

MOSSEL BAY MUNICIPALITY

TENDER TDR3/2019: RENEWABLE ENERGY PLANTS: EXECUTIVE SUMMARY OF SCOPE

1. CONTRACTOR'S RESPONSIBILITY

This document sets the general requirements for the establishment, operation and maintenance of Renewable Energy Plant(s) for Mossel Bay Municipality, on a turnkey project basis smaller than 1MVA (1000kVA).

Any type of renewable energy technology (solar, syngas, gas discharge, wave, etc), established at the site(s) indicated, will be considered.

The Plant(s) shall be operated and maintained for the period offered by the Tenderer. A competent person in terms of the General Machinery Regulations of the Occupational health and Safety Act shall be appointed by the successful Contractor to take responsibility for the operation of the plant(s).

The technical and timeline aspects applicable to the construction/establishment of the plant(s) shall be managed in terms of General Conditions of Contract for Construction Works (Third Edition) 2015 (GCC), prepared by the South African Institution of Civil Engineering (SAICE) shall apply to this contract.

Service level and power purchase agreements between Mossel Bay Municipality and the successful Contractor(s) will be entered into to manage the long term running of the plant(s). The registration of the plant(s) with NERSA by the Municipality, will be part of this process.

The dismantling of the plant(s) and reinstatement of the land to its original condition, at the cost of the Contractor will be part of the agreement.

The design definitions and guidelines, plant(s) performance requirements, quality management and minimum codes and standards, but not limited to, forms part of this document.

It is the responsibility of the Contractor to deliver a turnkey project, complete with all the legal required certification, to the Employer, including environmental approvals.

All materials supplied, must carry a guarantee and be new materials. The installation must comply with the Tender Specification as well as the applicable Standardised Specifications. Workmanship must be of the best quality and be carried out in accordance with the Occupational Health and Safety (Act 85 of 1993) and Environmental Conservation Act, 2003 (Act No.50 of 2003).

The Specification, Drawings and Bill of Quantities show the general nature of the work and not all details are shown. The responsibility lies with the Contractor to provide all equipment and materials in order to furnish a complete functional turnkey installation.

Over and above the compulsory site inspection and/or clarification meeting, prospective Tenderers must visit the site and must make sure of the circumstances of the site. No claims due to lack of knowledge in this regard, will be entertained after appointment of the successful Tenderer.

2. OBJECTIVES

The main objectives for the project are as follows:

- To purchase alternative energy from private established and operated Plants.
- To test the market availability for various forms of alternative electricity energy and implement the best possible option(s) for the Mossel Bay Municipality.
- To establish grid tied renewable energy Plants at the Hartenbos Regional Sewerage Works and Kleinbrak Water Purification works, owned and operated by the Contractor to the satisfaction of the Employer, for the lifetime of the plant or as indicated by the Tenderer.

- The proposal of any other grid tied renewable energy Plants, at seven alternative sites, as indicated in Part C4 of this document.
- The proposal of energy storage systems to provide a 24/7 supply of alternative energy will also be considered. The provision of stored energy during peak electricity consumption periods will be a recommendation.
- All possibilities, suggestions and proposals will be considered. These include, but are not limited to:
 - Power purchase agreements;
 - Multi-party agreements;
 - PPP arrangements;
 - The exchange of land for lower energy prices;
 - Any other proposal.
- The terms and requirements of the power purchase agreement will be negotiated with the successful Contractor.
- The plant may only be established after the applicable statutory processes and approvals, applicable to the specific type of plant and operating period offered, is done in collaboration with the Municipality.
- The municipal land available at the sites, for this purpose, will be made available to Contractors free of charge.
- It is expected to have an operational plant(s) within 12 months of the signing of the service level and power purchase agreements.

3. NETWORK VOLTAGES AND TRANSFORMER CAPACITIES OF THE PROPOSED SITES FOR RENEWABLE ENERGY PLANTS

#	DESCRIPTION	VOLTAGES (V)	TRF(S) (KVA)	COORDINATES
1	Hartenbos sewerage plant	400/11000	1x 400, 1x 500, 1x 630	34° 6'32.80"S 22° 6'49.94"E
2	Kleinbrak water purification	400/22000	3x 1000	34° 5'1.36"S 22° 8'30.10"E
3	Midbrak sewerage plant	11000/22000	3x 3000	34° 3'33.22"S 22° 11'16.72"E
4	Voorbaai sewerage pump station	400/11000	1x 1000	34° 9'6.26"S 22° 6'5.51"E
5	Intake 66/11kV substation	11000/66000	2x 10000	34° 8'41.01"S 22° 5'39.24"E
6	Sonskynvallei 66/11kV substation	11000/66000	1x 20000	34° 7'1.73"S 22° 5'26.49"E
7.1	Duinezicht substation 66kV point of supply	66000	none	34° 9'38.90"S 21° 59'36.68"E
7.2	Duinezicht substation 11kV point of supply	11000	Eskom transformer	34° 9'38.90"S 21° 59'36.68"E
8.1	Harbor area substation	11000	none	34° 10'47.67"S 22° 9'10.61"E
8.2	Beach Street mini-substation	400/11000	630	34° 10'53.88"S 22° 9'10.10"E
9	Desalination plant	400/11000	4x 1600	34° 9'1.38"S 22° 6'34.78"E