



sanedi

South African National Energy
Development Institute.

**REQUEST FOR QUOTATIONS FOR THE SUPPLY, CONSTRUCTION,
INSTALLATION AND COMMISSIONING OF A FIXED DOME DIGESTER
SYSTEM FOLLOWED BY TRAINING IN OPERATIONS AND
MAINTENANCE OF THE DIGESTER AT THE TRAINING CENTRE AT
SERNICK FARM, EDENVILLE.**

NAME OF BIDDER.....

POSTAL ADDRESS

STREET ADDRESS

CONTACT PERSON

TELEPHONE NUMBER Code Number

CELL PHONE NUMBER Code Number

FACSIMILE NUMBER CodeNumber

E-MAIL ADDRESS

Signature f Bidder **Date**

RFQ Number	5020
Date of RFQ	10 th March 2021
Sanedi Contact	All enquiries must be directed to: Name: Ms Vulani Ngoveni e-mail address: enquiries.procurement@sanedi.org.za Website address: www.sanedi.org.za
Closing date	17 th March 2021 at 11:00am
Submission methods	The submissions should be made to the following email: quotes.procurement@sanedi.org.za NB: failure to submit in the correct email will render your submission non-responsive.
Work specification (and Technical specifications)	<p>1. Project Background</p> <p>The Working for Energy Programme is a sub-programme of the Applied Energy Research Programme at SANEDI. The Programme focuses on clean energy interventions that can benefit low income communities in South Africa. Consideration is made for clean energy interventions that can be easily adapted, operated and maintained in areas that are most needy.</p> <p>In order to implement its mandate of promoting the development and deployment of clean energy access, SANEDI is working in partnership with relevant bodies to enhance clean energy access to selected beneficiaries including the National Development Agency (NDA).</p> <p>NDA is a state owned entity owned by the Department of Social Development. It's mandate is to eradicate poverty and enhance the development of the Civil Societies. NDA has offices in all provinces and its Head Office is in Parktown. SANEDI has partnered with NDA since 2014 and this partnership has enhanced the greening and the development of the Early Childhood Development Centres. The partnership is now expanding to emerging farmer support and development initiatives.</p> <p>Sernick, based in Kroonstad in the Free-state province, is a diversified organization with its focus on agriculture and agricultural processing activities animal feed production, feedlot, red meat production (abattoir, de-boning and processing) as, well as retail outlets and therefor produces a lot of animal and plant (feed) wastes amenable to waste to energy opportunities in farming.</p>

SANEDI through REEEP, partnered with Sernick in the waste to energy training of the beneficiaries of the Sernick-Department of Agriculture Partnership in Emerging Farmer Development Programme.

SANEDI therefore seeks to replicate the successes of this Greening Project at the Training Centre at the Sernick Farm in Free State, which is also partnered with SANEDI and REEEP in the Free State Province.

The Training Centre was previously a farm school that was converted into a training Centre in 2014. It is on Sernick land and is adjacent to 12 farm workers housing units. The training Centre was utilised by Sernick for the training of emerging farmers in the vicinity in 2015 with courses that were sponsored by Agriseta, RPO, READ, MPO and SAMIC

Sernick makes use of training Service Providers and it provides mostly technical mixed farming or animal production related training. The Training Centre can accommodate up to up to twenty five (25) overnight students at a time. There is a kitchen and dining room and the food is catered for. Furthermore, there is water. The aim of this project is to set up a biogas digester system that will produce biogas which will augment the LPG Gas in the Training Centre Kitchen. The other objective is to introduce the trainee farmers to waste to energy options available in the farming sector as part of the farm resource management and energy diversification.

2. Scope of works

2.1 Project Objectives

The key objectives of this project are as follows:

- Decrease the LPG demand for cooking by augmenting with the use of Biogas derived from available bio-waste i.e. cow dung.
- introduce the trainee farmers to waste to energy options available in the farming sector as part of the farm resource management and energy diversification
- Improve energy security and energy access.
- Produce fertilizer for the food gardening in the facility and the village community
- Illustrate the concept of food water and energy nexus concepts
- Reduce greenhouse gas emissions from uncontrolled bio-waste decomposition.

