



energy

Department:
Energy
REPUBLIC OF SOUTH AFRICA

Department of Energy

**Terms of Reference – Project Management Services for
the Solar Water Heater Programme, including other
Clean Energy Interventions like Load Reduction
Programmes in the Built Environment for a period of 3
years**

1. **DISCLAIMER**

- 1.1 The Request for Proposals (the “RFP”) contains information that is being furnished by the Department of Energy (“the Department”) solely for use by approved prospective bidders in connection with the tendering of the Project Management Services (referred to as **Services** as herein defined).
- 1.2 The information contained in the RFP has been obtained from various sources. Any estimates, projections and information contained in the RFP may involve significant elements of subjective judgement and analysis, which may or may not be correct. Neither the Department nor the Department’s Advisers make or shall be deemed to make any representation or warranty, express or implied, or accept any responsibility or liability, as to the accuracy or completeness of the information contained in the RFP or any other written or oral information made available in connection with the tendering of the Services and nothing contained in the RFP is or shall be relied upon as a promise or representation, whether as to the past, present or future.
- 1.3 This RFP does not purport to be all-inclusive or to contain all the information that a prospective bidder may desire in evaluating the Services. Each bidder must conduct and rely on its own evaluation of the Services and the terms of the offering, including the merits and risks involved, in making their proposals. The information contained herein supersedes all information concerning the proposal and bidding process, which may have been previously communicated in its respect to any Person whether in writing or orally.
- 1.4 The Department will make available to each prospective bidder prior to the submission of proposals the opportunity to ask questions of and receive answers from the Department and to obtain any additional information, to the extent the Department possesses such information or can acquire it without unreasonable effort or expense.
- 1.5 No person has been authorized to give any information or to make any representation concerning the Services, written or oral, that does not conform to the information included in this RFP and, if given or made, such

other information or representations must not be relied upon as having been authorized by the Department. The Department disclaims any and all omissions from this RFP or any other written or oral communication transmitted or made available to the recipient.

- 1.6 The terms and conditions set out in this RFP are stipulated for the express benefit of the Department and, save as expressly stated to the contrary, may be waived or condoned at the Department's sole discretion at any time.
- 1.7 The Department reserves the right, in its sole discretion, to modify any of the submission rules, regulations and/or procedures or communication relating to the proposal/bid submission and any related or subsequent submission rules, regulations and/or procedures or communication. The Department shall not be responsible for or liable to any Person for any cost, expenses or damages incurred by any Person in responding to and/or acting in reliance upon this RFP.
- 1.8 The references to "Person" as used herein shall be construed as including references to an individual, firm, company, corporation, unincorporated body of persons or any State or any agency thereof.

PROJECT MANAGEMENT SERVICES

2. INTRODUCTION AND BACKGROUND

2.1 The Department wishes to create a panel of service providers to render project management (PM) services on an “as and when” basis over a period extending up to March 2019.

2.2 The project management services are required to assist the Department in managing the following aspects of the National Solar Water Heater (SWH) Programme: (i) the installation of SWHs (the so-called “Baseline Systems”) under the social sub-programme; (ii) the SWH load reduction sub-programme and (iii) the load reduction sub-programme for Public Buildings including Correctional Service Centres.

2.3 Solar Water Heater Social sub-Programme

2.3.1 The Installation Programme under the National SWH Programme involves the management of:

2.3.1.1 Uploading a database of Baseline Systems that have been manufactured to enable verification of the quantity supplied by each manufacturer;

2.3.1.2 Co-ordinating the collation of beneficiary household data using a Mobile Application (Mobile App) followed by matching the household data to the database of manufactured Baseline Systems so as to schedule the installation programme;

2.3.1.3 Logistical arrangements for transportation, warehousing, insurance and dispatching of Baseline Systems from the manufacturers to the designated central storage locations (CSL) in various parts of the country;

2.3.1.4 Co-ordinating dispatch from the CSL to the Designated Installation Areas (DIA) in various municipalities;

2.3.1.5 Ensuring a match between the demand in the various CSLs and the DIAs to the supply from the various manufacturers’ sites; this is to

manage the risk of standing time due to delays in supplying Baseline Systems in accordance with the Installation Programme;

