



**ENERGY FIJI LIMITED**

**BIDDING DOCUMENT**

**MR 291/2024 - PREFERRED SUPPLIER  
FOR THE SUPPLY OF GEOTEXTILE  
FABRIC**

## Section 1: Instructions to Bidders

- 1. Scope of Bid**

The Energy Fiji Limited (hereinafter referred to as "the purchaser"), wishes to receive bids for Preferred Supplier for the Supply of Geotextile Fabric as specified in these bidding documents (hereinafter referred to as "Geotextile Fabric").
- 2. Eligible Bidders**

This Invitation to Bid is open to bidders who have sound financial background and have previous experience in handling such projects.

Bidders shall provide such evidence of their continued eligibility satisfactory to the purchaser as the purchaser shall reasonably request.

Bidders shall not be under a declaration of ineligibility for corrupt or fraudulent.
- 3. Eligible Materials, Equipment and Services**

The GEOTEXTILE FABRIC to be supplied under the Contract shall have their origin from reputable companies from various countries. At the Purchaser's request, bidders may be required to provide evidence of the origin of various parts of the GEOTEXTILE FABRIC.
- 4. Qualification of the Bidder**

To be qualified for award of Contract, bidders shall submit proposals regarding work methods, scheduling and resourcing which shall be provided in sufficient detail to confirm the bidder's capability to fulfill the contract.
- 5. Cost of Bidding**

The bidder shall bear all costs associated with the preparation and submission of its bid and the Purchaser will in no case be responsible or liable for those costs.
- 6. Tender Submission**

It is mandatory for bidders to upload a copy of their bid in the TENDER LINK Electronic Tender Box no Later than 1600hrs, Wednesday 11<sup>th</sup> September, 2024. To register your interest and tender a response, view 'Current Tenders' at: <https://www.tenderlink.com/efl>

For further information contact the Manager Strategic Procurement, Inventory & Properties at [JReddy@efl.com.fj](mailto:JReddy@efl.com.fj)

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

This Tender Closes at 4.00pm (1600hrs) on Wednesday 11<sup>th</sup> September, 2024.
- 7. Deadline for Submission of Bids**

Bids must be received by the Employer at the address specified above no later than 1600 hours (Fiji Time) (11<sup>th</sup> September 2024). 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.
- 8. Late Bids**

Any bid received by the purchaser after the deadline for submission of bids prescribed will be rejected and returned unopened to the bidder.

**9. Modification and  
Withdrawal of Bids**

The bidder may modify or withdraw its bid after bid submission, provided that written notice of the modification or withdrawal is received by the Purchaser prior to the deadline for submission of bids.

No bid may be modified by the bidder after the deadline for submission of bids.

**10. Purchaser's Right  
to Accept any Bid  
and to Reject any or  
all Bids**

The Purchaser reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids, at any time prior to award of Contract, without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders of the grounds for the Purchaser's action.

**11. Notification of  
Award**

Prior to expiration of the period of bid validity prescribed by the Purchaser, the Purchaser will notify the successful bidder by fax/email, confirmed by registered letter, that its bid has been accepted. This letter (hereinafter and in the Conditions of Contract called the "Letter of Acceptance") shall name the sum which the Purchaser will pay the Contractor in consideration of the execution, completion and maintenance of the Works by the Contractor as prescribed by the Contract (hereinafter and in the Conditions of Contract called "the Contract Price").

The notification of award will constitute the formation of the Contract.

Upon the furnishing by the successful bidder of a performance security, the Purchaser will promptly notify the other bidders that their bids have been unsuccessful.

**12. Signing of Contract  
Agreement**

At the same time that he notifies the successful bidder that its bid has been accepted, the Purchaser will send the bidder the Form of Contract Agreement provided in the bidding documents, incorporating all agreements between the parties.

Within 7 days of receipt of the Form of Agreement, the successful bidder shall sign the Form and return it to the Purchaser

### 13. Corrupt or Fraudulent Practices

The Purchaser requires that the Contractor observe the highest standard of ethics during the procurement and execution of such contracts. In Pursuance of this policy, the Purchaser:

- (a) defines, for the purposes of this provision, the terms set forth below as follows:
  - (i) "corrupt practice" means behavior on the part of officials in the public or private sectors by which they improperly and unlawfully enrich themselves and/or those close to them, or induce others to do so, by misusing the position in which they are placed, and it includes the offering, giving, receiving or soliciting of anything of value to influence the action of any such official in the procurement process or in contract execution; and
  - (ii) "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Purchaser, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Purchaser of the benefits of free and open competition;
- (b) Will reject a proposal for award if it determines that the bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question.

