current Tenders' at: <https://www.tenderlink.com/efl>

The bid shall be typed and shall be signed by a person or persons duly authorized to sign on behalf of the bidder, as the case may be. All pages of the bid where entries or amendments have been made shall be initialed by the person or persons signing the bid.

The bid shall contain no alterations, omissions or additions, except those to comply with instructions issued by the Employer, or as necessary to correct errors made by the bidder, in which case such corrections shall be initialed by the persons signing the bid.

### **1.10. Deadline for Submission of Bids**

Hard copy of the tender Bids must be received by the Employer at the address specified above no later than 1600 hours (Fiji Time) **Wednesday, 19<sup>th</sup> February, 2025**

The Employer may, at its discretion, extend the deadline for submission of bids by issuing an addendum, in which case all rights and obligations of the Employer and the bidders previously subject to the original deadline will thereafter be subject to the deadlines extended.

### **1.11. Tender Evaluation**

After a preliminary analysis to ascertain whether or not the tender is in accordance with the requirements of the tender documents, each tender will be considered with particular reference to its eligibility as being a manufacturer, offer testing facilities in its workshop, price, completion date, design capability, evidence of past performance on contracts of a similar nature, supply of reliable quality equipment and all other matters affecting the Tenderers ability to complete the Contract in accordance with EFL's requirements.

### **1.12. Acceptance of Tenders**

EFL shall not be bound to accept the lowest bid or assign any reason for the rejection of a tender and reserves the right to waive any informality in a tender. No tender shall be deemed to have been accepted unless such acceptance is notified to the Tenderer by notice in writing either by handing such notice to the representative of the successful Tenderer or by sending such notice by e-mail. Such notice shall include any essential identifying details of the tender. The date of acceptance of Tender shall be the date on which the above mentioned notice is given or e-mailed.

### **1.13. Language of Tender**

All Tenders together with any documents submitted by the Tenderer as part of any Tender shall be typed in the English language.

### **1.14. Payment Schedule**

The contract shall be on a lump sum fixed price basis. 100% of the payment will be made upon receipt of goods by EFL in Fiji.

### **1.15. Conditions of Contract**

The Conditions of Contract shall be the AS/NZS 4911:2003 – General Conditions of Contract for the Supply of Equipment without Installation.

### **1.16. Insurance**

The Contractor is to confirm that they have in effect the insurance policies below:

1. Public and Products Liability Insurance
2. Industrial Special Risk Insurance

## 2 Tender Specifications

### General Description

The supplier is to supply Energy Fiji Limited with the Portable Dissolved Gas Analyser for Transformer Oil Analysis. Bidder is also required to supply required accessories with the product. The Portable Dissolved Gas Analysis shall be able to analyze insulating fluids across industrial application, and be able to measure certified fault gases and moisture levels in the transformer oil. The bidder's proposal shall address all functional and performance requirements within the specification and shall include sufficient information and support documentation in order to determine compliance with this specification without further necessary inquiries.

### Product Specification

The product shall have the ability to test 7 gases or more. The product will be required to carry out at 70 tests per year.

**Note to Bidder:** Please submit a copy of the table below with their product details in comparison to what is required by the employer.

Criteria	EFL Requirement		Bidder's Specification
Brand	Bidder to specify		
Power Requirements			
Nominal Voltage Range	220-260 V		
Frequency	50 Hz		
Watts	Bidder to Specify		
Battery	Bidder to Specify		
Environmental			
Operating temperature range	5 °C to 50 °C (IEC 60068-2-1, IEC60068-2-2)		
Operating pressure	760 to 1040 mbar		
Operating humidity	10 – 95% RH non-condensing		
Enclosure	IP67 (when closed)		
Oil sample Volume	Approximately 50ml		
Gas Sample Volume (Buchholz)	Approximately 5ml		
Weight	≤ 15kg		
Measurement Range			
	LDL (ppm)	UDL (ppm)	
Hydrogen (H <sub>2</sub> )	5	5,000	
Carbon Monoxide(CO)	2	50,000	
Carbon Dioxide(CO <sub>2</sub> )	40	50,000	
Methane(CH <sub>4</sub> )	2	50,000	
Acetylene (C <sub>2</sub> H <sub>2</sub> )	0.5	50,000	
Ethane (C <sub>2</sub> H <sub>6</sub> )	2	50,000	
Ethylene (C <sub>2</sub> H <sub>4</sub> )	2	50,000	

