

APPOINTMENT OF A SERVICE PROVIDER FOR DESIGN, SUPPLY, INSTALL, COMMISSION AND MAINTENANCE OF A COMPLETE FUNCTIONAL ROOFTOP SOLAR PHOTOVOLTAIC (PV) SYSTEM AT MUNICIPAL BUILDINGS WITHIN RAY NKONYENI MUNICIPALITY

NOTICE: 042 of 2025 BID NO:**8/2/RNM0538.**

BID NO: 8/2/RNM0538.

NAME OF THE BIDDER

BID AMOUNT R _____

TECHNICAL SERVICES P.O. BOX 5 PORT SHEPSTONE 4240

APRIL 2025

TABLE OF CONTENTS

	<u></u>	Page number		
1. Bid Advert		10-11		
2. Standard Forms		12		
3. Evaluation Criteria	1	15-17		
4. General condition	of contract	18-30		
5. Bid Specification a	and Pricing Schedule	32-49		
6. Attachments:				
7. RNM / MBD 2.	Tax Compliance Status Pin			
8. RNM /MBD 3.2.	Pricing Schedule	47-51		
9. RNM /MBD 4.	Declaration of Interest	52-54		
10.RNM /MBD 5.1.	Past Experience (1)	55-60		
11. RNM/MBD	8 Declaration	61-62		
12. RNM /MBD 9 Certificate of Independent Bid Determination 63-65				



RAY NKONYENI MUNICIPALITY

NOTICE: 042 of 2025 BID NO: 8/2/RNM0538.

APPOINTMENT OF A SERVICE PROVIDER FOR DESIGN, SUPPLY, INSTALL, COMMISSION AND MAINTENANCE OF A COMPLETE FUNCTIONAL ROOFTOP SOLAR PHOTOVOLTAIC (PV) SYSTEMS AT MUNICIPAL BUILDINGS WITHIN RAY NKONYENI MUNICIPALITY

Bids are hereby invited for the appointment of a service provider for design, supply, install, commission, and maintain a complete functional rooftop solar photovoltaic (PV) system at municipal buildings within Ray Nkonyeni Municipality.

Only bidders who are registered with a classification grading of 2EB or Higher are eligible to submit a tender and will be considered for an award.

Bid documents can be downloaded on <u>www.etenders.gov.za</u> or <u>www.rnm.gov.za</u>, from Friday 04 April 2025.

Reference: "Tender No 8/2/RNM0538: Appointment of a service provider for design, supply, install, commission, and maintain a complete functional rooftop solar photovoltaic (PV) system at municipal buildings within Ray Nkonyeni Municipality."

Bidders to submit two (02) copies of the bid document together with the original bid document, bidders that fail to submit copies will be disqualified. Fully completed Bid documents must be submitted in a sealed envelope, clearly marked "APPOINTMENT OF A SERVICE PROVIDER FOR DESIGN, SUPPLY, INSTALL, COMMISSION, AND MAINTENANCE OF A COMPLETE FUNCTIONAL ROOFTOP SOLAR PHOTOVOLTAIC (PV) SYSTEMS AT MUNICIPAL BUILDINGS WITHIN RAY NKONYENI MUNICIPALITY" and must be deposited in the Bid box at the Municipal offices at 10 Connor Street, Port Shepstone, no later than 12:00 on Friday, 07 May 2025 after which all Bids will be opened in public.

The procedure for the evaluation of responsive Bid Offers will be Method 4 (Financial Offer, preference, and quality (functionality) with 80/20 Preference Points System. Bidders that fail to Score a minimum of 60% for functionality will not be evaluated further. The total score awarded will be the addition of the two scores for price and preference. Preference points claimed in terms of the Preferential Procurement Policy Framework Regulations of 2022.

Functionality Criteria	Points	Verification documents
Company previous relevant	10	Appointment letters and corresponding completion
experience		certificates
Personnel previous relevant	15	Attach CV, certified qualification certificates and
experience		ECSA registration certificate not older than 3 months
		of certification by the Commissioner of Oaths
Total Points	25	

SPECIFIC GOALS	POINTS	Verification Documents
Companies within Ray		
Nkonyeni Municipality	20	Proof of company address
Total points	20	

A compulsory clarification virtual meeting will be held on Friday, 25 April 2025 @ 10:00. Please confirm your attendance by sending an email to Ms Nandi Sihlali - <u>nandi.sihlali@rnm.gov.za</u> and cc Vaneshree Moodley - <u>vaneshree.moodley@rnm.gov.za</u> before end of business Tuesday, the 22 April 2025.

All queries to be directed to Ms Nandi Sihlali, Manager Electrical Section via email <u>nandi.sihlali@rnm.gov.za</u>.

NOTE TO BIDDERS ON PRE-CONDITIONS OF THE BID:

- The Supply Chain Management Policy of Ray Nkonyeni Municipality will apply. The Council reserves the right not to accept the lowest bid or any bid and reserves the right to accept the whole or part of the bid, or to reject all bids and cancel the notice to bid;
- No late comers will be entertained, and they will not be allowed to join the meeting.
- Only service providers registered in the Central Supplier Database (CSD) will be considered, attach proof of registration failure to attach will result in your bid not evaluated further. Proof of registration to be attached. Failure to attach will result in your bid not being further evaluated.
- Members or Directors of Companies or Service Providers who are state employees are not allowed to bid or quote;
- •
- Unsuccessful bidders will be informed of the Bid outcome through the Municipal website. Aggrieved unsuccessful bidders will be allowed to lodge, within fourteen (14) days of the decision or action, a written objection or complaint to the Office of the Municipal Manager through email, <u>mm@rnm.gov.za</u> or fax number 0865297195. Complaints or objections received after fourteen (14) days of the date of the notice will not be entertained; and
- The original bid document plus TWO <u>extra</u> (02) copies must be submitted, failure to submit two copies will result in disqualification.
- Bids submitted are to be valid for a period of <u>120 days</u>.

K J ZULU MUNICIPAL MANAGER Ray Nkonyeni Municipality 10 Connor Street P O Box 5 PORT SHEPSTONE 4240

ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS (NOT TO BE RE-TYPED)

NB!!!!! Please attach copies of the following documents.

- Company registration documents.
- Certified copy of ID documents of directors/owners/members/ shareholders.
- Copy of a valid TAX Compliance Certificate Or Tax Compliance Status PIN Sheet.
- Declarations (MBD 4, 6.1, 8 & 9).
- Joint Venture agreements (where applicable)

STANDARD FORMS

THIS BID IS SUBJECT TO THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT. THIS BID WILL BE EVALUATED AND ADJUDICATED ACCORDING TO THE FOLLOWING CRITERIA:

- 1. Relevant specifications

- Value for money
 Capability to execute the contract
 PPPFA & associated regulations

NB: NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE

RAY NKONYENI MUNICIPALITY

STANDARD FORM FOR BIDS

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE RAY NKONYENI MUNICIPALITY							
BID NUMBER: 8/2/RNM0538	CLOSING DATE		07 May 2		CLOSI	NG TIM	1E: 12h00
							AND MAINTENANCE OF A
		AR PHOTOV	/OLTAIC	(PV) SY	YSTEM AT MU	NICIPA	L BUILDINGS WITHIN RAY
DESCRIPTION NKONYENI MUNICIPAL							
	THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (MBD7).						
BID RESPONSE DOCUMENTS MAY BE I SITUATED AT	DEPOSITED IN THE	E BID BOX					
10 Connor Street							
Port Shepstone							
4240							
SUPPLIER INFORMATION							
NAME OF BIDDER							
POSTAL ADDRESS							
STREET ADDRESS							
TELEPHONE NUMBER	CODE				NUMBER		
CELLPHONE NUMBER							
FACSIMILE NUMBER	CODE				NUMBER		
E-MAIL ADDRESS							
VAT REGISTRATION NUMBER					1		
TAX COMPLIANCE STATUS	TCS PIN:			OR	CSD No:		
ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?	□Yes [IF YES ENCLOSE	⊡No PROOF]		BASEI The G	OU A FOREIGI D SUPPLIER FO GODS VICES /WORKS RED?	OR [☐Yes ☐No IF YES, ANSWER PART B:3
							_
TOTAL NUMBER OF ITEMS OFFERED					L BID PRICE	F	<u> </u>
SIGNATURE OF BIDDER	DATE						
CAPACITY UNDER WHICH THIS BID IS SIGNED							
BIDDING PROCEDURE ENQUIRIES MAY							E DIRECTED TO:
				chnical Services			
			CONTACT PERSON			Indi Sihlali	
	039 312 8304 TELEPHONE NUMBER 039 688 2015		9 000 2015				
FACSIMILE NUMBER E-MAIL ADDRESS	FACSIMILE NUMBER Bongani.mfenga@rnm.gov.za E-MAIL ADDRESS Nandi.S		ndi.Sihlali@rnm.gov.za				

PART B TERMS AND CONDITIONS FOR BIDDING

1.	BID	SUBMISSION:				
	1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.					
	1.2. ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED-(NOT TO BE RE-TYPED) OR ONLINE					
	1.3. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT REGULATIONS, 2022, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.					
	1.4.	THE BID OFFER MUST BE SIGNED BY A PERSON AUTHORIZED TO SIGN ON BEHALF OF	THE BIDDER;			
	1.5.	A BIDDER WHO SUBMITTED A BID AS A JOINT VENTURE HAS INCLUDED AN ACCEPTAB AGREEMENT WITH HIS/HER BID;	LE JOINT VENTURE			
	1.6.	A BIDDER WHO IS A JOINT VENTURE HAS INCLUDED MBD 4, 8 & 9 FOR EACH ENTITY IN T / CONSORTIUM WITH HIS/HER BID	HE JOINT VENTURE			
	1.7.	THE BIDDERER OR A COMPETENT AUTHORISED REPRESENTATIVE OF THE CONTRACTOR THE BID HAS ATTENDED THE COMPULSORY CLARIFICATION MEETING OR SITE INSPECT				
2.	TAX	COMPLIANCE REQUIREMENTS				
2.1		DERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.				
2.2	BID TO	DERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PI ENABLE THE ORGAN OF STATE TO VIEW THE TAXPAYER'S PROFILE AND TAX STATUS.	N) ISSUED BY SARS			
2.3	.3 APPLICATION FOR THE TAX COMPLIANCE STATUS (TCS) CERTIFICATE OR PIN MAY ALSO BE MADE VIA E-FILING. IN ORDER TO USE THIS PROVISION, TAXPAYERS WILL NEED TO REGISTER WITH SARS AS E-FILERS THROUGH THE WEBSITE WWW.SARS.GOV.ZA.					
2.4	FO	REIGN SUPPLIERS MUST COMPLETE THE PRE-AWARD QUESTIONNAIRE IN PART B:3.				
2.5	BID	DERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.				
2.6		BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, I BMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.	EACH PARTY MUST			
2.7		ERE NO TCS IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIE SD NUMBER MUST BE PROVIDED.	R DATABASE (CSD),			
3.	QUE	STIONNAIRE TO BIDDING FOREIGN SUPPLIERS				
3.1.	IS 1	HE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?				
		ES THE ENTITY HAVE A BRANCH IN THE RSA?				
		ES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?				
3.4.	DO	ES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?				
3.5.	IS 1	HE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?				
CON	IPLI/	ANSWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REC ANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (R AS PER 2.3 ABOVE.	GISTER FOR A TAX SARS) AND IF NOT			
	IB: FAILURE TO PROVIDE ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID INVALID. IO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE.					