## Table of Contents

Section 1: Instructions to Bidders.....	1
Section 2: Technical Specification.....	1
1 General Description .....	1
2 Scope .....	1
2.1 Estimated quantities .....	1
3 Specifications.....	1
3.1 Required Mechanical Properties of the Non-Woven Geotextile.....	1
3.2 Required Hydraulic Properties of the Non-Woven Geotextile.....	2
3.3 Typical Physical Properties .....	2
3.4 Materials .....	2
4 Manufacturer’s Qualification/ Certification .....	3
5 Suppliers Qualification .....	3
6 Type Tests .....	3
7 Storage, Packaging and Identification .....	3
8 Technical Information to be Supplied .....	4
9 Stock Availability .....	4
10 Warranty.....	4
11 Quality and Environment Assurance .....	4
12 Standards.....	4
13 Witnessing of Tests .....	<b>Error! Bookmark not defined.</b>
14 Compliance.....	5
15 Samples.....	5
15.1 Production Samples .....	5
15.2 Sample Delivery.....	5
16 Training.....	5
Section 3: Pricing Schedule .....	6
1 Incoterms .....	6
2 Currency.....	6
3 Taxation.....	6
4 Pricing breakdown .....	6
5 Validity .....	6
6 Price Breakdown .....	6
Section 4: Bid Documentation .....	6
1 Documents establishing equipment conformity to Bidding documents .....	6
2 Submission Checklist .....	7

3	Technical Data - Geotextile Fabric.....	8
4	Submission Requirements.....	9
5	Tender Submission - Instruction to bidders .....	10

## Section 2: Technical Specification

### 1 General Description

The Energy Fiji Limited invites sealed tenders from reputable companies with the relevant experience, for the Supply of Geotextile Fabric.

This document specifies the general requirements to manufacture, test, and supply and deliver anticipated quantity of non-woven, needle punched, continuous filament, and polyester Geotextile fabric of **Strength Class D**.

### 2 Scope

The Geotextile Fabric will be used in the upgrade of Access Roads to its 132kV Transmission Line Towers in the Western Division.

#### 2.1 Estimated quantities

The following table shows the Purchaser's total estimated requirement of Geotextile Fabric's to be purchased each year for the next three (3) years. The Tenderers should note that the total estimated requirement for Transmission Geotextile Fabric's to be purchased under this contract is not guaranteed.

#	Geotextile Fabric	Quantity
1	Non-woven, needle punched, continuous filament, polyester Geotextile fabric of <b>Strength Class D</b>	2 rolls

### 3 Specifications

#### 3.1 Required Mechanical Properties of the Non-Woven Geotextile

Strength Class	Wide Strip Tensile Strength	Wide Strip Toughness	Grab Tensile Strength	Trapezoidal Tear Strength	G Rating	CBR Burst Strength
	kN/m	kJ/m <sup>2</sup>	N	N	-	N
	AS 3706.2	AS 3706.2	AS 3706.2	AS 3706.3	Austroads 90	AS 3706.7
	Q Value	Q Value	Q Value	Q Value	Q Value	Q Value
<b>D</b>	<b>26</b>	<b>7</b>	<b>&gt;1,200</b>	<b>&gt;450</b>	<b>&gt;3,000</b>	<b>&gt;4,400</b>

#### Notes accompanying the table

- Grab strength shall be the characteristic value of grab strength for the Lot tested (i.e. mean grab strength - 0.83 x standard deviation) in accordance with the Acceptance criteria. Mean grab strength and the corresponding standard deviation shall be determined in accordance with AS 2001.2.3 Method B.

- (b) Characteristic value of tearing strength for the Lot tested (i.e. mean tear strength - 0.83 x standard deviation) determined in accordance with AS 3706.3 and Acceptance criteria.
- (c) G = Geotextile Strength Rating determined to be  $(L \times h50c)^{1/2}$  based on the characteristic values of the Lot. A minimum of ten test specimens is required to determine the characteristic CBR and h50 values. L is the characteristic value of CBR plunger failure load N for the Lot tested determined in accordance with AS 3706.4. (i.e. mean CBR plunger failure load N - 0.83 x standard deviation.) If the strain at failure exceeds 80% then the characteristic CBR load L80 at 80% strain shall be used in the calculation of G. h50c is the characteristic value of h50 for the Lot (i.e. mean h50 - 0.83 x standard deviation), h50 shall be determined in accordance with AS 3706.5.

