



energy

Department:  
Energy  
REPUBLIC OF SOUTH AFRICA

## ***REQUEST FOR QUOTATION (RFQ)***

### ***DEVELOPMENT OF AN IMPLEMENTATION PLAN FOR THE ENERGY AND CLIMATE CHANGE STRATEGY (ECCS) IN PUBLIC BUILDINGS FOR A PERIOD OF FOUR (4) MONTHS***

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#### **1. BACKGROUND**

- 1.1 The South African National Government recognised the need for transformation and the shift towards a resource efficient and low-carbon economy that can promote growth and sustainable development. This ideal is supported by a number of energy efficiency (EE) and renewable energy (RE) as well as climate change mitigation policies and programmes. However, despite all the efforts by the national government and various stakeholders, the current level of penetration of energy efficient practices and application of renewable energy technologies, particularly in the building sector is relatively small considering its potential.
- 1.2 To this effect, the Department of Energy (DoE), jointly with the Department of Public Works (DPW) developed an Energy and Climate Change Strategy (ECCS). The ECCS with focus on the public buildings sector is a vital exercise in support of the National Climate Change Response Policy (NCCRP) developed by the Department of Environment Affairs and approved by Cabinet in 2011.
- 1.3 The development of the ECCS took into account other important pieces of work carried out by other sister departments in responding to emissions reductions such as the Mitigation Potential Analysis (MPA). It also supports the Green

Building Policy of the Department of Public Works (DPW), especially through the Shared Energy Savings Contract initiative which is now in roll-out stage by the DPW. Furthermore, it supports the National Infrastructure Management Strategy (NIMS) which is also implemented under DPW and the Construction Industry Development Board (CIDB). The strategy also aligns with the initiatives currently undertaken through the National Energy Efficiency Strategy such as energy audits, smart metering and other various green energy interventions.

- 1.4 One of the key aims of the ECCS was to define the baseline and explore the potential for the reduction of energy use and Greenhouse gas (GHG) emissions in the public buildings sector with a focus on EE and RE interventions, while also paying attention to related co-benefits such as jobs and water conservation. Studies undertaken in relation to the development of the EECS recommended the implementation pilot project to confirm the defined baselines and the proposed emission reduction potential to enable the sector to move beyond the currently mandated regulations such as SANS10400-XA for new buildings and the anticipated Energy Performance Certificates (EPCs) for existing buildings, as well as the Green Rating System by the Green Building Council of South Africa (GBCSA).
- 1.5 The strategy has appraised three different roll-out scenarios (i.e. retrofitting for buildings that require minor to moderate measures and/or eco-refurbishment for those requiring major measures) for the implementation of the identified potential interventions, with the associated energy efficiency savings, emissions reductions and implementation costs provided for each option. It has also identified a need for a pilot project on retrofitting, refurbishment or a combination of both to validate a number of existing funding sources, enabling institutional arrangements, and appraise the co-benefits associated with the proposed interventions, including the potential number of jobs likely to be created over a long term.
- 1.6 A significant amount of initiatives to retrofit and refurbish public buildings have however been undertaken by a number of public institutions since the development of the ECCS. The Department of Energy has also embarked on

the implementation of some of the interventions proposed by the ECCS in public schools located in the cold interior and temperate interior climatic zones. Work that has been carried out or currently being carried out can yield important lessons for the scale-up, and would also help validate to validate findings and targets of the EECS including costs and associated energy efficiency savings and emissions reduction.

- 1.7 An analysis of similar work carried or being carried out in each of the four building categories defined in the ECCS (offices, healthcare, education and other), in each of the six climatic zones of South Africa (as defined under SANS10400-XA), and each of the refurbishment categories defined in the strategy (minor, moderate and major) is critical in validating the proposed EE and RE interventions, funding and procurement mechanisms, enabling institutional arrangements, defined baselines and the co-benefits associated with the proposed interventions, including the potential number of jobs likely to be created. Success factors and barriers identified through this analysis will inform to a large extent the development of a firm Implementation Plan for the ECCS in the short, medium and long-term trajectory.
- 1.8 The development of an implementation plan for the implementation of the ECCS is seen as an important stepping stone towards addressing fully the energy and climate change challenges observed in the study, with the clear objective of improving the state of the public buildings' stock in South Africa as proposed through modelling and cost matrix analysis.