SIGNATURE OF BIDDER: CAPACITY UNDER WHICH THIS BID IS SIGNED: DATE:

.....

EVALUATION OF TENDER OFFERS

The procedure for evaluation of responsive Bid Offers will be **METHOD 4 if applicable to your bid: (Financial Offer, preference and quality (functionality)** with 80/20 Preference Points System. Bidders that fail to Score a minimum of 60% for functionality will not be evaluated further. The total score awarded will be the addition of the two scores for price and preference.

The following formula will be used in Calculation of Percentage for Functionality PS=So x Ap

Ms

Where:

- Ps = percentage scored for functionality by Bid/proposal under consideration
- So = total score of bid/proposal under consideration
- Ms = Maximum possible score

Ap = percentage allocated for functionality

ASPECT	CRITERIA	POSSIBLE POINTS	VERIFICATION METHOD
Company Previous Relevant Experience	Company who has successfully supplied, installed, commissioned, and maintained 5 or more complete solar photovoltaic (PV) systems.	10	Attach appointment letters with 5 corresponding completion certificates
	Company who has successfully supplied, installed, commissioned, and maintained 3 to 4 complete solar photovoltaic (PV) systems.	6	Attach appointment letters with 3 to 4 corresponding completion certificates
	Company who has successfully supplied, installed, commissioned, and maintained 1 to 2 complete solar photovoltaic (PV) systems.	4	Attach appointment letters with 1 to 2 corresponding completion certificates
	Company with no relevant experience.	0	No attached appointment letters and NO corresponding completion certificates
Electrical engineer, with a	With relevant experience of 5 years or more in electrical works	5	Attach CV, certified qualification certificates and ECSA
bachelor's degree or higher in Electrical	With relevant experience of 3 years or more but less than 5 years in electrical works	3	registration certificate not older than 3 months of certification
Engineering. should be	With relevant experience of less than 3 years in electrical works	2	by the Commissioner of Oath
registered with ECSA	With no experience	0	
Electrical Technician with NQF	With relevant experience of 5 years or more in electrical works	5	Attach CV and certified copies of certificates not older
level 6 / National Diploma.	With relevant experience of 3 years or more but less than 5 years in electrical works	3	than 3 months of certification by the Commissioner of Oath

	With relevant experience of less than 3 years in electrical works	2	
	With no experience	0	
Electrical Artisan with	With an experience of 3 years or more in electrical works	5	Attach CV and certified copies of
an electrical trade test certificate, must have a	With an experience of 2 years or more but less than 3 years in electrical works	3	certificates not older than 3 months of certification by the Commissioner of Oath
wireman's licence.	With an experience of less than 2 years in electrical works	2	
	With no experience	0	
		25	
Maximum Pos	Maximum Possible Points		

SPECIFIC GOALS	POINTS	Verification Documents
Companies within		Proof of company address
Ray Nkonyeni	20	
Municipality		
Companies within	15	Proof of company address
Ugu District		
Municipality		
Companies within	10	Proof of company address
KwaZulu Natal		
Other	5	Proof of company address
Total points	20	

b) Financial Offer

The financial offer will be scored using the following formula:

Nf = W1 x[1-(P-Pm) / Pm]

Where:

W1 = 80 for financial values up to R 50, 000, 000.00 (inclusive of VAT) of all responsive tenders received:

- Pm = the value of the comparative offer of the most favourable tender;
- P = the value of the comparative offer under consideration;

In the application of the 90/10 preference point system, if all bids received are below R 50, 000, 000.00, the bid must be cancelled. If one or more of the acceptable bid(s) received are above R 50, 000, 000.00 threshold, all bids received must be evaluated on the 90/10 preference point system.

c) Preferences

Up to **20** points (for financial values up to R 50, 000, 000.00), will be awarded to bidders who complete the preference schedule and who are found to be eligible for the preference claimed.

The applicable preference point system for this tender is the 80/20 preference point system

- 1.1 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:
 - (a) Price; and
 - (b) Specific Goals.

1.2 To be completed by the organ of state:

The maximum points for this tender are allocated as follows:

	POINTS
PRICE	80
SPECIFIC GOALS	20
Total points for Price and SPECIFIC GOALS	100

- 1.3 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.
- 1.4 The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.

GENERAL CONDITIONS OF CONTRACT TABLE OF CLAUSES

- 1. Definitions
- 2. Application
- 3. General
- 4. Standards
- 5. Use of contract documents and information inspection
- 6. Patent Rights
- 7. Performance security
- 8. Inspections, tests and analyses
- 9. Packing
- 10. Delivery and documents
- 11. Insurance
- 12. Transportation
- 13. Incidental Services
- 14. Spare parts
- 15. Warranty
- 16. Payment
- 17. Prices
- 18. Variation orders
- 19. Assignment
- 20. Subcontracts
- 21. Delays in the supplier's performance
- 22. Penalties
- 23. Termination for default
- 24. Anti-dumping and countervailing duties and rights
- 25. Force Majeure
- 26. Termination for insolvency
- 27. Settlement of Disputes
- 28. Limitation of Liability
- 29. Governing language
- 30. Applicable law
- 31. Notices
- 32. Taxes and duties
- 33. Transfer of contracts
- 34. Amendments of contracts
- 35. Prohibition of restrictive practices

General Conditions of Contract

1. Definitions 1.1 The following terms shall be interpreted as indicated:

- 1.2 "Closing time" means the date and hour specified in the bidding documents for the receipt of bids.
- 1.3 "Contract" means the written agreement entered into between the purchaser and the supplier, as recorded in the contract form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
- 1.4 "Contract price" means the price payable to the supplier under the contract for the full and proper performance of his contractual obligations.
- 1.5 "Corrupt practice" means the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution.
- 1.6 "Countervailing duties" are imposed in cases where an enterprise abroad is subsidized by its government and encouraged to market its products internationally.
- 1.7 "Country of origin" means the place where the goods were mined, grown or produced or from which the services are supplied. Goods are produced when, through manufacturing, processing or substantial and major assembly of components, a commercially recognized new product results that is substantially different in basic characteristics or in purpose or utility from its components.
- 1.8. "Database application form" means the application form required by the Ray Nkonyeni Municipality to be filled in by the successful Bidder, following the award of the contract, for inclusion on the RNM database before payment is made.
- 1.9 "Day" means calendar day.
- 1.10 "Delivery" means delivery in compliance of the conditions of the contract or order.
- 1.11 "Delivery ex stock" means immediate delivery directly from stock actually on hand.
- 1.12 "Delivery into consignee's store or to his site" means delivered and unloaded in the specified store or depot or on the specified site in compliance with the conditions of the contract or order, the supplier bearing all risks and charges involved until the goods are so delivered and a valid receipt is obtained.
- 1.13 "Dumping" occurs when a private enterprise abroad market its goods on own initiative in the RSA at lower prices than that of the country of origin and which have the potential to harm the local industries in the RSA.
- 1.14 "Force majeure" means an event beyond the control of the

supplier and not involving the supplier's fault or negligence and not foreseeable. Such events may include, but is not restricted to, acts of the purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.

- 1.15 "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of any bidder 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 bidder of the benefits of free and open competition.
- 1.16 "GCC" means the General Conditions of Contract.
- 1.17 "Goods" means all of the equipment, machinery, and/or other materials that the supplier is required to supply to the purchaser under the contract.
- 1.18 "Imported content" means that portion of the bidding price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or his subcontractors) and which costs are inclusive of the costs abroad, plus freight and other direct importation costs such as landing costs, dock dues, import duty, sales duty or other similar tax or duty at the South African place of entry as well as transportation and handling charges to the factory in the Republic where the goods covered by the bid will be manufactured.
- 1.19 "Local content" means that portion of the bidding price, which is not included in the imported content provided that local manufacture does take place.
- 1.20 "Manufacture" means the production of products in a factory using labour, materials, components and machinery and includes other related value-adding activities.
- 1.21 "Order" means an official written order issued for the supply of goods or works or the rendering of a service.
- 1.22 "Project site," where applicable, means the place indicated in bidding documents.
- 1.23 "Purchaser" means the organization purchasing the goods.
- 1.24 "Republic" means the Republic of South Africa.
- 1.25 "SCC" means the Special Conditions of Contract.
- 1.26 "Services" means those functional services ancillaries to the supply of the goods, such as transportation and any other incidental services, such as installation, commissioning, provision of technical assistance, training, catering, gardening, security, maintenance and other such obligations of the supplier covered under the contract.

- 1.27 "Supplier" means the successful bidder who is awarded the contract to maintain and administer the required and specified service(s) to the State.
- 1.28 "Tort" means in breach of contract.
- 1.29 "Turnkey" means a procurement process where one service provider assumes total responsibility for all aspects of the project and delivers the full end product / service required by the contract.
- 1.30 "Written" or "in writing" means hand-written in ink or any form of electronic or mechanical writing.

2. Application 2.1 These general conditions are applicable to all bids, contracts and orders including bids for functional and professional services (excluding professional services related to the building and construction industry), sales, hiring, letting and the granting or acquiring of rights, but excluding immovable property, unless otherwise indicated in the bidding documents.

- 2.2 Where applicable, special conditions of contract are also laid down to cover specific goods, services or works.
- 2.3 Where such special conditions of contract are in conflict with these general conditions, the special conditions shall apply.
- **3. General** 3.1 Unless otherwise indicated in the bidding documents, the purchaser shall not be liable for any expense incurred in the preparation and submission of a bid. Where applicable a nonrefundable fee for documents may be charged.
 - 3.2 Invitations to bid are usually published in locally distributed news media and on the municipality/municipal entity website.
- **4. Standards** 4.1 The goods supplied shall conform to the standards mentioned in the bidding documents and specifications.
- 5. Use of 5.1 The supplier shall not, without the purchaser's prior written consent, disclose the contract, or any provision thereof, or any specifications, contract documents plan, drawing, pattern, sample, or information furnished by or on behalf of the purchaser in connection therewith, to any person other and information than a person employed by the supplier in the of the contract. Disclosure to any such employed person shall be made in confidence inspection and shall extend only so far as may be necessary for purposes of such performance.
 - 5.2 The supplier shall not, without the purchaser's prior written consent, make use of any document or information mentioned in GCC clause 5.1 except for purposes of performing the contract.
 - 5.3 Any document, other than the contract itself mentioned in GCC clause 5.1 shall remain the property of the purchaser and shall be returned

(all copies) to the purchaser on completion of the supplier's performance under the contract if so, required by the purchaser.