### 3.2 Required Hydraulic Properties of the Non-Woven Geotextile

Strength Class	Pore Size (O95)	Permittivity	Coefficient of Permeability	Flow Rate @100mm Head
	µm	$s^{-1}$	$m/s \times 10^{-4}$	$l/m^2/s$
	AS 3706.7	AS 3706.9	AS 3706.9	AS 3706.9
<b>D</b>	<b>75</b>	<b>1.35</b>	<b>43</b>	<b>135</b>

#### Notes

accompanying the table

- (a) a) Flow rate (Q100) under a 100mm constant head and permittivity ( $\psi$ ) determined in accordance with AS 3706.9.
- (b) Equivalent opening size (EOS) defined as O95 taken to be the mean value of the test results in accordance with AS 3706.7.

### 3.3 Typical Physical Properties

Appearance	Odourless Grey Fibres
Roll Size	5m x 100m
Weight	180kg - 250kg

### 3.4 Materials

The fibers of the geotextile and thread used in jointing lengths shall consist of polymers composed of at least 95% by mass of synthetic fibers.

The geotextile filaments shall be rot proof, chemically stable and shall have low water absorbency. Filaments shall resist delamination and maintain their relative dimensional stability in the geotextile.

Non-woven geotextiles shall have filaments bonded by needle punching, heat or chemical bonding processes.

Geotextiles shall be stabilized against ultraviolet radiation such that when tested in accordance with AS 3706.11 shall have retained strength of at least 50% after 672 hours of test exposure

## 4 Manufacturer's Qualification/ Certification

Manufacturer shall have sufficient designing, supplying and manufacturing experience of the Geotextile Fabric for at least three (3) years. As proof, the manufacturer shall submit a supply-list indicating type of Fabric, quantity supplied, name of client and the year of delivery. Certificates from customers with satisfactory usage shall be provided with the supply record.

## 5 Suppliers Qualification

The supplier shall furnish with the bid:

1. A supply history of the Geotextile Fabric and/or other products.
2. Prove capital capability to supply the said quantity.

## 6 Type Tests

The following type tests are required:

- Wide Strip Tensile Strength (AS 3706.2)
- Wide Strip Toughness Test (AS 3706.2)
- Grab Tensile Strength (AS 3706.2)
- Trapezoidal Tear Strength (AS 3706.3)
- G Rating (Austroads)
- CBR Burst Strength (AS 3706.7)
- Pore Size (AS 3706.7)
- Permittivity Test (AS 3706.9)
- Coefficient of Permeability Test (AS 3706.9)
- Flow Rate @100mm Head Test (AS 3706.9)

## 7 Storage, Packaging and Identification

Geotextiles shall be stored under protective cover or wrapped with a waterproof opaque UV protective sheeting to avoid any UV damage prior to installation.

Geotextiles shall not be stored directly on the ground or in any manner in which they may be affected by heat. The method of storage shall be in accordance with any other recommendations set by the manufacturer.

The protected geotextile rolls shall be clearly labelled showing manufacturer, type of geotextile and batch identification number.

The vendor shall be responsible for nominating standard pack quantities and standard packs shall be clearly marked with the following:

- a) Manufacture's name
- b) Manufacture's part reference number
- c) Batch number
- d) Item description
- e) Package weight
- f) Quantity x length

## 8 Technical Information to be Supplied

The following information shall be supplied with the offer:

- a) Catalogue describing the items and indicating the model number
- b) Constructional features and material used for components
- c) Complete dimensional drawing
- d) Quality assurance certificates
- e) Duly completed schedule of guaranteed technical particulars
- f) Manufacturing experience and list of purchasers
- g) Test certificates as per clause 5.2.1 and 5.2.2

## 9 Stock Availability

The bidder is required to show the size of his/her stock holding and the ability to meet the required estimate quantity per annum. The movement of Geotextile Fabric will depend on EFL's Access road project works. An estimate movement of the item are outlined in the table below but it will not be purchase as a lump sum quantity at once. Hence, the successful bidder will be required to carry a consignment / safety stock at times to meet EFL's demand within the three-year contract period.