## **2. OBJECTIVES**

- 2.1 The main objective of this assignment is to develop an implementation plan that takes the long term view as proposed in the ECCS [i.e. the short (2015-2020), medium (2020-2030) and long-term (2030-2050)], and should qualify the following analysis: Key activities to be implemented (i.e. EE and RE interventions/technologies) for the short term, medium term and long term trajectories;
  - Associated implementation costs over the projected time period of 2050;

- Funding streams and procurement mechanisms as well as implementation guidelines;
- Enabling institutional arrangements;
- Strategic outcomes in terms core and co-benefits proposed in the ECCS.

2.2 Furthermore, the development of the plan should include an analysis of similar work carried or being carried out in each of the four building categories defined in the ECCS, taking into consideration the six climatic zones of South Africa.

### 3. SCOPE OF WORK

3.1 The ECCS raised a number of key questions that must be considered in developing the implementation plan. Therefore the scope of work for this project will be as follows:

3.1.1 **Scope rationale 1:** The strategy proposes a roll-out of an eco-refurbishment programme for the public building sector within the overarching Green Building Policy of DPW, with energy efficiency (EE) and renewable energy (RE) interventions as key components of the refurbishment. The strategy further proposes that the programme be implemented within a collaborative framework supported by DoE and DEA in order to ensure access to climate-change related funding streams as well as optimised data-capture for monitoring and reporting. The opportunity of hosting the roll-out under the Public Infrastructure Development Programme under DED (as per Act 23 of 2014) is also envisaged in order to optimise on the broad range of core and co-benefits potential of the strategy and its associated programme.

**Scope of work 1:** The service provider will be expected to conduct a detailed analysis and identification of interventions currently being implemented and based on the collected information and taking into consideration the interventions proposed in the strategy, develop a clearly designed modalities or procedure that defines and governs the roles and responsibilities of each partners and possible associated costs for the implementation strategy.

**3.1.2 Scope rationale 2:** The strategy identified three categories of refurbishment, which are the minor, moderate and major refurbishments. These categories are conceptualised to align with the prevailing backlog in maintenance of stock in the sector. For resource alignment, and especially with regard to funding, the key actions have been conceptualised under three time horizons of Short (2015 – 2020), Medium (2020 – 2030) and Long-term (2030 – 2050). To this effect, the strategy proposes pilot projects in the next 2 to 3 years in order to use the experience and lessons to roll out or up scale the refurbishment programme until 2050 as recommended.

**Scope of work 2:** The service provider will be expected, in line with the deliverable 1 above, to clearly and concisely map out key activities that need to be done in the short, medium and long term

**3.1.3 Scope rationale 3:** The strategy proposes a number of associated costs of implementation (details are in the report). These cost are projected or determined in accordance with the state of the building stock over the short, medium and long term trajectory

**Scope of work 3:** The service provider will be expected to determine the actual implementation costs.

**3.1.4 Scope rationale 4:** The strategy proposes that key funding stream for general refurbishment, and these needs to be further quantified and elaborated during the development of the implementation plan as follows:

- Regular DPW-maintenance and revitalisation budgetary allocations: This is deemed at around 1% of stock- replacement value instead of international best practice of 3 to 5%. It would therefore need to be significantly boosted to reach the target rates of the Strategy.
- Regular provincial and municipal maintenance and refurbishment budgets: Estimates have not been established yet and would therefore need to be quantified in the Implementation Plan stage of the Strategy.
- Partner organisation contributions such as DBSA and multi-lateral or bilateral funding agencies:
- Private-sector: Models of private-sector involvement under structures such as PPP have been tested under New-build (example of DEA-Headquarters which is a 6-star green-rated building), but not under refurbishment.

**Scope of work 4:** The service provider will be expected to conduct a detailed investigation and analysis of the above proposed funding mechanisms, and other mechanisms not mentioned in the study, and make an informed recommendation with clear and achievable goals in line with deliverables 1 to 3 above.

3.1.5 **Scope rationale 5:** The strategy further identified the core and co-benefits of the eco-refurbishment as follows:

- 36 million m<sup>2</sup> (85% of existing stock now under “fair to very poor” condition) restored to “good” working condition and 144 million m<sup>2</sup> of green-designed/built new stock,
- Average of 9.3 billion kWh/year (5.4 billion through EE and 3.9 billion through RE interventions) saved to 2050, at an average discount-adjusted cost of R0.80/kWh (R0.50/kWh for EE and R1.00/kWh for RE) to 2050.