- 5.4 The supplier shall permit the purchaser to inspect the supplier's records relating to the performance of the supplier and to have them audited by auditors appointed by the purchaser, if so, required by the purchaser.
- 6. **Patent rights** 6.1 The supplier shall indemnify the purchaser against all third party claims of infringement of patent, trademark, or industrial design rights arising from use of the goods or any part thereof by the purchaser.
 - 6.2 When a supplier developed documentation / projects for the municipality / municipal entity, the intellectual, copy and patent rights or ownership of such documents or projects will vest in the municipality / municipal entity.
- 7. Performance 7.1 Within thirty (30) days of receipt of the notification of contract award, the successful bidder shall furnish to the purchaser the performance security of the amount specified in SCC.
 - 7.2 The proceeds of the performance security shall be payable to the purchaser as compensation for any loss resulting from the supplier's failure to complete his obligations under the contract.
 - 7.3 The performance security shall be denominated in the currency of the contract, or in a freely convertible currency acceptable to the purchaser and shall be in one of the following forms:
 - (a) a bank guarantee or an irrevocable letter of credit issued by a reputable bank located in the purchaser's country or abroad, acceptable to the purchaser, in the form provided in the bidding documents or another form acceptable to the purchaser; or
 - (b) a cashier's or certified cheque.
 - 7.4 The performance security will be discharged by the purchaser and returned to the supplier not later than thirty (30) days following the date of completion of the supplier's performance obligations under the contract, including any warranty obligations, unless otherwise specified.
- **8. Inspections,** 8.1 All pre-bidding testing will be for the account of the bidder.

tests and analyses

- 8.2 If it is a bid condition that goods to be produced or services to be rendered should at any stage be subject to inspections, tests and analyses, the bidder or contractor's premises shall be open, at all reasonable hours, for inspection by a representative of the purchaser or organization acting on behalf of the purchaser.
 - 8.3 If there are no inspection requirements indicated in the bidding documents and no mention is made in the contract, but during the

contract period it is decided that inspections shall be carried out, the purchaser shall itself make the necessary arrangements, including payment arrangements with the testing authority concerned.

- 8.4 If the inspections, tests and analyses referred to in clauses 8.2 and 8.3 show the goods to be in accordance with the contract requirements, the cost of the inspections, tests and analyses shall be defrayed by the purchaser.
- 8.5 Where the goods or services referred to in clauses 8.2 and 8.3 do not comply with the contract requirements, irrespective of whether such goods or services are accepted or not, the cost in connection with these inspections, tests or analyses shall be defrayed by the supplier.
- 8.6 Goods and services which are referred to in clauses 8.2 and 8.3 and which do not comply with the contract requirements may be rejected.
- 8.7 Any contract goods may on or after delivery be inspected, tested or analysed and may be rejected if found not to comply with the requirements of the contract. Such rejected goods shall be held at the cost and risk of the supplier who shall, when called upon, remove them immediately at his own cost and forthwith substitute them for goods which do comply with the requirements of the contract. Failing such removal the rejected goods shall be returned at the supplier's cost and risk. Should the supplier fail to provide the substitute goods forthwith, the purchaser may, without giving the supplier further opportunity to substitute the rejected goods, purchase such goods as may be necessary at the expense of the supplier.
- 8.8 The provisions of clauses 8.4 to 8.7 shall not prejudice the right of the purchaser to cancel the contract on account of a breach of the conditions thereof, or to act in terms of Clause 22 of GCC.
- **9. Packing** 9.1 The supplier shall provide such packing of the goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packing, case size weights shall take into consideration, where appropriate, the remoteness of the goods' final destination and the absence of heavy handling facilities at all points in transit.
 - 9.2 The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the contract, including additional requirements, if any, and in any subsequent instructions ordered by the purchaser.

10. Delivery and 10.1 Delivery of the goods and arrangements for shipping and clearance obligations, shall be made by the supplier in accordance with the terms specified in the contract.

11. Insurance 11.1 The goods supplied under the contract shall be fully

insured in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified.

- **12. Transportation**12.1 Should a price other than an all-inclusive delivered price be required, this shall be specified.
- **13. Incidental** 13.1 The supplier may be required to provide any or all of the following services, including additional services, if any:
 - (a) performance or supervision of on-site assembly and/or commissioning of the supplied goods.
 - (b) furnishing of tools required for assembly and/or maintenance of the supplied goods.
 - (c) furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied goods.
 - (d) performance or supervision or maintenance and/or repair of the supplied goods, for a period of time agreed by the parties, provided that this service shall not relieve the supplier of any warranty obligations under this contract; and
 - (e) training of the purchaser's personnel, at the supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied goods.
 - 13.2 Prices charged by the supplier for incidental services, if not included in the contract price for the goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the supplier for similar services.
- **14. Spare parts** 14.1 As specified, the supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the supplier:
 - such spare parts as the purchaser may elect to purchase from the supplier, provided that this election shall not relieve the supplier of any warranty obligations under the contract; and;
 - (b) in the event of termination of production of the spare parts:
 - (i) advance notification to the purchaser of the pending termination, in sufficient time to permit the purchaser to procure needed requirements; and
 - (ii) following such termination, furnishing at no cost to the purchaser, the blueprints, drawings, and specifications of the spare parts, if requested.
- **15. Warranty** 15.1 The supplier warrants that the goods supplied under the contracts are new, unused, of the most recent or current models, and they incorporate all recent improvements in design and materials

unless provided otherwise in the contract. The supplier further warrants that all goods supplied under this contract shall have no defect, arising from design, materials, or workmanship (except when the design and/or material is required by the purchaser's specifications) or from any act or omission of the supplier, that may develop under normal use of the supplied goods in the conditions prevailing in the country of final destination.

- 15.2 This warranty shall remain valid for twelve (12) months after the goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the contract, or for eighteen (18) months after the date of shipment from the port or place of loading in the source country, whichever period concludes earlier, unless specified otherwise.
- 15.3 The purchaser shall promptly notify the supplier in writing of any claims arising under this warranty.
- 15.4 Upon receipt of such notice, the supplier shall, within the period specified and with all reasonable speed, repair or replace the defective goods or parts thereof, without costs to the purchaser.
- 15.5 If the supplier, having been notified, fails to remedy the defect(s) within the period specified, the purchaser may proceed to take such remedial action as may be necessary, at the supplier's risk and expense and without prejudice to any other rights which the purchaser may have against the supplier under the contract.
- **16. Payment** 16.1 The method and conditions of payment to be made to the supplier under this contract shall be specified.
 - 16.2 The supplier shall furnish the purchaser with an invoice accompanied by a copy of the delivery note and upon fulfillment of other obligations stipulated in the contract.
 - 16.3 Payments shall be made promptly by the purchaser, but in no case later than thirty (30) days after submission of an invoice or claim by the supplier.
 - 16.4 Payment will be made in Rand unless otherwise stipulated.
 - 16.5. Payment will only be made if the supplier has filled in and submitted the necessary database application form to the satisfaction of the Chief Financial Officer.
- **17. Prices** 17.1 Prices charged by the supplier for goods delivered and services performed under the contract shall not vary from the prices quoted by the supplier in his bid, with the exception of any price adjustments authorized or in the purchaser's request for bid validity extension, as the case may be.
- **18. Variation** 18.1 In cases where the estimated value of the envisaged changes in purchase does not vary more than 15% of the total value of the original contract, the contractor may be instructed to deliver the

goods or render the services as such. In cases of measurable quantities, the contractor may be approached to reduce the unit price, and such offers may be accepted provided that there is no escalation in price.

- **19. Assignment** 19.1 The supplier shall not assign, in whole or in part, its obligations to perform under the contract, except with the purchaser's prior written consent.
- **20. Subcontracts** 20.1 The supplier shall notify the purchaser in writing of all sub-contracts awarded under this contract if not already specified in the bid. Such notification, in the original bid or later, shall not relieve the supplier from any liability or obligation under the contract.

21. Delays in the 21.1 Delivery of the goods and performance of services shall be made by the supplier in accordance with the time schedule prescribed by the purchaser in the contract.

- 21.2 If at any time during performance of the contract, the supplier or its subcontractor(s) should encounter conditions impeding timely delivery of the goods and performance of services, the supplier shall promptly notify the purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the supplier's notice, the purchaser shall evaluate the situation and may at his discretion extend the supplier's time for performance, with or without the imposition of penalties, in which case the extension shall be ratified by the parties by amendment of contract.
- 21.3 The right is reserved to procure outside of the contract small quantities or to have minor essential services executed if an emergency arises, the supplier's point of supply is not situated at or near the place where the goods are required, or the supplier's services are not readily available.
- 21.4 Except as provided under GCC Clause 25, a delay by the supplier in the performance of its delivery obligations shall render the supplier liable to the imposition of penalties, pursuant to GCC Clause 22, unless an extension of time is agreed upon pursuant to GCC Clause 22.2 without the application of penalties.
- 21.5 Upon any delay beyond the delivery period in the case of a goods contract, the purchaser shall, without cancelling the contract, be entitled to purchase goods of a similar quality and up to the same quantity in substitution of the goods not supplied in conformity with the contract and to return any goods delivered later at the supplier's expense and risk, or to cancel the contract and buy such goods as may be required to complete the contract and without prejudice to his other rights, be entitled to claim damages from the supplier.
- **22. Penalties** 22.1 Subject to GCC Clause 25, if the supplier fails to deliver any or all of the goods or to perform the services within the period(s) specified in the contract, the purchaser shall, without prejudice to its other remedies under the contract, deduct from the contract price, as

a penalty, a sum calculated on the delivered price of the delayed goods or unperformed services using the current prime interest rate calculated for each day of the delay until actual delivery or performance. The purchaser may also consider termination of the contract pursuant to GCC Clause 23.