No.	Item Description	Approximate 3 Year Usage
1	Non-woven, needle punched, continuous filament, polyester Geotextile fabric of <b>Strength Class D</b>	10

## 10 Warranty

The supplier and/or manufacturer shall provide warranty of a minimum of 3 Years from the date Energy Fiji Limited receives the Geotextile Fabric.

On the contrary, if the bidder cannot warranty for 3 years than a preferred warranty period shall be given by the bidder

## 11 Quality and Environment Assurance

The quality assurance system of design, manufacture, and inspection shall conform to ISO 9001.

Quality assurance certificate according to ISO 9001 issued by an authorized inspection agency shall be submitted with the bid.

The environment management system of manufacture shall confirm to ISO 14001.

Environment assurance certificate according to ISO 14001 issued by an authorized inspection agency shall be submitted with the bid

Bids will not be considered if the manufacturer's experience or quality assurance system does not meet the above requirements.

## 12 Standards

Standards for Geotextile Fabric		Bidders Response
AS 3706.1	General Requirements, sampling, conditioning, Basic Physical Properties and Statistical Analysis	

AS 3706.3	Determination of Tearing Strength - Trapezoidal method	
AS 3706.4	Determination of Burst Strength - California Bearing Ration (CBR) - Plunger method	
AS 3706.5	Determination of Puncture Resistance - Drop Cone method	
AS 3706.7	Determination of Pore Size Distribution - Dry Sieving method	
AS 3706.9	Determination of Permittivity	
AS 3706.11	Determination of Durability - Resistance to Degradation by Light and Heat	
AS 2001.2.3	Physical Tests - Determination of breaking force and extension of Textile Fabrics	
AS 2001.2.4	Physical Tests - Determination of bursting pressure of Textile Fabrics -Hydraulic Diaphragm method	
AS/NZS ISO 9001:2008	Quality Management Systems - Requirements	

## 13 Compliance

The Supplier shall state in writing that their offer complies with the relevant Standards and this specification. If the Supplier is offering equipment manufactured to an equivalent standard, full details of that standard must be given including a copy written in English.

## 14 Samples

### 14.1 Production Samples

Samples of items may be required during the tender assessment period. Samples would normally only be required from tenderers who have previously not supplied the items to the Purchaser.

### 14.2 Sample Delivery

When samples are required, production samples shall be delivered freight free, suitably packaged and labelled including reference to the Contract Number.

The EFL may at its discretion either purchase the samples at the tendered price or return the samples to the respective tenderer after the contract has been awarded. Samples shall be supplied within 7 days of official request.

## 15 Training

Training material in the form of drawings, instructions and/or audio visuals shall be provided for the items accepted under the offer.

This material shall include but is not limited to the following topics:

- Handling
- Storage
- Application
- Installation
- Environmental performance
- Mechanical performance
- Disposal

## Section 3: Pricing Schedule

### 1 Incoterms

All pricing shall be done on Cost, Insurance and Freight (CIF) basis, delivered to Suva or Lautoka wharf, Fiji.

### 2 Currency

All pricing shall be in USD, AUD, NZD or FJD.

### 3 Taxation

The pricing shall be EXCLUSIVE of any type of taxation that needs to be paid in Fiji.

### 4 Pricing breakdown

The prices quoted will be fixed and NOT variable.

### 5 Validity

The pricing shall be valid for 180 days.

### 6 Price Breakdown

#	Geotextile Fabric	Quantity	Dimensions	Price per Roll (500m <sup>2</sup> ) FJD VEP
1	Non-woven, needle punched, continuous filament, polyester Geotextile fabric of <b>Strength Class D</b>	1 Roll	Length - 100m Width - 5m Area - 500m <sup>2</sup>	
Grand Total				

## Section 4: Bid Documentation

The Bidder shall furnish, as part of the bid, documents establishing the Bidder's eligibility to bid and its qualifications to perform the contract if its bid is accepted.

The documentary evidence of the bidder's qualifications to perform the contract of its bid is accepted will establish to the purchaser's satisfaction.

- a) that the Bidder has the financial, technical, and production capability necessary to perform the contract;
- b) That the Bidder meets the qualification criteria listed in Section 2.

### 1 Documents establishing equipment conformity to Bidding documents

The Bidder shall furnish as part of its bid, documents establishing conformity to the bidding documents of the Geotextile Fabric, which the Bidder proposes to supply under the contract.