**Scope of work 5:** The service provider will be expected to include in the implementation plan who the department should address the issue of job creation in the implementation of the strategy, while ensuring that it achieves the energy savings target as set out in the energy efficiency strategy and also the emissions reductions in line with the climate change objectives.

#### 4. DURATION OF THE PROJECT

4.1 The duration of the project will be four (4) months after signing of the Service Level Agreement with the successful service provider.

#### 5. OUTPUTS/ DELIVERABLES

5.1 A work plan detailing how deliverables 1-5 is going to be achieved.

5.1.1 A detailed implementation plan that outlines and details the expected deliverables as captured in the scope of work as follows:

5.1.2 **Deliverable 1:** A detailed analysis and identification of interventions currently being implemented and based on the collected information and taking into consideration the interventions proposed in the strategy, and clearly designed modalities or procedures that define and govern the roles and responsibilities of each partners and possible associated costs for the implementation strategy.

- 5.1.3 **Deliverable 2:** In line with deliverable 1 above, a clear and concise mapping of key activities that need to be done in the short, medium and long term.
- 5.1.4 **Deliverable 3:** determination of the actual implementation costs.
- 5.1.5 **Deliverable 4:** a detailed investigation and analysis of the above proposed funding mechanisms, and other mechanisms not mentioned in the study, and informed recommendations with clear and achievable goals in line with deliverables 1 to 3 above.
- 5.1.6 **Deliverable 5:** An implementation plan indicating how the department should address the issue of job creation in the implementation of the strategy, while ensuring that it achieves the energy savings target as set out in the energy efficiency strategy and also the emissions reductions in line with the climate change objectives.

## **6. PAYMENT**

- 6.1 Payment will be based on the achievement of the deliverables and in line with the approved payment schedule. The Department will not make an upfront payment to a successful service provider. Payment will only be made within 30 days in accordance to the delivery of services that will be agreed upon by both parties and upon receipt of an original invoice.

## **7. REPORTING**

- 7.1 The service provider will submit the achieved deliverables to the Programme Manager as per agreed time period.
- 7.2 All resulting reports and data shall be delivered in two copies, i.e. in electronic format and in hard copies. All draft and final reports shall be printed in full colour. The reporting language is English. All documents and copyrights, including data and databases developed during the process, will remain the intellectual property of the DoE.
- 7.3 All drafts and final reports shall be submitted in full by the end of the project to the Chief Director: Clean Energy. They must be edited, complete and presented in their final versions.

## 8. EVALUATION METHODOLOGY

### 8.1 Cost

- (a) The service provider will be requested to give a quote regarding the work to be undertaken for this project. A summary of the overall proposed charges for the services should be provided. The cost must be VAT inclusive and should be quoted in South African rand.

Detailed costing should be aligned with the project scope and deliverables.

A breakdown of the charges to be applied to each of the task described above, including any reimbursable and miscellaneous expenses.

## 9. BROAD-BASED BLACK ECONOMIC EMPOWERMENT

- 9.1 Provisions of the Preferential Procurement Policy Framework Act (PPPFA 2011) and its regulation will apply in terms of awarding points.

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

- 9.3 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.

- 9.4 In the case of Exempted Micro Enterprises, the following documents MUST be submitted:

- (a) Verification agencies accredited by SANAS; and  
(b) Registered auditors approved by IRB

The table below depicts the B-BBEE status level of contribution

B-BBEE Status Level of Contributor	Number of points(80/20 system)
1	20
2	18
3	16
4	12
5	8

6	6
7	4
8	2
Non-compliant contributor	0

## 10. EVALUATION CRITERIA

10.1 Bids will be evaluated on the 80/20 point system as outlined in the PPPFA of 2011.

10.2 The proposals will be evaluated in two phases:

10.2.1 **Phase 1:** Bidders will be evaluated based on functionality. The minimum threshold for functionality is 70 out of 100 points. Bidders who fail to meet the minimum threshold will be disqualified and will not be evaluated further for price and BBEE points.