23. Termination 23.1 The purchaser, without prejudice to any other remedy for breach of contract, by written notice of default sent to the supplier, may terminate this contract in whole or in part:

- (a) if the supplier fails to deliver any or all of the goods within the period(s) specified in the contract, or within any extension thereof granted by the purchaser pursuant to GCC Clause 21.2;
- (b) if the supplier fails to perform any other obligation(s) under the contract; or
- (c) if the supplier, in the judgement of the purchaser, has engaged in corrupt or fraudulent practices in competing for or in executing the contract.
- 23.2 In the event the purchaser terminates the contract in whole or in part, the purchaser may procure, upon such terms and in such manner, as it deems appropriate, goods, works or services similar to those undelivered, and the supplier shall be liable to the purchaser for any excess costs for such similar goods, works or services. However, the supplier shall continue performance of the contract to the extent not terminated.
- 23.3 Where the purchaser terminates the contract in whole or in part, the purchaser may decide to impose a restriction penalty on the supplier by prohibiting such supplier from doing business with the public sector for a period not exceeding 10 years.
- 23.4 If a purchaser intends imposing a restriction on a supplier or any person associated with the supplier, the supplier will be allowed a time period of not more than fourteen (14) days to provide reasons why the envisaged restriction should not be imposed. Should the supplier fail to respond within the stipulated fourteen (14) days the purchaser may regard the supplier as having no objection and proceed with the restriction.
- 23.5 Any restriction imposed on any person by the purchaser will, at the discretion of the purchaser, also be applicable to any other enterprise or any partner, manager, director or other person who wholly or partly exercises or exercised or may exercise control over the enterprise of the first-mentioned person, and with which enterprise or person the first-mentioned person, is or was in the opinion of the purchaser actively associated.
- 23.6 If a restriction is imposed, the purchaser must, within five (5) working days of such imposition, furnish the National Treasury, with the following information:

- (a) the name and address of the supplier and / or person restricted by the purchaser;
- (b) the date of commencement of the restriction;
- (c) the period of restriction; and
- (d) the reasons for the restriction.

These details will be loaded in the National Treasury's central database of suppliers or persons prohibited from doing business with the public sector.

- 23.7 If a court of law convicts a person of an offence as contemplated in sections 12 or 13 of the Prevention and Combating of Corrupt Activities Act, No. 12 of 2004, the court may also rule that such person's name be endorsed on the Register for Bid Defaulters. When a person's name has been endorsed on the Register, the person will be prohibited from doing business with the public sector for a period not less than five years and not more than 10 years. The National Treasury is empowered to determine the period of restriction, and each case will be dealt with on its own merits. According to section 32 of the Act the Register must be open to the public. The Register can be perused on the National Treasury website.
- 24. Anti-dumping24.1 When, after the date of bid, provisional payments are required, or and anti-dumping or countervailing duties are imposed, or the amount of amount of a provisional payment or anti-dumping or countervailing countervailing duties and rights right is increased in respect of any dumped or subsidized import, the State is not liable for any amount so required or imposed, or for the amount of any such increase. When, after the said date, such a provisional payment is no longer required or any such anti-dumping or countervailing right is abolished, or where the amount of such provisional payment or any such right is reduced, any such favourable difference shall on demand be paid forthwith by the supplier to the purchaser or the purchaser may deduct such amounts from moneys (if any) which may otherwise be due to the supplier in regard to goods or services which he delivered or rendered, or is to deliver or render in terms of the contract or any other contract or any other amount which may be due to him.
- **25.** Force 25.1 Notwithstanding the provisions of GCC Clauses 22 and 23, the supplier shall not be liable for forfeiture of its performance security, damages, or termination for default if and to the extent that his delay in performance or other failure to perform his obligations under the contract is the result of an event of force majeure.
 - 25.2 If a force majeure situation arises, the supplier shall promptly notify the purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the purchaser in writing, the supplier shall continue to perform its obligations under the contract as far as is reasonably practical and shall seek all reasonable alternative means for performance not prevented by the force majeure event.
- 26. Termination 26.1 The purchaser may at any time terminate the contract by giving

- **for insolvency** written notice to the supplier if the supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the supplier, provided that such termination will not prejudice or affect any right of action or remedy, which has accrued or will accrue thereafter to the purchaser.
- 27. Settlement of disputes 27.1 If any dispute or difference of any kind whatsoever arises between the purchaser and the supplier in connection with or arising out of the contract, the parties shall make every effort to resolve amicably such dispute or difference by mutual consultation.
 - 27.2 If, after thirty (30) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the purchaser or the supplier may give notice to the other party of his intention to commence with mediation. No mediation in respect of this matter may be commenced unless such notice is given to the other party.
 - 27.3 Should it not be possible to settle a dispute by means of mediation, it may be settled in a South African court of law.
 - 27.4 Notwithstanding any reference to mediation and/or court proceedings herein,
 - (a) the parties shall continue to perform their respective obligations under the contract unless they otherwise agree; and
 - (b) the purchaser shall pay the supplier any monies due the supplier for goods delivered and / or services rendered according to the prescripts of the contract.

28. Limitation of 28.1 Except in cases of criminal negligence or willful misconduct, and in the case of infringement pursuant to Clause 6;

- (a) the supplier shall not be liable to the purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the supplier to pay penalties and/or damages to the purchaser; and
- (b) the aggregate liability of the supplier to the purchaser, whether under the contract, in tort or otherwise, shall not exceed the total contract price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment.
- **29. Governing** 29.1 The contract shall be written in English. All correspondence and other documents pertaining to the contract that is exchanged by the parties shall also be written in English.
- **30.** Applicable 30.1 The contract shall be interpreted in accordance with South African laws, unless otherwise specified.
- **31. Notices** 31.1 Every written acceptance of a bid shall be posted to the Supplier

concerned by registered or certified mail and any other notice to him shall be posted by ordinary mail to the address furnished in his bid or to the address notified later by him in writing and such posting shall be deemed to be proper service of such notice.

- 31.2 The time mentioned in the contract documents for performing any act after such aforesaid notice has been given, shall be reckoned from the date of posting of such notice.
- **32. Taxes and** 32.1 A foreign supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside the purchaser's country.
 - 32.2 A local supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted goods to the purchaser.
 - 32.3 No contract shall be concluded with any bidder whose tax matters are not in order. Prior to the award of a bid SARS must have certified that the tax matters of the preferred bidder are in order.
 - 32.4 No contract shall be concluded with any bidder whose municipal rates and taxes and municipal services charges are in arrears.
- **33. Transfer of** 33.1 The contractor shall not abandon, transfer, cede assign or sublet a contracts contract or part thereof without the written permission of the purchaser.
- **34. Amendment** 34.1 **No agreement to amend or vary a contract or order or the conditions, stipulations or provisions thereof shall be valid and of any force unless such agreement to amend or vary is entered into in writing and signed by the contracting parties. Any waiver of the requirement that the agreement to amend or vary shall be in writing, shall also be in writing.**
- **35. Prohibition** 35.1 In terms of section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998 as amended, an agreement between, or concerted practice by, firms or a decision by an association of firms, is prohibited if it is between parties
 - or a decision by an association of firms, is prohibited if it is between parties in a horizontal relationship and if a bidder(s) is / are or a contractor(s) was / were involved in collusive bidding.
 - 35.2 If a bidder(s) or contractor(s) based on reasonable grounds or evidence obtained by the purchaser has / have engaged in the restrictive practice referred to above, the purchaser may refer the matter to the Competition Commission for investigation and possible imposition of administrative penalties as contemplated in section 59 of the Competition Act No 89 0f 1998.
 - 35.3 If a bidder(s) or contractor(s) has / have been found guilty by the Competition Commission of the restrictive practice referred to above, the purchaser may, in addition and without prejudice to any other remedy provided for, invalidate the bid(s) for such item(s) offered, and / or terminate the contract in whole or part, and / or restrict the bidder(s) or contractor(s) from conducting business with the public sector for a period not exceeding ten (10) years and / or claim damages from the bidder(s) or contractor(s) concerned.

No contract will be awarded to a person who has failed to submit a copy of Tax Compliance Certificate with a PIN from the South African Revenue Service ("SARS") certifying that the taxes of that person to be in order or that suitable arrangements have been made with SARS.

I certify that I have the appropriate authority to furnish the above-mentioned information, and that the above information is correct at the time of completion.

Name:	Signature:
Designation:	Date:

E

TECHNICAL SPECIFICATIONS

1. BACKGROUND INFORMATION AND TECHNICAL SPECIFICATIONS

Ray Nkonyeni Municipality intends to implement sustainable energy generation solutions to offset the use of energy in its municipal buildings, and to lower energy demand from both the Municipal and Eskom electricity grids. The solar PV systems shall serve the purpose reducing energy consumption and reduce municipal and Eskom electricity bills for the buildings; and further to enable to municipal offices to operate to a specified level during outages and at night where applicable. The Municipality has drawn up the specifications to design, supply, install, commission and maintain hybrid, grid-tied rooftop solar photovoltaic (PV) systems at municipal buildings within Ray Nkonyeni Municipality.

The technical specifications and requirements for major components, engineering and installations works ensure that the solar PV plant is built to render higher energy yields in its lifetime – a gridtied solar PV system consisting of solar PV modules, a module mounting structure, a solar inverter with power conditioning unit (PCU) consisting of a maximum power point tracker (MPPT), interconnecting cables, junction boxes, distribution boxes with a control and protection system, IR/UV protected PVC cables and the necessary switches.

2. SCOPE OF WORK

The scope of work and deliverables covers the following:

- Design of the solar photovoltaic (PV) system according to applicable local and international standards and specifications for Ray Nkonyeni Municipal Buildings.
- Supply and deliver monocrystalline or similar PV modules, with rated power of 545W or higher. It must come with a minimum warranty of 25 years.
- Supply and deliver single-phase or three-phase hybrid inverters with online remote monitoring and control, MPPT inputs, that is NRS 097 approved. It must come with a minimum warranty of 10 years.
- Supply and deliver 30/24kwh Lithium-ion batteries, nominal voltage of 52V to suit High Voltage inverter. It must come with a minimum warranty of 10 years.
- Supply mounting structure, cabling, mounting hardware and infrastructure, reticulation, grid connection works and remote monitoring and control.
- Construction work and installation of equipment (as necessary).

- Submission of preliminary and final as-build design documentation as well as grid code compliance certificate to the municipalities.
- Training programme of Municipal Staff / Team.

3. NORMATIVE REFERENCES

It is the bidders' or solar PV contractor's responsibility to be familiar with the applicable and latest standards, guidelines and codes as listed below and other standards.