- 2.3.1.6 Ensuring sign-off (approval) by the Municipality and the Social Facilitation team prior to any work being undertaken in a DIA;
- 2.3.1.7 Compiling the Work Packages for each DIA (outlining the logistical, installation, and scope of work in respect of each household, for the entire DIA)
- 2.3.1.8 Managing the Works performed by Installation Contractors;
- 2.3.1.9 Technically auditing the installed Baseline Systems and issuing the applicable completion certificates;
- 2.3.1.10 Putting best practice management systems in place to ensure smooth and cost effective operations under the National SWH programme;
- 2.3.1.11 Reporting on progress in respect of schedule, challenges and corrective measures; this to include financial information; etc.

2.4 Load Reduction sub-Programme Through Retrofitting SWH Systems

2.4.1 The load reduction sub-programme under the NSWV Programme entails the management (in conjunction with the participating members of the insurance sector and the Department or any Organ of State that represent the Department) of:

- 2.4.1.1 The collation of a database of electric geyser failures that need to be retrofitted with SWH systems: *database to be supplied by the participating members of the insurance sector*);
- 2.4.1.2 Development of a set of standard SWH technical solutions (including cost) to fit the various electric geyser replacement scenarios, including (a) total disconnection of the electric element from the grid, (b) pre-heating whereby the electric geyser tank is retained or any other possible scenario; and in respect of (a), (b) or (c) the configuration of various tank sizes to eliminate the prevalence of inadequate water heating;

- 2.4.1.3 Logistical arrangements for transportation, warehousing, insurance and dispatching of approved SWH systems from the manufacturers to the designated central storage locations (CSL) in various parts of the country;
- 2.4.1.4 Ensuring a match between the demand in the various CSLs to the supply from the various manufacturers; in the instance of an electric geyser failure standing time due to delays in supplying SWH systems must be kept to a bare minimum;
- 2.4.1.5 Reporting on progress in respect of schedule, challenges and corrective measures; this to include financial information.

2.5 Load Reduction sub-Programme for Public Buildings Including Correctional Centres.

- 2.5.1 The load reduction sub-programme in public buildings (including correctional service centres) entails the management of:
 - 2.5.1.1 The assessment through audit of baseline energy consumption in the target building;
 - 2.5.1.2 The collation of audit outcomes into a standard report that outlines the various business cases of energy efficiency interventions that could reduce energy consumption in the target building;
 - 2.5.1.3 Assessing the business case for own generation for each correctional service centre, including waste-to-energy, rooftop PV, biogas, etc.;
 - 2.5.1.4 Implementation of viable load reduction or own generation interventions;
 - 2.5.1.5 Verification of achieved load reduction outcomes through approved verification protocols;
 - 2.5.1.6 Reporting on progress in respect of schedule, challenges and corrective measures; this to include financial information.

3. PROBLEM STATEMENT

3.1 Solar Water Heater Social sub-Programme

- 3.1.1 Baseline Systems have been manufactured under the National SWH Programme at various sites including **Gauteng** (Pretoria and Johannesburg), **Limpopo** (Polokwane), **KwaZulu-Natal** (Durban), **Eastern Cape** (East London) and **Western Cape** (Cape Town). The systems are currently warehoused by these manufacturers and have been tagged with unique identifiers (a bar code that indicates the technical characteristics, manufacturer's name, location, etc.).
- 3.1.2 On an annual basis about 50 000 systems are to be installed in various municipalities under the National SWH Programme (social sub-programme).
- 3.1.3 About 40 000 Baseline Systems have been delivered and are readily available for the Installation Programme. The Department further projects that by 01 September 2017 an additional 50 000 Baselines Systems will be delivered and availed for the Installation Programme.
- 3.1.4 Numerous municipalities have so far been identified for participation in the SWH social sub-programme on the basis of a technical pre-feasibility assessment confirming the availability and quality of water and the willingness of the municipality to participate on the conditions outlined in the Framework Agreement (**Annexure A**).
- 3.1.5 The municipality is expected to accede to the Framework Agreement as a condition for participation in the national SWH programme.
- 3.1.6 At the same time a participating municipality is expected to identify a DIA (or various DIAs) within which pertinent household data is to be collected electronically – covering information about the roof structure (including a picture of the house), the water connection point, owner's name and consent, the Geographical Positioning Systems (GPS) co-ordinates, etc.
- 3.1.7 A Baseline System from a manufacturer must be matched to the household both electronically and physically by installing it on the roof of the household.