No	Criteria	Weights
1	<p><b>Company Experience:</b></p> <ul style="list-style-type: none"> <li>❖ The Service provider (<b>as a Company</b>) must have at least have five (5) years experience in developing climate change mitigation and energy related strategies, action plans and monitoring systems. The service provider should also have at least five (5) years experience in conducting building energy audits, and development of the technical specifications and designs for the installation of energy efficiency and renewable energy technologies, as well as measurement and verification of energy savings data. The service provider <b>must</b> together with the proposal provide at least 3 references letters from contactable referees indicating that similar projects were executed to the DoE.</li> </ul>	<p><b>10</b></p> <p>10</p>
2	<p><b>Team leader and team members:</b></p> <ul style="list-style-type: none"> <li>❖ Team Leader must have a minimum of five (5) years experience in developing climate change mitigation and energy related strategies, implementation plans and monitoring systems, and a minimum of 3 years experience in energy auditing, energy management, measurement and verification of energy savings data as well as compilation of technical specifications and</li> </ul>	<p><b>20</b></p> <p>10</p>

	<p>designs for installation of energy efficiency and renewable energy technologies</p> <ul style="list-style-type: none"> <li>❖ Individual team member(s) must have a minimum of three (3) years experience in energy auditing and management.</li> <li>❖ Certified copies of CV's of the team leader and team members must be attached to the technical proposal as proof.</li> </ul>	<p>5</p> <p>5</p>
3.	<p><b>Qualifications:</b></p> <ul style="list-style-type: none"> <li>❖ Team leader must possess a minimum of an Honours Degree in Energy Studies, Environmental Sciences, Electrical Engineering, Project/Programme Management, and Sustainable Development</li> <li>❖ Team member(s) must have a minimum of a Bachelor's Degree in Energy Studies, Environmental Sciences Electrical Engineering, Project/Programme Management, and Sustainable Development.</li> </ul>	<p><b>20</b></p> <p>10</p> <p>10</p>
4	<p><b>Project Plan:</b></p> <ul style="list-style-type: none"> <li>❖ A clear methodology for the development of the implementation plan must be indicated in the proposal. The methodology must outline how the planned work will be carried out and should be according to each phase or deliverable of compiling the implementation plan.</li> <li>❖ Clear process on the approach to the analysis of similar work focusing on the validation of technical specifications for the identified RE and EE interventions, estimated costs and benefits of the identified interventions.</li> <li>❖ Detailed work plans, including timetable for key deliverables and milestones.</li> <li>❖ Management of the project.</li> </ul>	<p><b>50</b></p> <p>15</p> <p>20</p> <p>10</p> <p>5</p>
<b>Total</b>		<b>100</b>

For the purpose of evaluating functionality, the following values will be applicable:

1=	<b>Very Poor</b>	Will not be able to fulfil the requirements
2=	<b>Poor</b>	Will partially fulfil the requirements
3=	<b>Average</b>	Will be able to fulfil the requirements
4=	<b>Good</b>	Will be able to fulfil better in terms of the requirements adequately
5=	<b>Excellent</b>	Will fulfil the requirements exceptionally

10.2.2 **Phase 2:** Bidders who complied with the minimum threshold for functionality, i.e. 70 out of 100 points will then be evaluated on the 80/20 point system as outlined in the PPPFA of 2011.

Price	<b>80</b>
B-BBEE status	<b>20</b>

## 11. GENERAL CONDITION

### 11.1 Acceptance Criteria

11.1.1 The Department of Energy reserves the right to appoint more than one service providers per municipality grouping.

11.1.2 16.1.2 The Department of Energy reserves the right to accept any bid, in accordance with the DoE's Procurement Policy and Procedures; including the right to accept any bid if it is deemed that no proposal meets the requirements.

## 12. CLOSING DATE

12.1 Quotation must be submitted on or before **17 August 2017 at 11H00**. Department of Energy, Matimba House, 192 Corner Visagie and Paul Kruger Streets, Pretoria, 0001. **Note: no electronic submission will be accepted.**

## 13. ENQUIRIES

13.1 All technical enquiries to be directed in writing to:

Mr. Thebe Mamakoko

Tel: 012- 406 7679

Email: [Thebe.Mamakoko@energy.gov.za](mailto:Thebe.Mamakoko@energy.gov.za)

13.2 All bid enquiries to be directed to:

Ms Keitumetse Pitse/ Daisy Maraba/ Rachel Moerane  
Tel:012-406-7742/7748/7747

E-mail address: [Rachel.Moerane@energy.gov.za](mailto:Rachel.Moerane@energy.gov.za)/ [Daisy.Maraba@energy.gov.za](mailto:Daisy.Maraba@energy.gov.za)/  
[Keitumetse Pitse@energy.gov.za](mailto:Keitumetse.Pitse@energy.gov.za)