SANS 10142-1 (The wiring of premises Part 1: Low-voltage installations) SANS 10313 (Protection against lightning - physical damage to structures and life hazard) SANS (IEC) 60529 (Degrees of protection provided by enclosures (IP codes)) NRS 097-2 (Grid connection of embedded generation Part 2) NRS 097-2-3 (Grid connection of embedded generation Part 2 Small-scale embedded generation - Section 3: Simplified utility connection criteria for low-voltage connected generators) IEC 62305 (Protection against lightning – all parts) IEC 60364 (Low-voltage electrical installations – all parts) IEC 60364-7-712 (Requirements for special installations or locations – Solar photovoltaic (PV) power supply systems) IEC 61724 (Photovoltaic system performance monitoring – Guidelines for measurement, data exchange and analysis) IEC 61730 (Part 1 and 2 safety) – Photovoltaic module safety qualification IEC 61701 Salt mist corrosion testing of photovoltaic modules IEC 62716 Ammonia corrosion testing of photovoltaic modules IEC 62108 (Concentrator photovoltaic (CPV) modules and assemblies - Design qualification and type approval) IEC 62109 (Safety of power converters for use in photovoltaic power systems) IEC 62727 (Photovoltaic systems – Specification for solar trackers) IEC 62817 (Photovoltaic (PV) module safety qualification) IEC 60228 (Conductors of insulated cables) IEC 62116 (Utility-interconnected photovoltaic inverters - Test procedure of islanding

prevention measures)

SANS 61215 Design qualification and type test approval (crystalline)

IEC 62759-1 Transportation of photovoltaic modules

TÜV2 Pfg 1169 (Requirements for cables for use in photovoltaic systems)

DST 34-1765 Distribution standard for the interconnection of embedded generation SANS 1200

4. PV MODULES – TECHNICAL REQUIREMENTS

The bidder is to supply solar photovoltaic modules which meet the following minimum requirements:

- 1.1. The PV module rated peak power shall be >+545Wp at STC at 25
- 1.2. The modules shall be monocrystalline silicon (mc-Si).
- 1.3. The solar PV modules are required to be IEC 61215: monocrystalline PV design qualification and type approval and be IEC 61730 certified as a minimum.
- 1.4. Detailed specification sheets and certificates of compliance to these standards are to be provided as part of the tender document.
- 1.5. The modules be Potential Induced Degradation (PID) -free certified and

have a positive output tolerance.

- 1.6. Preference shall be given to Bloomberg tier 1 PV manufacturers.
- 1.7. PV module shall have a minimum performance guarantee of 80% for the required design life of 25 years under prevailing site conditions and environmental condition comply to coastal specifications.
- 1.8. A comprehensive IV flash test report for each PV module procured must be provided in Microsoft Excel format at least two (2) weeks prior to commencement of construction works (this is not a requirement for the tender process). The data must have the following information:
 - Test conditions during the measurements
 - Power at maximum power point (Pmpp)
 - Voltage at MPP (Vmpp)
 - Current at MPP (Impp)
 - Fill factor
 - Open circuit voltage (Voc)
 - Short circuit current (Isc)
 - Module surface temperature (measured by temperature sensor, corrected and uncorrected if possible)
 - Serial number of the tested panel, including panels belonging to shipping pallets and containers.
- 1.9. The installation of PV modules must take place in accordance with the manufacturer's specifications. The PV module installation manual must be provided as part of the as-built documentation. The manual must contain all the necessary requirements and specifications for proper module installation, such as (but not limited to):
 - Types of mounting structures, including physical requirements for securing mechanisms (screws, clamps, dimensions, tightening force, locations) and
 - Useful information such as recommended mounting types, recommended spacing to guarantee sufficient air circulation, restrictions to certain environments etc.
 - Mechanical and electrical configuration guidelines (landscape, portrait, string and array sizing, grounding etc.)
 - Earthing requirements.
- 1.10. Modules shall be labelled indicating manufacturer, model number, serial number, maximum power point watt rating (Wpeak ± tolerance), maximum power point current, maximum power point voltage, open circuit voltage and short circuit current of each module and the maximum system voltage.
- 1.11. Modules must carry a defect warranty of at least 10 years and a linear 25- or 30-year performance guarantee of 80%.
 - The warranties offered by the module manufacturer must be transferable to the municipality. Other terms and conditions for warranty transferability must be clearly defined.
 - The sales agreement with the module manufacturer must clearly define the claiming procedure for defective modules, the required additional specific independent party involvement and any other conditions that might influence the honouring of the warranties and guarantees.

2. INVERTERS – TECHNICAL REQUIREMENTS

- 2.1. The inverters must comply with minimum safety requirements in accordance with IEC 62109 and must feature anti-islanding protection according to IEC 62116. They must also comply with NRS 097-2-1:2017, July 2020 amendment.
- 2.2. Selection of inverters must be based on the design and functional requirements, including the integration requirements of the PV system and compatibility with the selected PV modules for the installations.
- 2.3. The inverter must be designed for PV application and include:
 - At least one MPP tracker
 - A display showing the faults and the performances.
 - An advanced system that allows power control and efficiency (maximum efficiency) at a minimum of 97% (excluding transformer)
 - Remote monitoring and control capabilities
 - Isolation fault detection
 - Anti-islanding protection feature
 - Ability to start and stop function automatically.
 - Variable power factor setting.
- 2.4. Inverter specifications:
 - The ratio of the input DC power to output AC power may not exceed 120% at STC.
 - The MPP voltages of the strings are to be verified to lie in the MPP voltage range of the inverter for temperatures between 0°C and 70°C. The maximum inverter input voltage may also not exceed -10°C.
 - An IP protection class of at least 54 is required for outdoor mounting of the inverters and an IP grade of at least 21 is required for indoor mounting, must comply with coastal specifications.
 - If installed outdoors, inverters must be protected from direct sunlight.
 - The inverter requires an external DC switch.
 - Any special grounding requirements for inverters, must be implemented without fail as stipulated by the PV module manufacturer.
- 2.5. Inverters Guarantees and warranties.
 - Inverters must have a warranty of at least 10 years. The sales agreement with the inverter manufacturer must clearly define the claiming procedure for defective inverters or parts as well as the required testing and independent verification requirements and any other conditions that might influence the honoring of the warranties.
 - Proof must be provided that the inverter manufacturer has sufficient financial backup to cover manufacturers in case of bankruptcy or insolvency procedures.
 - Warranty voiding conditions must be clearly stipulated in the warranty document.
 - The warranties offered by the inverter manufacturers must be transferable to the municipality.
 - Other terms and conditions for warranty transferability must be clearly defined.

3. PV MOUNTING STRUCTURE – ROOF MOUNT

3.1. Structures should be mounted without penetrating the roof (e.g. by drilling holes), as this might damage the galvanisation layer of galvanised roofs, if the

roof does not support such kinds of installation.

- 3.2. A clamping method is preferred, or adequate measures are to be taken to ensure corrosion protection. The support structure of the PV system and any connections to the roof must not have an impact on the functioning of the roof. In all circumstances, the building's weather tightness must be maintained.
- 3.3. The support structure must not block the water drainage of the roof. The drainage system must be well maintained and clean. The roof clearance around the perimeter of the array must allow for safe operation and maintenance activities. Corridors must be created to allow easy access to the module arrays so that they can be cleaned and maintained.
- 3.4. Alignment between all module planes must be guaranteed. On flat roofs, the PV installation can be attached to the roof by using a ballast method or by anchoring it onto the roof supporting structure. On sloped roofs, the structure can be installed either with or without rails, and with or without some type of penetration of the roof.
- 3.5. The supporting structure of the modules and all other PV components on the roof must be designed and installed in line with the relevant South African standards applicable, in particular, to PV installations.
- 3.6. SANS 10160 Part 2 Self-weight and imposed loads
- 3.7. SANS 10160 Part 3 Wind actions
- 3.8. The wind load on the modules must be calculated (prior to selecting the supporting structure) for each specific location, depending on the wind zone of the site, building surrounds, roof altitude, inclination of roof and modules, location of modules on the roof (corners, roof edge, etc.), load of PV installation, distance between rows of modules, presence of wind shield, etc. The number of connection points must be calculated based on the applied loads and the static behaviour of the system. The connection points must not compromise the position of the roofing or the sealing in between.
- 3.9. Wind load stability calculations must be provided to the municipality prior to the beginning of construction works.

4. PV MOUNTING STRUCTURE – BALLAST AND ANCHORING MOUNTING TYPES FOR FLAT ROOFS

- 4.1. Ballasts are generally placed in certain positions to attach the PV system onto the roof. The roof should not be penetrated, and the ballast must be dimensioned based on the conclusions of the stability study.
- 4.2. A high- Ultraviolet (UV) -resistant roof material must be installed between the ballast tiles and the roofing as a protection layer in order to prevent sharp edges from damaging the roof and to act as a buffer against thermal expansion of the supporting structure.
- 4.3. The load of the PV system must be uniformly distributed over the roof. When an anchoring system is used, the perforation of the module supporting structure through the roofing material can have a direct impact on its water tightness and thermal isolation, which must be kept as low as possible.
- 4.4. All points of roof penetration must be durably sealed using purpose-made products capable of accommodating the movement and temperatures to which they may be subjected. Besides the tensile and pressure forces, the horizontal component of the wind force must also be considered when designing the mounting solution.

5. PV MOUNTING STRUCTURE – RAILED, SHARED RAIL AND RAIL-LESS MOUNTING TYPES FOR SLOPED ROOFS

5.1. When opting for the railed type of mounting, two rails are attached to the roof

to support and secure rows of PV modules with clamps that are usually positioned with either a portrait or landscape orientation. Another option is to share the middle rail when modules are installed in parallel rows, thereby reducing the rail weight, number of roof penetrations and costs involved.

- 5.2. The rails are secured to the roof by means of a bolt or screw that penetrates the roof.
- 5.3. In a rail-less type of mounting, the PV modules are attached directly to the roof using bolts or screws that penetrate the roof, with the module frames acting as a rail. The modules need not be limited to the orientation of the rigid rails and can be positioned in any direction.
- 5.4. The contractor must install flashing around the holes for a watertight seal.

6. PV MOUNTING STRUCTURE – MODULE MOUNTING

- 6.1. The modules must be mounted onto the mounting structure in accordance with the requirements of the module manufacturer as described in the instruction manual. If not, the Contractor must provide written approval for the mounting method from the module manufacturer.
- 6.2. If modules are clamped onto the mounting structure, at least four clamping points should be used.
- 6.3. The minimal torque for fastening the modules as stated in the instruction manual must be observed.
- 6.4. The contractor must install the modules at the minimum inclination so the rain can wash them clean, i.e. at least 15° from the horizontal.
- 6.5. The sheds must be designed so that the shadow angle remains below the winter solstice. The shadow angle is defined as the angle between the horizontal and the line connecting the highest point of one row to the lowest point of the following row of modules.

7. PV MOUNTING STRUCTURE – WARRANTIES

- 7.1. The structure must have at least a ten-year warranty but must be designed for a minimum lifetime of 25 years.
- 7.2. Special attention must be paid to warranty conditions pertaining to corrosion. Corrosion prevention must start at the design stage, considering site- and soil specific parameters.

8. PV MOUNTING STRUCTURE – CIVIL WORKS

- 8.1. Civils works must be carried out in accordance with SANS 1200.
- 8.2. Piling or foundations for fixed mounting or sun-tracker structures must comply with the manufacturer's requirements.
- 8.3. All relevant design documents must be provided for review prior to the beginning of construction activities.