- 3.1.8 The Installation Programme targets youth and women in a developmental approach that involves the training of local persons under the auspices of the Expanded Public Works Programme (EPWP), ensuring their incorporation and participation as team members in the various installation activities undertaken by an Installation Contractor appointed by the Department.
- 3.1.9 The selection of the local trainees shall be facilitated by the municipality, in conjunction with the Department, in line with the guidelines prescribed under the EPWP Recruitment Guidelines. It is noteworthy that the manufacturer of Baseline Systems will also provide specific training in regard to the installation of their product.
- 3.1.10 The project management service involves the co-ordination of all activities, on behalf of the Department, that are necessary to manage the local trainees, manufacturers, installation contractors, municipalities, inventory and time associated with the national SWH programme.
- 3.1.11 The service will be required at the Head Office level (Pretoria) but including all the beneficiary municipality operations.

3.2 Load Reduction sub-Programme For Solar Water Heaters

- 3.2.1 The retrofitting of an electric geyser that fails with a fit-for-purpose SWH system is intended to reduce electricity demand and consequently reduce greenhouse gas emissions (GHG).
- 3.2.2 A commitment between the Department and the participating members of the insurance sector targets the replacement of an insured electric geyser with a SWH system through a public-private partnership that eventually eliminates the electrical load due to water heating. This initiative is referred to as load reduction programme.
- 3.2.3 With the regard to the potential extent of the load reduction programme it is estimated that approximately 200 000 electric geysers fail each year and are replaced by new electric geysers.

3.3 Load Reduction sub-Programme For Public Buildings

- 3.3.1 Insofar as public buildings (particularly correctional service centres) energy consumption can be reduced by improving the building's energy efficiency performance through various interventions.
- 3.3.2 The extent to which local, provincial and national government can save on energy costs has been estimated at about 30% through demand-side management.
- 3.3.3 On the supply-side a high level business case for own-generation for some of these facilities has been explored and needs to be tested further.

4. METHODOLOGY

4.1 Solar Water Heater Social sub-Programme

4.1.1 Feasibility of installing Baseline Systems at a DIA

- 4.1.1.1 Ensure that the social facilitation of an Identified Residential Area (IRA) has been completed in collaboration with the beneficiary Municipality;
- 4.1.1.2 Ensure that the technical feasibility assessment of an allocated DIA(s) in a beneficiary Municipality is completed taking into account the risks outlined in the social facilitation report;
- 4.1.1.3 Ensure that local trainees are recruited in line with the prescribed guidelines;
- 4.1.1.4 Collate into a set of Work Packages the information relating to beneficiary household data that was captured using a Mobile App; the collated information per Participating Residential Dwelling is regarding, among others:
- (i) Whether a Freeze-Resistant or Non-Freeze Resistant SWH is required
 - (ii) Name, address and Consent
 - (iii) GPS co-ordinates
 - (iv) Picture including roof structure
 - (v) Location of and extent of piping to water connection point

- (vi) Extent of consumables required
- (vii) Type of mounting and stand required for the Baseline System
- (viii) Whether an electrical connection and disconnection is applicable
- (ix) Inclusion of the sign-off by Community Liaison Officer from the municipality

4.1.2 Application for managing the various aspects of the National SWH Installation Programme

4.1.2.1 A Mobile App will be free issued on a hand-held device to be supplied used by the Social Facilitation and Technical Assessment Contractors. The Mobile App will be used to upload project information including the data referred to in 4.1.1.4 above; and

4.1.2.2 The location of a manufactured Baseline System is to be tracked at all times through this Mobile App.

4.1.3 Determine GPS co-ordinates and secure central storage location (CSL) near DIA

4.1.3.1 Manage the logistical requirements (to be included as part of the Work Package).

4.1.3.2 Map the route and cost of transferring the Baseline System from a manufacturer to an appropriate CSL, in respect of the various optimally sized batches of Baseline Systems in order to meet the demand at the DIA.