Criteria	EFL Requirement	Bidder's Specification
Gas measurement accuracy	±LDL(ppm)	
Moisture (H <sub>2</sub> O) – Relative Humidity	0 to 100% RH	
Moisture measurement accuracy	± 3 ppm	
Buchholz gas measurement & accuracy	Bidder to specify	
<b>Technology</b>		
LCD	User Friendly	
Computer interface	USB	
Result Output	Bidder to Specify	
<b>Accessories</b>		
50 ml ground-glass syringe	Bidder to supply	
Three-way plastic stopcock	Bidder to supply	
Sample bottle & lid assembly	Bidder to supply	
Spare sample bottle	Bidder to supply	
Magnet retriever	Bidder to supply	
Quick connection valve (for oil injection from the syringe)	Bidder to supply	
Teflon-coated stir bars	Bidder to supply	
Replacement Teflon filters	Bidder to supply	
USB Cable	Bidder to supply	
Transit Hardcover Case	Bidder to supply	
Buchholz Gas Measurement Kit	Bidder to supply	
Consumables for At least 140 tests	Bidder to supply	
System Check/Calibration Kit	Bidder to supply	
Safety	EC/EN 61010-1	
Training	Hands on training at EFL	
Warranty	2 years	

Bidder to supply below mandatory documents with their product offer:

1. Product User manual
2. Product Technical Specification and Brochures
3. Warranty information
4. List of Consumables with prices



### 3 REFERENCE STANDARDS

IEC 61010-1	Safety requirement for electrical equipment for measurement, control, and laboratory use Part 1 General requirements
IEC 60068-2-1	Environmental Testing – Part 2-1 deals with cold tests applicable to both non heat-dissipating and heat dissipating specimens
IEC 60068-2-2	Environmental Testing –Part 2-2 – Dry heat
EN60529	Degree of Protection provided by enclosure (IP Code)
IEC 60567:2015	Oil-impregnated paper and pressboard – Sampling of insulating liquids – Methods for Dissolved Gas Analysis
IEC 61810-1:2016	Relays and switches – Part 1: General rules
IEEE C57.104-2019	Guide for the Interpretation of Gases Generated in Oil-Immersed Transformers
ASTM D3612-18	Standard Guide for the Interpretation of Dissolved Gas Analysis in Transformer Oil
IEEE 803-2008	Guide for the Application of DGA for the Detection of Transformer Faults
IEC 60599:2015	Mineral oil-impregnated electrical equipment in service – Guidance on the interpretation of dissolved and free gases analysis

### 4 FINANCIAL

The bidders shall fill the details in the below table for the financial information of the required scope of work.

Item No.	Equipment	Quantity	Delivery location	Unit Price	Total Price
1.	Complete set of Portable Dissolved Gas Analyzer with accessories, recommended spares and carrying case	2 Sets	Navutu Depot		
2.	Training (Hands on and Classroom Based) on Device Operation, Maintenance and Interpreting Results	1	Navutu Depot		
<b>Total</b>					
<b>Incoterm</b>					
<b>Currency</b>					

<b>Price Validity</b>	
<b>Warranty</b>	

**Note – Flexibility shall be given should EFL wishes to purchase only one unit.**

## **5 Training**

Bidders are to provide training for an approximate of 20 participants in Fiji at EFL's Navutu Depot, at no extra cost to EFL. Training shall be provided within 6 weeks after receiving the Portable Dissolved Gas Analysis by EFL. The details of the hands-on training must be provided in the tender bid, which may include:

- Classroom exercise.
- Field exercise.

Bidder is also required to provide comprehensive documented training on interpreting results obtained from Gas Analysis and impact of each gas.