9. PROTECTION AND CONTROL DEVICES

- 9.1. The degree of protection must comply with the applicable standards associated with PV and electrical works in general.
- 9.2. Over-current and over-voltage protection devices are required on the DC and AC sides.
- 9.3. All switchgears used in any of the switchboards must comply with SANS (IEC) 60947 and SANS (IEC) 62271.
- 9.4. The protection and control design and methodology must be indicated by the contractor during the tender bidding stage and the municipality must review

its adequacy.

9.5. The design must include any necessary disconnection switches to ensure that the anti-islanding requirements of the relevant authority are met.

10. CABLING

All cables must be installed in accordance with the manufacturer's specifications and must meet all the design aspects considered during cable sizing calculations. The combined cable DC and AC losses may not exceed 3%.

- 10.1. DC cables The DC cables of the PV installation must have the following characteristics as a minimum:
 - Cables used outdoors must be UV resistant.
 - Cables should have a Class II rating for insulation.
 - Cables must be rated for temperatures from -15°C to +90°C. This requirement is also applicable to all materials used in the installation (such as cable conduits).
 - The cable must be made of double-insulated components and must have a minimal lifespan of 25 years.
 - Cables must comply with SANS 1507 / TÜV 2 Pfg 1169 or any other equivalent standards.
 - All DC solar cables must be halogen-free, flame resistant and fire retardant.
 - All cable terminations shall be MC4 type
- 10.2. The cable bending radius must be a minimum of four times the cable diameter or as specified by the manufacturer if it is different.
 - Cables must be sized to allow a current of up to 1.25 times the lsc and up to 1.2 times the Voc of a solar PV array.
 - Cables shall be installed in conduits and hooded cable trays.
 - The cable return path should follow the same way to avoid induction loops.
 - Cables shall be dimensioned according to CEI 20-40 and CEI 20-67. Norm CEI 64-8 shall be followed to prevent short-circuit-induced current. Norm CEI 82-25 shall be followed for arrangement of cables and cables trays.
 - Combined DC cable losses should be less than 2% at STC.
- 10.3. AC cables The AC cables of the PV installation must have the following characteristics as a minimum:
 - AC cables may be XLPE or PILC, with aluminium or copper stranded wire conductors.
 - AC cable construction must be according to SANS 97 or 1339, SANS 1507 and IEC 60502.
 - AC cables must be suitable for direct buried (armoured) or ducted installation.
 - All joints and terminations must be completed and tested in accordance with the manufacturer's recommendations.
 - AC cables must be terminated with suitable lugs.

11. INSTALLATION

11.1. An electrical certificate of compliance (CoC) will be required for electrical installations that include solar PV systems for municipal buildings, per the

Occupational Health and Safety Act (N. 85 of 1993: Occupational Health and Safety Act). The first step is to make sure that a valid CoC is available for the existing electrical installation, following which a newly installed solar PV system can then supplement the existing CoC.

11.2. The CoC must be issued by qualified and accredited person such as a registered electrician, as per requirements of SSEG installations, SANS 10142-1-2, or a professional engineer (Pr Eng) or a professional technologist (Pr Tech Eng) to sign off COCs for PV systems.

12. COMMISSIONING

- 12.1. During commissioning, assurance must be gained that the constructed PV plant is safe, meets its design objectives, functions and produces energy in accordance with the contract specifications.
- 12.2. The commissioning requirements for PV plants are based on IEC 62446: PV systems Requirements for testing, documentation and maintenance Part 1: Grid connected systems Documentation, commissioning tests and inspection.

13. TESTS AND ACCEPTANCE

- 13.1. The contractor must conduct the required tests to provide evidence that the established completion milestones have been achieved.
- 13.2. The municipality may conduct additional tests and inspections, request additional tests from the contractor or supervise tests conducted by the contractor, without causing unnecessary delay and subject to due notice.
- 13.3. The contractor must compile checklists of their tests and inspections for approval by the municipality.

14. COMPLETION CERTIFICATE

- 14.1. An electrical certificate of compliance (CoC) will be required for electrical installations that include solar PV systems, as per the Occupational Health and Safety Act (N. 85 of 1993: Occupational Health and Safety Act).
- 14.2. The first step is to make sure that a valid CoC is available for the existing electrical installation, following which a newly installed solar PV system can then supplement the existing CoC.
- 14.3. The CoC must be issued by a qualified and accredited person such as a registered electrician. However, in the absence of a standard detailing the specific requirements of SSEG installations as in SANS 10142-1-2. AA professional engineer (Pr Eng) or a professional technologist (Pr Tech Eng) to sign off COCs for PV systems.

15. QUALITY ASSURANCE

15.1. The bidder should be registered on the PV Green Card database and to provide sufficient proof by providing a letter from the South African Photovoltaic Industry Association (SAPVIA).

16. PERFORMANCE WARRANTY

16.1. Due to well-known and predicted electrical degradation of solar panels, the bidder must indicate that the generated power compared to the full rated original output, must not decrease by more than 10% after ten years period and 20% after 25 years.

16.2. Any identified faults, defects in materials or workmanship shall be made good free of charge during the warranty period. The defects and /or failures considered here include those due to manufacturing, quality of material, non-conformity to specifications. Bidders must indicate what guarantees and warranties will be applicable for their installation and/or technologies, including technical support.

17. ROUTINE MAINTENANCE

- 17.1. Maintenance of the solar PV systems shall be done routinely on a monthly basis. This includes cleaning the panels and checking all system components. Any issues that are identified with the system components are to be raised with the contractor.
- 17.2. The PV modules shall be monitored constantly, and the contractor shall be informed of any fault conditions.

17.3. Monthly checks

- The PV modules shall be cleaned monthly:
- Panels to be cleaned with pure water and micro-fibre brushes.
- Conduct string test with multimeter.
- Check infrared images of electrical connections.
- Check for cracks and loose connections, etc.

17.4. Annual service

• The annual service shall include mechanical inspections, module inspections, checking all earthing, check lightning protection and all components 21.

The recommended scope of work for the scheduled maintenance plan is provided in the table below,

EQUIPMENT	TASK	FREQUENCY	EXTENT
Modules	Integrity inspection and	Yearly	Front side – all
	replacement if required. Front side		Backside
	inspection of all modules to identify		
	shattered glass. Backside		
	inspection of a sample to check for		
	cracks		
Modules	Integrity inspection & replacement if	After lightning or	All suspect
	required. Check for damaged	hailstorms	modules
	bypass diodes and burned junction		
	boxes.		
Modules	Check tightening of clamps	Yearly	Random
			sample

Modules	Module cleaning	As needed to	All
		minimise soiling	
		loss (< 5% loss	
		compared to	
		clean)	
Electrical	Integrity check & cleaning	Yearly	All
cabinets and			
switchboards			
Electrical	Check labelling and identification	Yearly	Sample
cabinets and			
switchboards			
Electrical	Electrical protection visual	Yearly	All
cabinets and	inspection & functional test	-	
switchboards			
Electrical	Check fuse status	Yearly	All
cabinets and			
switchboards			
Electrical	Check surge protection status (if	Yearly	All
cabinets and	applicable)		
switchboards			
Electrical	Check integrity of cables & state of	Yearly	All
cabinets and	terminals		
switchboards			
Electrical	Check tightening	Yearly	All
cabinets and			
switchboards			
Electrical	Lubrication of locks	Yearly	All
cabinets and			
switchboards			
Cables	Integrity inspection	Yearly	Sample
Cables	Check labelling and identification	Yearly	Sample
Cables	Check cable terminals	Yearly	Sample
Inverters	Integrity check & cleaning	Yearly	All
Inverters	Check labelling and identification	Yearly	Random
Inverters	Electrical protection visual	Yearly	All
	inspection, check correct operation		

Inverters	Check fuses	Yearly	All
Inverters	Check surge protection	Yearly	All
Inverters	Sensors functional verification	Yearly	Random
Inverters	Measurements inspection	Yearly	All
Inverters	Check parameters	Yearly	All
Inverters	Functional test of ventilation system	Yearly	All
Inverters	Safety equipment inspection	Yearly	All
Inverters	Clean filters	6 months	All
Inverters	Replace filters	2 years	All
Energy meter	Integrity check & cleaning	Yearly	All
Energy meter	Check labelling and identification		
Uninterrupted	Integrity check & cleaning	Yearly	All
Power Supply			
(UPS) if			
applicable			
UPS	Check batteries per manufacturer	Yearly	All
Lightning	Integrity check & cleaning	Yearly	All
protection (if			
applicable)			
Buildings	Documents inspection	Yearly	All
Buildings	Check fire extinguishers	Yearly	All
Buildings	Check earthing	Yearly	All
Buildings	Integrity check & cleaning	Yearly	All
Safety	Check correct operation	Yearly	All
equipment			
Safety	Integrity check & cleaning	Yearly	All
equipment			
PV support	Integrity inspection	Yearly	Random
structure			
PV support	Check tightening	Yearly	Random
structure			
PV support	Check potential equalisation	2 years	All
structure			
Stock of spare	Inventory of stock	Yearly	All
parts			

Stock of spare	Visual inspecti on of stock	Yearly	All
parts	conditions		
Stock of spare	Stock replenishment	Quarterly	All
parts			

18. PERFORMANCE MONITORING

- 18.1. The requirements for a monitoring system are that it includes a minimum number of licenses for the municipality staff to view and download the monitoring data.
- 18.2. The IEC 61724-1 standard for PV system performance monitoring serves as a detailed reference for a performance monitoring system. The standard describes three levels of monitoring systems, and Class B medium accuracy is recommended for contracts involving performance guarantees (where applicable). The system must come with a digital monitoring, to gather time and date stamped system data in order to monitor performance.

19. HEALTH AND SAFETY

19.1. A health and safety plan shall be set to ensure proper management and compliance during manufacture, installation, removal, transportation and disposal of scrap modules, as per OHSAS 18001: 2007 or ISO 45001: 2018 standards.

20. TRAINING

- 20.1. The bidder shall provide training on the selection, installation, operation and maintenance of the PV solar systems to comply with solar PV standards SANS 10142-1, SANS 60364-7, SASA 61215.
- 20.2. The bidder shall provide technical support on the system and equipment for the contract's duration.
- 20.3. Technical system support training for the Ray Nkonyeni Municipal staff.
- 20.4. Provide copies of the training materials and user manuals to the Municipality.