4.1.4 Develop dispatch schedule from manufacturer to CSL

4.1.4.1 Manage a Dispatch Schedule to match supply to demand between the manufacturer and the CSL, taking into consideration the Work Packages developed under 2.3.1.7 and optimal transport arrangements.

4.1.5 Execute work package for installation works in DIA

4.1.5.1 Manage the collection of Baseline Systems from factory and the transportation of the Systems to the CSL. This shall be done in a

secure and optimised manner that does not undermine the functional integrity of the Baseline System;

- 4.1.5.2 Facilitate the collection of Baseline Systems by the Installation Contractor from CSL to the Participating Residential Dwellings in each DIA (commensurate with their installation rate as outlined under 4.1.6.1 below);
- 4.1.5.3 Installation Contractor to undertake Works in accordance with the pre-determined Work Package; and
- 4.1.5.4 Project Management service provider (Project Manager – PM) to track progress and reconcile quantities on the Mobile App.

4.1.6 Install Work Package and Scope

- 4.1.6.1 Installation to be at a rate that is aligned with the minimum Installation Contractor capacity (this is a bid parameter in the Installation Request for Bids);
- 4.1.6.2 The specific Baseline System shall be assigned by the PM who in turn shall ensure that the Baseline System is to be installed at the Participating Residential Dwelling that is mapped on the Mobile App.

4.2 Load Reduction Through Retrofitting SWH Systems

4.2.1 Collation of database of electric geysers

- 4.2.1.1 In conjunction with the participating members of the insurance sector the PM shall map the GPS co-ordinates of insured electric geysers that have failed in order to optimise logistics relating to retrofitting with SWH systems.

4.2.2 Ensure adequate supply of SWH systems at CSL

- 4.2.2.1 PM to match the SWH technology type (freeze or non-freeze resistant) and to recommend stock levels expected in the CSL to retrofit failed electric geysers;
- 4.2.2.2 PM to manage the logistical requirements of transferring the SWH systems from the designated manufacturer to an appropriate CSL.

4.2.3 Reporting

4.2.3.1 PM to be responsible for reconciliation of the number of failed electric geysers against retrofitted SWH systems.

4.3 Load Reduction sub-Programme for Public Buildings Including Correctional Service Centres

4.3.1 Assessment of baseline consumption

4.3.1.1 In respect of each building/facility the service provider appointed for undertaking the energy audit to:

(i) collate disaggregated data regarding energy consumption patterns – as minimum including lighting, Heating Ventilation and Air-Conditioning (HVAC), other building services, relative to the prevailing electricity tariff; in this regard smart technology to be installed at various points of the building/facility electrical system; and

(ii) propose the intervention (energy efficiency or own generation) and the business case.

4.3.1.2 PM to collate appropriate energy management information in respect of a building/facility regarding aggregate energy consumption over a complete time cycle.

4.3.2 Development of Business Case for an Intervention

4.3.2.1 In respect of each building/facility the PM to assess the audit outcome and the business case for an energy efficiency or an own generation intervention;

4.3.2.2 PM to develop a standardised assessment tool to appraise each business case, including the capital requirements, financing structure, financial parameters (project hurdle rate etc.) to justify the proposed intervention;

4.3.2.3 PM to make a recommendation regarding the proposed intervention taking into account the business case.

4.3.3 Implementation of an Intervention

- 4.3.3.1 In respect of each building/facility where the recommendation for an intervention has been approved, the PM to:
- (i) manage the submission of the Work Package for purposes of procurement;
 - (ii) provide engineering supervision of the execution of the Intervention;
 - (iii) track progress and report including taking corrective measures to ensure smooth delivery of the Intervention.