## **7 Recommended Spares**

The tenderer shall forward a list of manufacturer's mandatory spare parts and consumable required for operation and maintenance of the equipment supplied under this contract for a period of 10 years. The cost of supply of these spare parts shall form part of the contract. The tenderer shall also forward a list of optional spare parts, which shall not form part of the contract but should be shown in a separate price schedule.

The successful contractor shall ensure the availability of spare parts for operation and maintenance of all the items of equipment for a period of at least 10 years.

## 8 EVALUATION CRITERIA

The evaluation shall be based on all the data bidders provide in the above given tables and the data given regarding the product itself.

No.	Mandatory Compliance	Percentage
1	Valid FRCS tax compliance certificate for Local Companies	25%
2	Valid FNPf certificate of Compliance for Local Companies	25%
3	Valid FNU certificate of Compliance for Local Companies	25%
4	Business registration details	25%
No.	Technical Compliance	Percentage
1	Filled Product Specification Criteria from Bidder	2%
2	Product Warranty Period Details and Insurance Details	1%
3	Product Specification from Manufacturer	2%
4	Product Manuals	2%
5	Bidder to account for all the cost of the items with delivery	1%
6	Filled Standards Table	1%
7	Quality of the offered product and its durability	2%
8	Product to match the specification required by EFL	85%
9	Product to have all necessary accessories as required by EFL	2%
10	Recommended spare part list and consumable	2%

The above selection criteria will be used to evaluate the bids.

**Note:** Bidders must have 100% in Mandatory Compliance to be considered for evaluation.

## 9. TENDER SUBMISSION CHECK LIST

*The Bidders must ensure that the details and documentation mention below must be submitted as part of their tender Bid*

Tender Number \_\_\_\_\_

Tender Name \_\_\_\_\_

1. Full Company / Business Name: \_\_\_\_\_

**(Attach copy of Registration Certificate)**

2. Director/Owner(s): \_\_\_\_\_

3. Postal Address: \_\_\_\_\_

4. Phone Contact: \_\_\_\_\_

5. Fax Number: \_\_\_\_\_

6. Email address: \_\_\_\_\_

7. Office Location: \_\_\_\_\_

8. TIN Number: \_\_\_\_\_

**(Attach copy of the VAT/TIN Registration Certificate - Local Bidders Only (Mandatory))**

9. FNPF Employer Registration Number: \_\_\_\_\_ **(For Local Bidders only) (Mandatory)**

10. **Provide a copy of Valid FNPF Compliance Certificate (Mandatory- Local Bidders only)**

11. **Provide a copy of Valid FRCS (Tax) Compliance Certificate (Mandatory Local Bidders only)**

12. **Provide a copy of Valid FNU Compliance Certificate (Mandatory Local Bidders only)**

13. Contact Person: \_\_\_\_\_

I declare that all the above information is correct.

Name: \_\_\_\_\_

Position: \_\_\_\_\_

Sign: \_\_\_\_\_

Date: \_\_\_\_\_

## 10. TENDER SUBMISSION - INSTRUCTION TO BIDDERS

Bidders are requested to upload electronic copies via Tender Link by registering their interest at: <https://www.tenderlink.com/efl>

EFL will not accept any hard copy submission to be dropped in the tender box at EFL Head Office in Suva.

This tender closes at 4.00pm (1600hrs) on **Wednesday, 19<sup>th</sup> February, 2025**.

For further information or clarification please contact our Supply Chain Office on phone (+679) 3224360 or (+679) 9992400 or email us on [tenders@efl.com.fj](mailto:tenders@efl.com.fj)

The bidders must ensure that their bid is inclusive of all Taxes payable under Fiji Income Tax Act. Bidders are to clearly state the percentage of VAT that is applicable to the bid prices.

The lowest bid will not necessarily be accepted as the successful bid.

The Tender Bids particularly the "Price" must be typed and not hand written.

Any request for the extension of the closing date must be addressed to EFL in writing three (3) working days prior to the tender closing date.

Tender Submission via email or fax will not be accepted.