21. SCHEDULE A AND B

ltem No.	Description	Unit	Required	Tendered
	Product information			
1.1	Manufacturer (Specify)			
1.2	Product Type (Specify)			
2	PV Module Characteristics			
2.1	PV Module technology		Crystalline (Mono)	
2.2	Module rated power (c-si)	Wp	355 Wp / 2370Wp	
2.3	Module Efficiency		17.5%	
2.4	Temperature coefficient on Pmpp		- 0.38%/ ⁰ C	
	(Negative on sign)			
2.5	Nominal Power Tolerances from Manufacturer used for acceptance to the module)		0% Pnom +5% (Positive tolerance only)	
2.6	Module Maximum System Voltage		48V	
3	Product Warranty and Performance Gua	rantee		
3.1	Power output guaranteed during the first- year operation		Minimum: 97%	
3.2	Linear degradation coefficient after year 1 t ear 25	%/year	Maximum degradation of -0.7%/year	
3.3	Guaranteed output of the nominal power after		Minimum 90%	
2 /	10 years		Minimum 900/	
3.4	Guaranteed output of the nominal power after		Minimum 80%	
	25 years		• • • • • • • • • • • • • • • • • • •	
3.5	Product Warranty against Manufacturing Effects	Years	Minimum 10%	
4	Minimum Certificates for acceptance of P	V module	es	

Item No.	Description		Required	Tendered
4.1	IEC 61730- Photovoltaic (PV) module safety lass II qualification		Required	
4.2	IEC 61730-2 Testing requirements for P modules in order to provide safe electrical and mechanical operation		Required	
4.3	ANS 61215- PV module safety certification		Required	
4.4	UL 1703- Fire resistance rating is acceptable	N/A	Required	
4.5	E-European conformity if exported	N/A	Required	
4.6	PV Cycle-recycling approved waste disposal	N/A	Required	
4.7	ISO 9001•.201 5/Quality management system		Required	
4.8	ISO 14001:2C15/Standards for environmental management system	N/A	Required	
4.9	HSAS 18001 :2007/ international standard N/A or occupational health and safety	5	Required	
5	Documentation for evaluation of PV mode	ules		
5.1	Detailed Technical Specifications		Required	
5.2	Limited Product and Peak Power Warranty	N/A	Required	
5.3	Installation, Operation and Maintenance manual	N/A	Required	
5.4	Description of the cleaning strategy Instruction		Required	
5.5	Recycling strategy		Required	
5.6	Flash Test Report	N/A	Required	
5.7	Potential Induced Degradation (PID) free test report	N/A	Required	

22. DEVIATION SCHEDULE

Any deviations offered to this specification shall be listed below with reasons for deviation. In addition, evidence shall be provided that the proposed deviation will at least be more cost- effective than that specified by Ray Nkonyeni Municipality.						
ltem No.	Sub-clause of?	Proposed deviation				

MBD 3.2

PRICING SCHEDULE – NON-FIRM PRICES (PURCHASES)

NOTE: PRICE ADJUSTMENTS WILL BE ALLOWED AT THE PERIODS AND TIMES SPECIFIED IN THE BIDDING DOCUMENTS.

IN CASES WHERE DIFFERENT DELIVERY POINTS INFLUENCE THE PRICING, A SEPARATE PRICING SCHEDULE MUST BE SUBMITTED FOR EACH DELIVERY POINT

Name of Bidder.....

Bid number: **8/2/RNM0538.**

Closing Time: 12h00

Closing Date: 07 May 2025

The quote/tender is valid for a period of 120 days.

Escalation will be made annually based on the average CPI for each completed year of the award.

All products supplied must comply with SANS standards and be SABS approved.

TENDER NO.8/2RNM538 - APPOINTMENT OF A SERVICE PROVIDER FOR DESIGN, SUPPLY, INSTALL, COMMISSION AND MAINTENANCE OF A COMPLETE FUNCTIONAL ROOFTOP SOLAR PHOTOVOLTAIC (PV) SYSTEMS AT RAY NKONYENI MUNICIPAL BUILDINGS FOR A THREE-YEAR PERIOD

Item No. Item Description		Supply Rate (Incl. 15% Vat)	Install Rate (Incl. 15% Vat)
Detailed design of PV system including all auxiliary system and facilities	Per system		
Site preparations, setting out and clearing	m²		
Supply and install mounting structure: roof type.			
3.1. Clay Sheets	Per panel		
3.2. Tiles	Per panel		
Supply and install 545W solar PV modules.	Unit		
Supply and install Lithium-ion battery storage system.	Unit		
Supply and install battery management unit	Unit		
Supply and install DC cabling, including ducting, terminations, and MC4 connectors.	Per m		
Supply and install Sized inverters.			
7.1. 16 kw single phase	Unit		
7.2. 20 kw three phase	Unit		
7.3. 50 kw three phase	Unit		
	Detailed design of PV system including all auxiliary system and facilities Site preparations, setting out and clearing Supply and install mounting structure: roof type. 3.1. Clay Sheets 3.2. Tiles Supply and install 545W solar PV modules. Supply and install Lithium-ion battery storage system. Supply and install DC cabling, including ducting, terminations, and MC4 connectors. Supply and install Sized inverters. 7.1. 16 kw single phase 7.2. 20 kw three phase	Detailed design of PV system including all auxiliary system and facilitiesPer systemSite preparations, setting out and clearingm²Supply and install mounting structure: roof type. 3.1. Clay SheetsPer panel3.2. TilesPer panelSupply and install 545W solar PV modules.UnitSupply and install Lithium-ion battery storage system.UnitSupply and install DC cabling, including ducting, terminations, and MC4 connectors.Per m7.1. 16 kw single phaseUnit7.2. 20 kw three phaseUnit	Item DescriptionQty(Incl. 15% Vat)Detailed design of PV system including all auxiliary system and facilitiesPer systemSite preparations, setting out and clearingm²Supply and install mounting structure: roof type. 3.1. Clay SheetsPer panel3.2. TilesPer panelSupply and install 545W solar PV modules.UnitSupply and install Lithium-ion battery storage system.UnitSupply and install DC cabling, including ducting, terminations, and MC4 connectors.Per mSupply and install Sized inverters.Unit7.1. 16 kw single phaseUnit7.2. 20 kw three phaseUnit

	8.4. 110 kw three phase	Unit	
	8.5. 125 kw three phase	Unit	
9	Supply and install Low Voltage AC cabling between inverters and boards (Including ducting)	Per m	
10	Supply and install LV boards, switches, protection		
10	devices. Lightning protection and earthing (all parts)	Unit	
11			
12	Supply and install energy and power meters.	Unit	
13	Supply and install signages and labels	Unit	
14	PV soiling monitoring	Unit	
15	String monitoring system	Unit	
16	Control and monitoring system (all data monitoring and operation devices)	Unit	
17	Commissioning, testing and issue COC.	Per COC	
18	Professional work, machinery and equipment	Lump sum	
19	Training programme on the operations and maintenance of the system	Per person	
20	Waste disposal	Lump sum	
21	Supply and install rack for batteries	Unit	
	Supply of spare parts 1Specify		
22	2Specify		
~~	3Specify		
	4Specify		
	5Specify		
23	Monthly maintenance check	Per System	
24	Annual service and maintenance	Per system	

-	Required by:
-	At:
- Br	and and model
- - Co	puntry of origin
- Do	pes the offer comply with the specification(s)?
- If ı 	not to specification, indicate deviation(s)
- Pe	priod required for delivery
- De	elivery:

** "all applicable taxes" includes value- added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies.

*Delete if not applicable

*YES/NO

*Firm/Not firm

PRICE ADJUSTMENTS

A NON-FIRM PRICES SUBJECT TO ESCALATION

- 1. IN CASES OF PERIOD CONTRACTS, NON-FIRM PRICES WILL BE ADJUSTED (LOADED) WITH THE ASSESSED CONTRACT PRICE ADJUSTMENTS IMPLICIT IN NON-FIRM PRICES WHEN CALCULATING THE COMPARATIVE PRICES
- 2. IN THIS CATEGORY PRICE ESCALATIONS WILL ONLY BE CONSIDERED IN TERMS OF THE FOLLOWING FORMULA:

$$Pa = \left(1 - V\right)Pt\left(D1\frac{R1t}{R1o} + D2\frac{R2t}{R2o} + D3\frac{R3t}{R3o} + D4\frac{R4t}{R4o}\right) + VPt$$

Where:

3.

Pa (1-V) Pt	= =	The new escalated price to be calculated. 85% of the original bid price. Note that Pt must always be the original bid price and not an escalated price.					
D1, D2	=	Each factor of the bid price e.g. labour, transport, clothing, footwear, etc. The total of the various factors D1, D2etc. must add up to 100%.					
R1t, R2t	=	Index figure obtained from new index (depends on the number of factors used).					
R1o, R2o	=	Index figure at time of bidding.					
VPt	=	15% of the original bid price. This portion of the bid price remains firm i.e. it is not subject to any price escalations.					
The following index/indices must be used to calculate your bid price:							

Index Dated	Index Dated	Index Dated
Index Dated	Index Dated	Index Dated

4. FURNISH A BREAKDOWN OF YOUR PRICE IN TERMS OF ABOVE-MENTIONED FORMULA. THE TOTAL OF THE VARIOUS FACTORS MUST ADD UP TO 100%.

FACTOR (D1, D2 etc. e.g. Labour, transport etc.)	PERCENTAGE OF BID PRICE

B PRICES SUBJECT TO RATE OF EXCHANGE VARIATIONS

1. Please furnish full particulars of your financial institution, state the currencies used in the conversion of the prices of the items to South African currency, which portion of the price is subject to rate of exchange variations and the amounts remitted abroad.

PARTICULARS OF FINANCIAL INSTITUTION	ITEM NO	PRICE	CURR ENCY	RATE	PORTION OF PRICE SUBJECT TO ROE	AMOUNT IN FOREIGN CURRENCY REMITTED ABROAD
				ZAR=		
				ZAR=		
				ZAR=		
				ZAR=		
				ZAR=		
				ZAR=		

2. Adjustments for rate of exchange variations during the contract period will be calculated by using the average monthly exchange rates as issued by your commercial bank for the periods indicated hereunder: (Proof from bank required)

AVERAGE MONTHLY EXCHANGE RATES FOR THE PERIOD:	DATE DOCUMENTATION MUST BE SUBMITTED TO THIS OFFICE	DATE FROM WHICH NEW CALCULATED PRICES WILL BECOME EFFECTIVE	DATE UNTIL WHICH NEW CALCULATED PRICE WILL BE EFFECTIVE

RNM/MBD 4

DECLARATION OF INTEREST

- 1. No bid will be accepted from persons in the service of the state¹.
- 2. Any person, having a kinship with persons in the service of the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid. In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons connected with or related to persons in service of the state, it is required that the bidder or their authorised representative declare their position in relation to the evaluating/adjudicating authority.

3 In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

3.1 Full Name of bidder or his or her representative
3.2 Identity Number:
3.3 Position occupied in the Company (director, trustee, shareholder ²)
3.4 Company Registration Number:
3.5 Tax Reference Number
3.6 VAT Registration Number:
3.7 The names of all directors / trustees / shareholders members, their individual identity numbers and state employee numbers must be indicated in paragraph 4 below.
3.8 Are you presently in the service of the state? YES / NC
3.8.1 If yes, furnish particulars.
 ¹MSCM Regulations: "in the service of the state" means to be – (a) a member of – (i) any municipal council; (ii) any provincial legislature; or (iii) the national Assembly or the national Council of provinces; (b) a member of the board of directors of any municipal entity; (c) an official of any municipality or municipal entity; (d) an employee of any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No.1 of 1999); (e) a member of the accounting authority of any national or provincial public entity; or (f) an employee of Parliament or a provincial legislature. ² Shareholder" means a person who owns shares in the company and is actively involved in the management of the company or business and exercises control over the company.
3.9 Have you been in the service of the state for the past twelve months?YES / NO
3.9.1 If yes, furnish particulars

.....