5. COMPOSITION

- 5.1 The PM shall have capacity to provide the services as outlined by responding separately in respect of any of (i) the installation of Baseline Systems under the social sub-programme; (ii) the SWH load reduction sub-programme and (iii) the load reduction sub-programme for Public Buildings including Correctional Service Centres.
- 5.2 The composition of the project management team in respect of (i) or (ii) or (iii) shall be outlined in detail, including qualifications, experience, role, estimated time, and costs associated with the team.

6. DURATION OF THE PROJECT

- 6.1 The PMs shall be placed on a panel from the date of appointment until 31 March 2019. Each project, for which PM is appointed, shall have its specified duration.
- 6.2 In the above regard all necessary processes will be followed in accordance with a Service Level Agreement (SLA) that will be entered into by and between the Department and each successful PM.

7. GENERAL REPORTING REQUIREMENTS

- 7.1 Progress meetings shall be held as and when necessary, but at least twice a month. The venue for these meetings will be at the offices of the Department in Pretoria or at the offices of a beneficiary Municipality.

- 7.2 Representatives from the selected PMs shall be obliged to attend. Where applicable, conference calls shall be held to facilitate such meetings.
- 7.3 The PM shall work closely with, and report directly to, an official to be assigned by the Department.
- 7.4 All resulting reports and data shall be delivered in three copies, namely, **one electronic copy and two hard copies**. All draft and final reports shall be printed in full colour. The reporting language is English.
- 7.5 All documents and copyrights, including Proposals, data and any associated databases developed under this RFP shall remain the intellectual property of the Department and will not be returned to the bidder, unless as contemplated in 10.2 below. These documents shall be submitted to the Department in complete form (with all supporting Annexures) by the end of the project.

8. **EVALUATION METHODOLOGY**

8.1 Bidders will be evaluated based on functionality in respect of each of (i) the installation of Baseline Systems under the social sub-programme; (ii) the SWH load reduction sub-programme and (iii) the load reduction sub-programme for Public Buildings including Correctional Service Centres.

8.2 **Price**

8.2.1 Price competition is not applicable at this stage of the procurement process.

8.2.2 For each projects the empanelled/successful bidders will be required to submit technical proposals **inclusive of detailed deliverables/outputs** as well as financial proposals as and when required by the Department.

8.3 **Broad-Based Black Economic Empowerment (B-BBEE)**

8.3.1 In determining the points scored for the objective criteria (the Broad-Based Black Economic Empowerment, commonly known as B-BBEE) the relevant provisions of the Preferential Procurement Policy Framework Act, 2005 (Act No 05 of 2005) ("the PPPFA") and the PPPFA Regulations of December 2011 shall apply.

8.3.2 Bidders are required to submit original and valid B-BBEE Status Level Verification Certificates or certified copies thereof together with their proposals to substantiate their B-BBEE rating claims.

8.3.3 Bidders who do not submit their B-BBEE status level verification certificates or are non-compliant contributors to B-BBEE will not qualify for preference points for B-BBEE.

B-BBEE Status Level of Contributor	Number of points (90/10 system)
1	10
2	9
3	8
4	5
5	4
6	3
7	2
8	1
Non-compliant contributor	0

8.4 Evaluation Criteria

No	Criteria	Weight
1	<p>Company Experience:</p> <ul style="list-style-type: none"> • Service providers should at least have a minimum of three (3) years' experience in executing project management assignments in any field. • The above mentioned experience must be supported by three (3) reference/client letters indicating when (start date and end date), where and value of the assignments were executed (one point for each submitted proof). 	<p>10</p> <p>05</p>

No	Criteria	Weight
2	<p>Team Leader and Members' Experience:</p> <ul style="list-style-type: none"> • Team Leader must have five years' experience (<u>clearly outlined in the Leader's CV and listing the relevant projects executed by the Team Leader</u>) in project management; experience in infrastructure rollout programmes or the built environment will be an added advantage. • Individual Team Members must have at least two (2) years' experience (<u>clearly outlined in each Team Member's CV and listing the relevant projects executed by each Team Member</u>) in project management. 	<p>15</p> <p>5</p>
3.	<p>Qualifications:</p> <ul style="list-style-type: none"> • Team Leader must have a (four-year) degree in Engineering (Construction, Civil, Mechanical, Electrical, etc.). • Team Leader must be registered with the South African Council for Project and Construction Management Professions. • Team Members must possess at least a degree or a National Diploma in Commerce, Information Technology. <p>- Certified copies of certificates for the team leader and team members must be attached to the technical proposal reflecting proof of the above mentioned qualification. <u>Failure to attach the required certified copies will imply the bidder will forfeit all the allocated points.</u></p>	<p>5</p> <p>15</p> <p>5</p>