3. SELECTED PROJECT SITE DETAILS

Biogas Digesters shall be supplied and installed at the facility listed below :

No	Name of the Facility	Physical Address	Dimensions of the Biogas Digesters
1.	Sernick Training Centre,	Sernick Training Centre Sernick Farm, Liebenbergstroom, Edenville Free State	A 36 m ³ fixed dome or prefabricated digester, or similar shall be installed at this facility

3.1 Areas to be implemented at the Community Training Centre, Sernick Farm, Free State

Area of the facility	Challenge	Technology
Main Kitchen	<p>The Sernick Training Centre is using a fossil based LPG gas for cooking.</p> <p>Sernick is sitting on tons of biowaste coming from their operations.</p>	<p>A 36 m³ airtight fixed dome digester or pre-fabricated or similar with one inlet, gas chamber and the outlet pipe.</p>

4. Specifications for Fixed Dome Biogas Digester, Pre-Fabricated Biogas Digester or Similar Biogas Digester System

4.1 Introduction

- 4.1.1 A biogas plant is an airtight underground tank in which organic materials mixed with water are digested/ fermented through anaerobic bacteria action with the purpose of generating biogas fuel. The treated waste is a nutrient-rich, nitrogen-rich fertilizer while the biogas is flammable gas composed of Methane (component which burns), carbon dioxide, hydrogen, nitrogen and hydrogen sulfide. The main components of the biogas are Methane and Carbon dioxide, other gases are in form of traces.
- 4.1.2 Biogas plants are used as a way of treating and sterilising bio-wastes. In this way it reduces Greenhouse Gasses that would otherwise be escaping to the atmosphere, and therefore improve human health and environment.

4.2 Design Specification

- 4.2.1 Any relevant combination of fixed dome bio digester systems that have a combined minimum total volume of 36 m³ and can handle daily feedstock and water and has a retention period of at least three weeks.
- 4.2.2 It is preferred that each biogas system be underground with a maximum 500mm protrusion of the system above ground
- 4.2.3 Operating temperature of the biogas digester system is to be (approximately): +10⁰C to +40⁰C
- 4.2.4 The produced gas must be connected to the Training Centre’s main kitchen, with minimum biogas output of at least 5m³ per day
- 4.2.5 The Biogas produced contains a lot of sulphur and sulphur trace elements. This is dangerous when inhaled. There is therefore a need to install a de-sulphuriser in the main kitchen prior to connecting the biogas to the stove.
- 4.2.6 A new four plate industrial stove adapted for biogas usage with aluminium or ceramic burner heads must be installed as part of the system;
- 4.2.7 Necessary water traps, flame traps, pressure gauges and control/ safety valves and systems must be installed;
- 4.2.8 All aluminium piping and rubber tubing must comply with all LPG industry regulations.

4.3 Installation of the biogas Digester

The winning bidder shall:

- a) Clear and level the site on completion of installation. However, Sernick will also assist the winning bidder with site clearance, digging, trenching and backfilling on site using a TLB;

- b) Plaster, waterproof and gasproof the digester system.
- c) Supply and install fire flame retardation devices, reusable gas scrubber and gas flow meter (measuring gas output) for the system.
- d) Supply and install biogas piping connecting the digester clear from the flame areas.
- e) The Biogas system is a wet system. It produces water along with the gas. This means that water draining facilities must be installed along with the drainage systems to drain excessive water from the system;
- f) Fence around all bio digesters with wire mesh and galvanised steel poles with lockable gate access.
- g) Ensure that all chambers (Inlet, outlet and gas) are sealed with removable steel reinforced concrete slabs for brick and mortar or lockable lids for the prefabricated systems and provide the locks.
- h) Comply with the latest Ministerial Determination on Expanded Public Works Programmes requirements, for the “Potential number of work days for local labour employed on the project” component of the evaluation criteria of the bid.
- i) Train a maximum of 5 (five) individuals nominated by Community Centre on how to operate and maintain the bio digester.
- j) Provide written instructions in the local language to the trained individuals on how to operate and maintain the digester at the Community Centre.
- k) Train the nominated individuals on processing and using the correct biodegradable feedstock for the bio digesters, troubleshooting as well as the elimination of potential hazards.
 - i. The expected feedstock to be used for the bio digesters are food, vegetable and animal waste only. Human waste must not be used as feedstock.
 - ii. It is expected that the bio-slurry as a result of the digesting process is to be used in the feed production fields and the centres food garden. It can also be made available to share with the community food garden programmes in abutting communities’ food security initiatives.

4.4 Warrantees and Guarantees.

The winning bidder shall provide a minimum 4 year product warrantee on the bio digester and all accessories installed. Accessories include and is not limited to related piping, equipment (gas meters, etc) and the biogas stove.