3.10 Do you have any relationship (family, friend, other) with persons in the service of the state and who may be involved with the evaluation and or adjudication of this bid?

3.10.1 If yes, furnish particulars. 3.11 Are you, aware of any relationship (family, friend, other) between any other bidder and any persons in the service of the state who may be involved with the evaluation and or adjudication of this bid? YES / NO 3.11.1 If yes, furnish particulars 3.12 Are any of the company's directors, trustees, managers, principle shareholders or stakeholders in service of the state? YES / NO 3.12.1 If yes, furnish particulars. 3.13 Are any spouse, child or parent of the company's directors trustees, managers, principal shareholders or stakeholders in service of the state? YES / NO 3.13.1 If yes, furnish particulars.

3.14 Do you or any of the directors, trustees, managers, principle shareholders, or stakeholders of this company have any interest in any other related companies or business whether or not they are bidding for this contract. **YES / NO**

3.14.1 If yes, furnish particulars:

4. Full details of directors / trustees / members / shareholders.

Full Name	Identity Number	State Employee Number

CERTIFICATION

I, _____ THE UNDERSIGNED CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM IS CORRECT.

ACCEPT THAT THE COUNCIL MAY ACT AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

Signature

Date

Capacity

Name of Bidder

CONTRACT FORM – PAST EXPERIENCE

Bidders must furnish hereunder details of similar works / service, which they have satisfactorily completed in the past. The information shall include a description of the works, the contract value and the name of the employer.

EMPLOYER	NATURE OF WORK	VALUE OF WORK	DURATION AND COMPLETION DATE	EMPLOYER CONTACT NO

DATE

SIGNATURE OF BIDDER

PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022

This preference form must form part of all tenders invited. It contains general information and serves as a claim form for preference points for specific goals.

NB: BEFORE COMPLETING THIS FORM, TENDERERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF THE TENDER AND PREFERENTIAL PROCUREMENT REGULATIONS, 2022

1 GENERAL CONDITIONS

- **12.2** The following preference point systems are applicable to invitations to tender:
 - the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
 - the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

12.3 To be completed by the organ of state

The applicable preference point system for this tender is the 80/20 preference point system.

12.4 Points for this tender (even in the case of a tender for incomegenerating contracts) shall be awarded for:

- (c) Price; and
- (d) Specific Goals.

12.5 To be completed by the organ of state:

The maximum points for this tender are allocated as follows:

	POINTS
PRICE	80
SPECIFIC GOALS	20
Total points for Price and SPECIFIC GOALS	100

- **12.6** Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.
- **12.7** The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.

13 DEFINITIONS

- (a) "**tender**" means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;
- (b) "**price**" means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts;
- (c) "Rand value" means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;
- (d) "tender for income-generating contracts" means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and
- (e) "**the Act**" means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

14 FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1. POINTS AWARDED FOR PRICE

3.1.1 THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

A maximum of 80 or 90 points is allocated for price on the following basis:

80/20 or 90/10

$$Ps = 80\left(1 - \frac{Pt - P\min}{P\min}\right)$$
 or $Ps = 90\left(1 - \frac{Pt - P\min}{P\min}\right)$
Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmin = Price of lowest acceptable tender

3.2. FORMULAE FOR DISPOSAL OR LEASING OF STATE ASSETS AND INCOME GENERATING PROCUREMENT

3.2.1. POINTS AWARDED FOR PRICE

A maximum of 80 or 90 points is allocated for price on the following basis:

80/20

90/10

$$Ps = 80\left(1 + \frac{Pt - Pmax}{Pmax}\right)$$
 or $Ps = 90\left(1 + \frac{Pt - Pmax}{Pmax}\right)$

or

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmax = Price of highest acceptable tender

4. POINTS AWARDED FOR SPECIFIC GOALS

- 4.1. QWE73In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this tender:
- 4.2. In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—
 - (a) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or
 - (b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system,

then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

Table 1: Specific goals for the tender and points claimed are indicated per the table below.

(Note to organs of state: Where either the 90/10 or 80/20 preference point system is applicable, corresponding points must also be indicated as such.

Note to tenderers: The tenderer must indicate how they claim points for each preference point system.)

The specific goals allocated points in terms of this tender	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (80/20 system) (To be completed by the tenderer)
Companies within Ray Nkonyeni Municipality	20	
Companies within Ugu District Municipality	15	
Companies within KwaZulu Natal	10	
Other	5	

DECLARATION WITH REGARD TO COMPANY/FIRM

- 4.3. Name of company/firm.....
- 4.4. Company registration number:
- 4.5. TYPE OF COMPANY/ FIRM
 - Υ Partnership/Joint Venture / Consortium
 - Υ One-person business/sole propriety
 - Υ Close corporation
 - Υ Public Company
 - **Υ** Personal Liability Company
 - Υ (Pty) Limited
 - Υ Non-Profit Company
 - Υ State Owned Company
 - [TICK APPLICABLE BOX]
- 4.6. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I acknowledge that:
 - i) The information furnished is true and correct;
 - ii) The preference points claimed are in accordance with the General Conditions as

indicated in paragraph 1 of this form;

- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;
- iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have –
 - (a) disqualify the person from the tendering process;
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
 - (d) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
 - (e) forward the matter for criminal prosecution, if deemed necessary.

SIGNATURE(S) OF TENDERER(S)			
SURNAME AND NAME: DATE:			
ADDRESS:			

DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

- 1 This Municipal Bidding Document must form part of all bids invited.
- 2 It serves as a declaration to be used by municipalities and municipal entities in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.
- 3 The bid of any bidder may be rejected if that bidder, or any of its directors have:
 - a. abused the municipality's / municipal entity's supply chain management system or committed any improper conduct in relation to such system;
 - b. been convicted for fraud or corruption during the past five years;
 - c. willfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years; or
 - d. been listed in the Register for Bid Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004).

4 In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

ltem	Question	Yes	No
4.1	Is the bidder or any of its directors listed on the National Treasury's Database of Restricted Suppliers as companies or persons prohibited from doing business with the public sector?	Yes	No
	(Companies or persons who are listed on this Database were informed in writing of this restriction by the Accounting Officer/Authority of the institution that imposed the restriction after the <i>audi alteram partem</i> rule was applied).		
	The Database of Restricted Suppliers now resides on the National Treasury's website(<u>www.treasury.gov.za</u>) and can be accessed by clicking on its link at the bottom of the home page.		
4.1.1	If so, furnish particulars:		
4.2	Is the bidder or any of its directors listed on the Register for Bid Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)? The Register for Bid Defaulters can be accessed on the National Treasury's website (www.treasury.gov.za) by clicking on its link at the bottom of the home page.	Yes	No
4.2.1	If so, furnish particulars:		

4.3	Was the bidder or any of its directors convicted by a court of law (including a court of law outside the Republic of South Africa) for fraud or corruption during the past five years?	Yes	No □
4.3.1	If so, furnish particulars:		
Item	Question	Yes	No
4.4	Does the bidder or any of its directors owe any municipal rates and taxes or municipal charges to the municipality / municipal entity, or to any other municipality / municipal entity, that is in arrears for more than three months?	Yes	No □
4.4.1	If so, furnish particulars:		
4.5	Was any contract between the bidder and the municipality / municipal entity or any other organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	Yes	No
4.7.1	If so, furnish particulars:		

CERTIFICATION

I, THE UNDERSIGNED (FULL NAME)

CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM TRUE AND CORRECT.

I ACCEPT THAT, IN ADDITION TO CANCELLATION OF A CONTRACT, ACTION MAY BE TAKEN AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

Signature	Date

Position

Name of Bidder

CERTIFICATE OF INDEPENDENT BID DETERMINATION

- 1. This Municipal Bidding Document (MBD) must form part of all bids¹ invited.
- 2. Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging).² Collusive bidding is a *pe se* prohibition meaning that it cannot be justified under any grounds.
- 3. Municipal Supply Regulation 38 (1) prescribes that a supply chain management policy must provide measures for the combating of abuse of the supply chain management system, and must enable the accounting officer, among others, to:
 - (a) take all reasonable steps to prevent such abuse;
 - (b) reject the bid of any bidder if that bidder or any of its directors has abused the supply chain management system of the municipality or municipal entity or has committed any improper conduct in relation to such system; and
 - (c) cancel a contract awarded to a person if the person committed any corrupt or fraudulent act during the bidding process or the execution of the contract.
- 4. This MBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid-rigging.
- In order to give effect to the above, the attached Certificate of Bid Determination (MBD 9) must be completed and submitted with the bid:

¹Includes price quotations, advertised competitive bids, limited bids and proposals.

Bid rigging (or collusive bidding) occurs when businesses, that would otherwise be expected to compete, secretly conspire to raise prices or lower the quality of goods and / or services for purchasers who wish to acquire goods and / or services through a bidding process. Bid rigging is, therefore, an agreement between competitors not to compete.

CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the undersigned, in submitting the accompanying bid:

(Bid Number and Description)

in response to the invitation for the bid made by:

(Name of Municipality / Municipal Entity)

do hereby make the following statements that I certify to be true and complete in every respect:

I certify, on behalf of:______that:

(Name of Bidder)

1. I have read, and I understand the contents of this Certificate;

- 2. I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect;
- 3. I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder;
- 4. Each person whose signature appears on the accompanying bid has been authorized by the bidder to determine the terms of, and to sign, the bid, on behalf of the bidder;
- 5. For the purposes of this Certificate and the accompanying bid, I understand that the word "competitor" shall include any individual or organization, other than the bidder, whether or not affiliated with the bidder, who:
 - (a) has been requested to submit a bid in response to this bid invitation;
 - (b) could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and
 - (c) provides the same goods and services as the bidder and/or is in the same line of business as the bidder.
- 6. The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium³ will not be construed as collusive bidding.
- 7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:

- (b) geographical area where product or service will be rendered (market allocation);
- (c) methods, factors or formulas used to calculate prices;
- (d) the intention or decision to submit or not to submit, a bid;
- (e) the submission of a bid which does not meet the specifications and conditions of the bid; or
- (f) bidding with the intention not to win the bid.
- 8. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this bid invitation relates.
- 9. The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
- 10. I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No. 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No. 12 of 2004 or any other applicable legislation.

SIGNATURE

DATE

POSITION

NAME OF BIDDER

³ Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.