No	Criteria	Weight
4	<p>Project Plan:</p> <p>Project plan in respect of either SWH social sub-programme, or SWH load reduction sub-programme, or load reduction in public buildings, with :</p> <p>1) <i>Intermediate and final outputs;</i></p> <p>2) <i>Identified milestones;</i></p> <p>3) <i>A clear methodology;</i></p> <p>4) <i>Tools to be used in executing the project;</i></p> <p>5) <i>Demonstration an understanding of the overall project management structure required for the management of activities related to execution of the projects.</i></p>	<p>05</p> <p>05</p> <p>15</p> <p>10</p> <p>05</p>
Total		100

8.4.1 The minimum threshold for functionality is **70 out of 100 points**. Bidders who fail to meet minimum threshold will be disqualified.

9. GENERAL CONDITIONS

9.1 The Department reserves the right:

9.1.1 To appoint more than one service provider;

9.1.2 To accept any Response in accordance with the Department's Procurement Policy and Procedures;

9.1.3 Not to accept any Response if it is deemed that no Response meets the requirements; and

9.1.4 To change the dates or deadlines, to amend or modify or to cancel this RFP call without incurring any cost or liability incurred by any bidder;

9.2 This RFP should not be construed as an agreement to purchase services.

10. **SUBMISSION FORMAT AND CLOSING DATE**

10.1 The RFP must be submitted on or before **17 February 2017 at 11H00** for the attention of Ms Daisy Maraba, Physical Address: Department of Energy, Matimba House, 192 Visagie Street, Corner Visagie and Paul Kruger Streets, Pretoria, 0001. **ONLY HAND-DELIVERED QUOTATIONS ARE ALLOWED.**

10.2 It is **MANDATORY** that the Proposals be received no later than the date and time stipulated in 10.1. Late submissions will not be accepted and will be returned to the bidder(s).

11. **COMPULSORY BRIEFING SESSION**

11.1 A **COMPULSORY** Briefing Session will be held on **07 February 2017 at the Department of Energy, Matimba House, 192 Visagie Street, Corner Paul Kruger and Visagie Streets, Pretoria at 10H00.**

11.2 **NB:** Any changes to the venue for the Briefing Session will be communicated to through the Briefing Note.

12. **NOTIFICATION POST AWARD**

12.1 Upon concluding the award process the Department will issue Appointment Letters to successful bidders as well as Regret Letters to unsuccessful bidders.

12.2 It is the responsibility of the bidder to ensure that at all times the Department has the latest details for the bidder's contact person(s).

12.3 The Department will not assume responsibility for any communication that has not been received by the bidder due to changed, but not communicated, contact details.

13. ENQUIRIES

13.1 All technical enquiries to be directed in writing to:

Mr Khanyiso Zihlangu

Tel: 012 406 7651

Email: Khanyiso.Zihlangu@energy.gov.za

13.2 All other enquiries to be directed to:

Ms Daisy Maraba

Tel: 012 406 7747

Email: Daisy.Maraba@energy.gov.za

13.3 Any requests for clarifications or inquiries must be submitted in writing via email as per paragraphs 13.1 and 13.2 above. Information obtained from any other source is not official and should not be relied upon. The Department is not liable for any oral information provided to any bidder.

13.4 The cut-off date and time for receiving written enquiries is the **10th of February 2017 (midnight)**. Any and all changes to this RFP required before the closing date and time will be issued in the form of a written Briefing Note. If Briefing Notes are issued, the bidders must acknowledge receipt thereof via email. The Department will assume no responsibility for oral instructions or suggestions.

13.5 The Department will endeavour to provide written responses, which will be communicated to all Proponents, not later than **15th of February 2017, at 17h00**.