4.5 Minimum information required.

- 4.5.1 Detailed component guarantee period.
- 4.5.2 Expected life span of the equipment.
- 4.5.3 Delivery period.
- 4.5.4 Information relating to the Bid Company’s Biogas Digester Systems. This should be brief and will be verified during the procurement evaluation process.

5 OCCUPATIONAL HEALTH AND SAFETY

5.1 Supplies must comply with the relevant national occupational health and safety requirements. The bidders is required to submit a plan to indicate how they plan to comply with the Occupational Health and Safety requirements.

5.2 For the duration of the project, Sernick will provide on-site accommodation to the winning bidder's team.

6 PROJECT MANAGEMENT

A suitable Service Provider is sought to undertake the Project Management of this task and supply the following deliverables:

6.1 Deliverables required of the Project Manager:

- Prepare a detailed methodology and project execution plan
- Provide a detailed project timeline, (Gant chart preferred)
- Produce a detailed labour plan, outlining the time and number of labour required and aligned to the Expanded Public Works Programme (EPWP) requirements
- Provide a risk management and indemnity plan for security of product, equipment and laborers
- Ensure the health and safety of all labour, including contracted local community labour, employed in accordance with applicable legislation and consultation with community leaders
- Procure necessary Personal Protection Equipment (PPE) for all involved in the execution of the project
- Provide SANEDI with weekly progress updates that include a write and photographic evidence in an electronic format and sent via e-mail:
 - Update to include relevant challenges and progress and solutions applied, to resolve any such challenges;
 - Record with certified copies of Identity Documents, everyone involved in the execution of the project;
 - Records of laborers' attendance, conduct, disciplinary processes, etc.;
 - Detailed reports on project process, delays, contingencies.
 - Any challenges with community members to be communicated with SANEDI and local Ward Councilor/ project representatives, for resolution.
- All project meetings held must be supported by written minutes sent to SANEDI and NDA via email
- Facilitate a project close-out meeting between the contractors, SANEDI and the Farm Manager.
- Provide a detailed final Technical Report including assumptions, metrics, repairs and any other relevant technical information.

6.2 Site inspection

The site visit is optional. Site inspection can be arranged for interested bidders. Interested bidders must send their RSVPs to enquiries.procurement@sanedi.org.za by the **12th March 2021**.

SANEDI may arrange for a virtual tour of the site and virtual briefing meeting in the context of the prevailing Disaster Management Act and Regulations on COVID 19.

6.3 PROJECT MANAGEMENT FROM SANEDI

The project shall be managed through SANEDI by a Working for Energy Project Manager and shall include a Project Oversight Committee as follows:

- a) Chaired by Working for Energy General Manager.
- b) Working for Energy Project Manager.
- c) Representatives from /SANEDI/NDA/Training Centre/Sernick Farm Community.
- d) A representative or more from the successful contractor.
- e) A representative from the community (*optional and subject to availability, without remuneration for attendance at any meeting/s*).
- f) A representative from each of the beneficiaries.
- g) A quorum shall be deemed on 50%+1 or when at least one member from each entity is present (present or virtually).

Any project related decisions raised by any party associated with the project compliance and physical installation of the system must be addressed through the SANEDI project manager directly, as the contracting party.

The Project Oversight Committee shall meet as follows:

- a) On-site inception meeting, to initiate the Project
- b) Thereafter, progress meetings as deemed necessary
- c) A final closure meeting after project completion
- d) Project closeout meeting.
- e) Observe all prevailing Disaster Management Regulations, Including COVID-19.

7 PROJECT SCHEDULE

The project shall be completed within six weeks from the last date of signature to the contract. Any deviations from this will need a written motivation to SANEDI.

Evaluation Criteria

The bids received will be evaluated in two stages. The first stage will be the pre-condition compliance and technical evaluation, the second the financial/BEE evaluation. The following are the evaluation criteria that all bids will be assessed against:

Criteria	Scoring Criteria (1-10)	Weighting
Company experience in Fixed Dome or prefabricated Biogas Digester or similar installation and related plumbing	<p>>5 years in Fixed Dome or prefabricated Biogas Digester or similar installation and related piping = 10</p> <p>>=3 years but less than 5 years experience in Fixed Dome or prefabricated Biogas Digester or similar installations and related piping = 5</p>	30%