The documentary evidence of conformity of the Geotextile Fabric to bidding documents may be in the form of literature, drawings, and data, and will consist of:

- a) A detailed description of the essential technical and performance characteristics of the Geotextile Fabric.
- b) The bidder should specifically mention about furnishing the test certificates and a specimen form of test certificate should be furnished along with the bid.

- c) A list giving full particulars, including available sources and current prices of spare parts, special tools etc., necessary for the proper and continuing functioning of the materials/equipment following commencement of the use of the Geotextile Fabric by the purchaser; and
- d) A commentary on the purchaser's Technical specifications demonstrating substantial responsive-ness of the Geotextile Fabric and services to those specifications, or a statement of deviations and exceptions to the provisions of the technical specifications.

For purpose of the commentary to be furnished pursuant to above, the Bidder shall note that standards for workmanship, material, and equipment, as well as references to brand names or catalogue numbers designated by the Purchaser in its Technical Specifications, are intended to be descriptive only and not restrictive.

The Bidder may substitute alternative standards, brand names, and/or catalogue numbers in their bid, provided that it demonstrates to the Purchaser's satisfaction that the substitutions ensure substantial equivalence to those designated in the Technical Specifications.

## 2 Submission Checklist

The following shall be provided in the bid submission:

Particulars	Unit	Requirement	Bidders Response
Manufactures name			
Place of manufacture			
Origin of materials used for manufacturing			
Type test certificates provided (Yes/No)		As per Clause 12	
Nominal overall Area	m <sup>2</sup>	500	
Material designation		Bidder to state	
<b>Packaging Details</b>			
Length of Geotextile Fabric per roll	m	Bidder to state	
Nominal Mass t of the Geotextile Fabric	Kg/m	Bidder to state	
Mass of roll	kg	Bidder to state	
Total number of rolls per pallet		Bidder to state	
Total weight of pallet and Geotextile Fabric	kg	Bidder to state	

Name of Tenderer: \_\_\_\_\_

Signature of Tenderer: \_\_\_\_\_

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

### 3 Technical Data - Geotextile Fabric

All tenderers are required to complete and submit a copy of the submission requirements with their bid submissions.

Particulars	Unit	Requirements	Bidders Response
Manufactures name			
Place of manufacture			
Origin of materials used for manufacturing			
Type test certificates provided (Yes/No)		As per clause 12	
Length	m	100	
Width	m	5	
Nominal Area	m <sup>2</sup>	500	
Material designation		Bidder to state	
CBR Burst Strength	N	Bidder to state	
Wide Strip Tensile Strength	kN/m	Bidder to state	
Wide Strip Toughness	KJ/m <sup>2</sup>	Bidder to state	
Grab Tensile Strength	N	Bidder to state	
<b>Packaging Details:</b>			
Length of Geotextile Fabric per roll	m	100	
Nominal Mass of the Geotextile Fabric	kg/m	Bidder to state	
Mass of roll	kg	Bidder to state	
Total number of rolls per pallet		Bidder to state	
Total weight of pallet and Geotextile Fabric	kg	Bidder to state	

Name of Tenderer: \_\_\_\_\_

Signature of Tenderer: \_\_\_\_\_

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

## 4 Submission Requirements

All tenderers are required to complete and submit a copy of the submission requirements with their bid submissions.

Requirements	Response from Bidders
Completed technical details (Clause 5) (Yes/No)	
Witnessing included as part of bid. (Yes/No)	
Validity of bid (180 days required) (Yes/No)	
Payment conditions.	
Delivery Term. (CIF preferred)	
Price review period after award of tender. (months)	
Bidders company profile outlining financial, technical and production capabilities.	
Detailed reference list of customers already using equipment offered during the last 5 years with particular emphasis on units of similar design and rating.	
Quality management system used in the production of Geotextile Fabric, attached certificate.	
Minimum warranty period from time of acceptance of Geotextile Fabric.	
Disposal method after service life.	
List of Type test certificates provided. (As per Clause 6)	
Sample routine test certificates.	

Name of Tenderer: \_\_\_\_\_

Signature of Tenderer: \_\_\_\_\_

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

## TENDER CHECKLIST

***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: \_\_\_\_\_

## **5 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 11<sup>th</sup> September, 2024.**

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**