



## **Request for Proposals (RFP)**

**To undertake General Energy Assessment at a Hotel located in the Western Cape on behalf of the CSIR**

**RFP No. 804/10/11/2017**

Date of Issue	27 October 2017	
Closing Date	10 November 2017	
Place	Tender box, CSIR Main Reception, Gate 3 ( North Gate)	
Enquiries	Strategic Procurement Unit	E-mail: <a href="mailto:tender@csir.co.za">tender@csir.co.za</a>
CSIR business hours	08h00 – 16h30	
Category	Professional Services	

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## **SECTION A – TECHNICAL INFORMATION**

### **1 INTRODUCTION**

The Council for Scientific and Industrial Research (CSIR) is one of the leading scientific research and technology development organisations in Africa. In partnership with national and international research and technology institutions, CSIR undertakes directed and multidisciplinary research and technology innovation that contributes to the improvement of the quality of life of South Africans. The CSIR's main site is in Pretoria while it is represented in other provinces of South Africa through regional offices.

### **2 BACKGROUND**

The National Cleaner Production Centre South Africa (NCPC-SA) was initially established as a joint initiative between the Department of Trade and Industry (the dti), Switzerland, Austria, United Nations Industrial Development Organisation (UNIDO) and the Council of Scientific and Industrial Research (CSIR). The NCPC-SA is currently funded primarily by the dti and aims at assisting South African industry through the adoption of Resource Efficiency and Cleaner Production (RECP) principles. This supports the dti's initiative on promoting South Africa's industry growth and global competitiveness as well as the Department of Environmental Affairs (DEA) National Cleaner Production Policy and Strategy, and is aligned with the Industrial Policy Action Plan (IPAP) and works in partnership with the dti's relevant sector desks.

The NCPC-SA offers companies subsidised assessments, using industry sector and thematic specialists, to assess their processes and facilities in order to identify opportunities for saving through the implementation of RECP improvement options. These options are typically aimed at assisting the company to reduce its current resource utilisation in terms of energy, water and materials, as well as minimisation of waste.

The CSIR's NCPC-SA assists industry to reduce resources in four thematic areas: energy; water; waste; and materials.

In each of these thematic areas, the NCPC-SA runs a flagship project. In energy, we have been running the Industrial Energy Efficiency (IEE) Project since 2010.

The IEE Project was established in response to the growing need to improve the energy efficiency of South Africa. UNIDO, along with the Swiss Secretariat for Economic Affairs, the

UK Department of International Development and partnered by the Department of Trade and Industry (the dti) and the Department of Energy (DoE) of South Africa, embarked on a program to address the global drive for greater energy efficiency.

The ultimate goal was the sustainable transformation of energy use practices in industry. The project achieved this by demonstrating the positive impact of energy management as a means of reducing carbon-dioxide emissions and to demonstrating the effectiveness and financial impact of in-plant energy management.

Between 2010 and 2015, the original phase of the IEE Project assisted industrial companies to reduce energy use by 1 220 GWh, saving participating companies some R1.7 billion in energy costs.

Now in its second phase (2016-2019), the South African IEE Project is once again implemented by the NCP-ISA, together with international implementing agent the United UNIDO.

The project offers a holistic approach to saving energy, through the promotion and implementation of Energy Management Systems (EnMS) and Energy Systems Optimisation (ESO) as well as the strengthening of industry capacity in the energy efficiency field.

The current phase is funded by the Global Environment Facility (GEF) and the Department of Trade and Industry (the dti); and supported by the Department of Energy, Department of Environmental Affairs, the South African National Energy Development Institute (SANEDI) and the Council for Scientific and Industrial Research (CSIR).

The CSIR's NCP-ISA has, as part of the Industrial Energy Efficiency Project, secured funding to undertake an assessment at a Hotel located in Cape Town, Western Cape, with the emphasis on energy.

This assessment will be undertaken by a suitably qualified specialist who will provide input into improving the utilisation of the energy resources onsite that might be beneficial to the company. The assessment will entail a review of the current processes and usage patterns within this plant, and a detailed analysis of options available to improve will be presented to management.

This project is strategic for the Centre, as it is anticipated that the company will use the recommendations to enhance their current energy performance.

This document serves to provide Terms of Reference for the work to be undertaken at the plant by the specialist.

### 3 INVITATION FOR PROPOSAL

Proposals are hereby invited for service providers to undertake a General Energy assessments at a Hotel located in the Western Cape on behalf of the CSIR.

### 4 PROPOSAL SPECIFICATION

All proposals are to be submitted in a format specified in this enquiry (if applicable). However, tenderers are welcome to submit additional / alternative proposals over and above the originally specified format.