		Up to 2 years in Fixed Dome or prefabricated Biogas Digester or similar installation and related piping = 2	
	<p>Profile of project team, qualifications, experience in FixedDome or prefabricated Biogas Digester Installation project management.</p> <p><i>NB: CVs of the project team must be attached and failure to do so will forfeit points</i></p>	<p>>5 years' experience in Fixed Dome or prefabricated Biogas Digester or similar Installation Project Management = 10</p> <p>>=3 years but less than 5 years' experience in Fixed Dome or prefabricated Biogas Digester or similar Installation Project Management = 5</p> <p>Up to 2 years' experience in Fixed Dome or prefabricated Biogas Digester or similar Installation Project Management = 2</p>	20%
	<p>Track record of Fixed Dome Biogas or prefabricated Digester or similar installations which must be demonstrated by reference letters. Reference letters must include the following:</p> <ul style="list-style-type: none"> • Must be in client's letterhead • Name of the project • Duration of the project, contact person and duly signed 	<p>5 reference letters in Fixed Dome or prefabricated Biogas Digester or similar Installations work = 10</p> <p>3 reference letters in Fixed Dome or prefabricated Biogas Digester or similar Installation work = 5</p> <p>Up to two reference letters in Fixed Dome or prefabricated Biogas Digester or similar Installation work = 2</p>	20%
	<p>Methodology Detail of proposed construction and installation methodology, logistical arrangements, Activities linked with timelines, suppliers, and project management, control, and oversight.</p>	<p>A comprehensive methodology with logistical arrangements, activities linked to timelines, suppliers, project management, control and oversight = 10</p> <p>An average methodology with some of the identified key areas =5</p>	20%

		A poor and unclear methodology =1									
	Local Content Detail of local products, goods and services to be used	70% materials that are locally sourced = 10 Greater than 80% but less than or equal to 50% of materials that are locally sourced = 5 Equal to 30% but less than 80% of materials locally sourced = 2	10%								
	Threshold		70								
	Total Weighted Score		100%								
Preferential Point system	<p>The Bid will be evaluated on 80/20 Preferential Point System according to the Preferential Procurement Policy Framework Act,2000</p> <p>The points scored out of 80 should be calculated according to the following formula:</p> <p>(i) The 80/20 preference point system</p> $Ps = 80 \left(1 - \frac{Hs - Rs}{Rs} \right)$ <p>where Ps = points scored for functionality and price of the bid/proposal under consideration Hs = highest percentage scored by any acceptable bidder for functionality and price Rs = percentage scored for functionality and price by bid/proposal under consideration</p>										
The maximum score	<p>The maximum score for this bid shall be awarded as follows:</p> <table border="1"> <thead> <tr> <th>POINTS</th> <th>PRICE</th> </tr> </thead> <tbody> <tr> <td>BBBEE Status level of Contribution</td> <td>20</td> </tr> <tr> <td>Points for price</td> <td>80</td> </tr> <tr> <td>Total points for price and BBBEE do not exceed</td> <td>100</td> </tr> </tbody> </table>			POINTS	PRICE	BBBEE Status level of Contribution	20	Points for price	80	Total points for price and BBBEE do not exceed	100
POINTS	PRICE										
BBBEE Status level of Contribution	20										
Points for price	80										
Total points for price and BBBEE do not exceed	100										
Terms and Conditions	<p>The RFQ shall be subjected to the SANEDI procurement terms and conditions which can be found on www.sanedi.org.za .</p>										
Quoted Price excluding Disbursements VAT inclusive	<p>(Attach a formal quotation on company official letterhead to this RFQ)</p> <p>R</p>										

Discounted amounts	R
Disbursements VAT inclusive	R
Total Amount VAT inclusive	R
Other Requirements	<p>The supplier must submit the following returnable schedules:</p> <ol style="list-style-type: none"> 1. Pricing schedule 2. Attach SBD9, SBD 4 and BBBEE Bid Declaration 3. Attach valid tax clearance 4. Certified BBBEE certificate 5. CSD Report <p>Forms are available on www.sanedi.org.za</p>

SBD 4: Bidder's Declaration of Interest

	<p>Any legal person, including persons employed by the state, or persons having a kinship with persons employed by the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid (includes an advertised competitive bid, a limited bid, a proposal or written price quotation). In view of possible allegations of favoritism, should the resulting bid, or part thereof, be awarded to persons employed by the state, or to persons connected with or related to them, it is required that the bidder or his/her authorised representative declare his/her position in relation to the evaluating/adjudicating authority where</p> <ul style="list-style-type: none"> - the bidder is employed by the state; and/or - the legal person on whose behalf the bidding document is signed, has a relationship with persons/a person who are/is involved in the evaluation and or adjudication of the bid(s), or where it is known that such a relationship exists between the person or persons for or on whose behalf the declarant acts and persons who are involved with the evaluation and or adjudication of the bid.
	<p>In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.</p>

	COMPANY & REPRESENTATIVE DETAILS
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	Full Name of bidder or his or her representative	
	Identity Number	
	Position occupied in the Company (director, trustee, shareholder, member):	
	Registration number of company, enterprise, close corporation, partnership agreement or trust	
	Tax Reference Number	
	VAT Registration Number	

	DECLARATIONS	YES	NO
	Are you or any person connected with the bidder presently employed by the state?		
	If so, furnish the following particulars: Name of person / director / trustee / shareholder/ member		
	Name of state institution at which you or the person connected to the bidder is employed :		
	Position occupied in the state institution		
	Any other particulars:		
	If you are presently employed by the state, did you obtain the appropriate authority to undertake remunerative work outside employment in the public sector?		
	If yes, did you attach proof of such authority to the bid document? <u>(Note: Failure to submit proof of such authority, where applicable, may result in the disqualification of the bid.</u>		

	If no, furnish reasons for non-submission of such proof:		
	Did you or your spouse, or any of the company's directors / trustees / shareholders / members or their spouses conduct business with the state in the previous twelve months?		
	If so, furnish particulars:		
	Do you, or any person connected with the bidder, have any relationship (family, friend, other) with a person employed by the state and who may be involved with the evaluation and or adjudication of this bid?		
	If so, furnish particulars:		
	Do you or any of the directors / trustees / shareholders / members of the company have any interest in any other related companies Wither or not they are bidding for this contract?		
	If so, furnish particulars:		

Full details of directors / trustees / members / shareholders.
The names of all directors / trustees / shareholders / members, their individual identity numbers, tax reference numbers and, if applicable, employee / PERSAL numbers must be indicated in the table below.

Full Name	Identity Number	Personal Income Tax Reference Number	State Employee Number / Pearsal Number

“State” means –

- (a) 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);
- (b) any municipality or municipal entity;
- (c) provincial legislature;
- (d) national Assembly or the national Council of provinces; or
- (e) Parliament.

“Shareholder” means a person who owns shares in the company and is actively involved in the management of the enterprise or business and exercises control over the enterprise.

DECLARATION OF INTEREST

I, the undersigned (name).....

Certify that the information furnished in this declaration is correct and I accept that SANEDI may reject the bid or act against me should this declaration prove to be false.

Name of Enterprise Bidding:

Name of Authorised Representative

Signature of Authorised Bidder

Date

SBD 9: Certificate of Independent Bid Determination

I, the undersigned, in submitting the accompanying bid for

in response to the invitation for the bid made by SANEDI do hereby make the following statements that I certify to be true and complete in every respect:

I therefore certify, on behalf of that I have read and I understand the contents of this Certificate;

1. I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect;
2. I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder;
3. 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;
4. 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

5. 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 consortium will not be construed as collusive bidding.
6. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
 - (a) prices;
 - (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.
7. 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.
8. 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.
9. 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.

Name of Enterprise Bidding:

Name of Authorised Representative

Signature of Authorised Bidder

Date

B-BBEE Bid Declaration

BEE Terms and Conditions

If it is detected that false information regarding the B-BBEE status level of contribution, local production content, or any other matter which will affect or has affected the evaluation of the tender, or where the tender has failed to declare any subcontracting arrangements, the purchaser may, in addition to any other remedy it may have –

- (a) disqualify the person from the bidding 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 favorable arrangements due to such cancellation;
- (d) restrict the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, 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

	Bidders who claim points in respect of B-BBEE Status Level of Contribution must complete the following:		
	B-BBEE STATUS LEVEL OF CONTRIBUTION CLAIMED (Points claimed for BBEE must be substantiated by means of a certified B-BBEE certificate issued by a Verification Agency accredited by SANAS or a Registered Auditor approved by IRBA or an Accounting Officer as contemplated in the CCA).	Points Claimed 	
	SUB-CONTRACTING	YES	NO
	Will any portion of the contract be sub-contracted?		
	If yes, indicate: what percentage of the contract will be subcontracted?	%	
	the name of the sub-contractor?		
	the B-BBEE status level of the sub-contractor?		
	is the sub-contractor an EME?		

I, the undersigned (full name).....

Certify that the B-BBEE information furnished on this declaration form is true and correct and attach a current broad-based black economic empowerment certificate as verified by an accredited agency.

i accept that, in addition to cancellation of a contract, action may be taken against me should this declaration prove to be false.

Name of Enterprise Bidding:

Name of Authorised Representative

Signature of Authorised Bidder

Date