This Request for Proposals requires interested Service Providers to submit a portfolio of evidence, outlining activities and experience in the field of Industrial Energy Efficiency (IEE), in order for the National Cleaner Production Centre of South Africa to establish their competence to perform and deliver the required assessment services.

**Use the information in the Table below as a guide for the portfolio of evidence required:**

Criteria	Elements of Detail
1. Organisational Profile and Service Offering	Provide a summary of key services and offerings. Attach relevant supporting as appendices.
2. No. of Project / Technical members	State project team (i.e. no of technical staff)
3. Period Company in Existence	State number of years in existence
4. Industrial Energy Efficiency Assessment Experience	i. Indicate knowledge and experience in transferring knowledge on IEE.
	ii. Indicate knowledge and exposure to specialised concepts (i.e. IEE Assessments, IEE implementation projects, etc.)
	iii. State number of IEE assessments undertaken and the success of individual projects.
	iv. Indicate competence and capability with regards to software and tools for IEE assessments.
	v. Indicate implementation support experience based on IEE recommendation improvements
5. Consultant Qualifications	Provide overview of qualifications i.e. IEE related qualifications, and attach CV's of key technical staff.
6. Industry Experience	List experience within the industry sectors supported by the NCPC-SA, especially the Hospitality Sector.
7. Resource Efficiency and Cleaner Production Assessment approach and methodology	In detail outline how the IEE project will be rolled out using NCPC-SA standard approach and methodology.

Criteria	Elements of Detail
8. BBBEE Rating	Specify BBBEE level contributor, include copy of certificate
9. References	Provide a min of 3 contactable references

In addition to the above generic portfolio guide, the application submission will be assessed against following competencies and skill sets, to determine the suitability of Service Provider to meet the requirements of the NCPC-SA:

- i. Good written communications and presentation of facts
- ii. Well versed in report writing (technical)
- iii. Good command of the English language.

Refer to **Annexure “A”** for project outcomes and deliverables

## 5 FUNCTIONAL EVALUATION CRITERIA

5.1 The evaluation of the functional / technical detail of the proposal will be based on the following criteria:

Criteria	Weight
Proposal Structure	10%
Project Team IEE Hospitality Sector Exposure	10%
Energy thematic experience	40%
Implementation Support Expertise	10%
Approach and Methodology	10%
Planning	10%
Scheduling	10%

5.2 Proposals with functionality / technical points of less than the pre-determined minimum overall percentage of **70%** and less than **50%** on any of the individual criteria will be eliminated from further evaluation.

5.3 Refer to Annexure B for the scoring sheet that will be used to evaluate functionality.

## **6 ELIMINATION CRITERIA**

Proposals will be eliminated under the following conditions:

- Submission after the deadline; and
- Proposals submitted at incorrect location.

## **7 NATIONAL TREASURY CENTRAL SUPPLIER DATABASE (CSD) REGISTRATION**

Before any negotiations will start with the winning bidder it will be required from the winning bidder to:

- be registered on National Treasury's Central Supplier Database (CSD). Registrations can be completed online at: [www.csd.gov.za](http://www.csd.gov.za);
- provide the CSIR of their CSD registration number; and
- provide the CSIR with a certified copy of their B-BBEE certificate. If no certificate can be provided, no points will be scored during the evaluation process. (RSA suppliers only)

## SECTION B – TERMS AND CONDITIONS

### 8 VENUE FOR PROPOSAL SUBMISSION

All proposals must be submitted at:

- **CSIR GATE 03 - Main Reception Area** (in the **Tender box**) at the following address  
Council for Scientific and Industrial Research (CSIR)  
Meiring Naudé Road  
Brummeria  
Pretoria

### 9 TENDER PROGRAMME

The tender program, as currently envisaged, incorporates the following key dates:

- Issue of tender documents: 27 October 2017
- Closing / submission Date: 10 November 2017
- Estimated contract duration (in months/years) Six (6) Months

### 10 SUBMISSION OF PROPOSALS

10.1 All proposals are to be sealed. No open proposals will be accepted.

10.2 All proposals are to be clearly marked with the RFP number and the name of the tenderer on the outside of the main package. Proposals must consist of two parts, each of which is placed in a separate sealed package clearly marked:

**PART 1:** Technical Proposal: RFP No.: 804/10/11/2017

**PART 2:** Pricing Proposal, B-BBEE and other Mandatory Documentation:  
RFP No.: 804/10/11/2017

10.3 Proposals submitted by companies must be signed by a person or persons duly authorised.

10.4 The CSIR will award the contract to qualified tenderer(s) whose proposal is determined to be the most advantageous to the CSIR, taking into consideration the technical (functional) solution, price and B-BBEE.

### 11 DEADLINE FOR SUBMISSION

Proposals shall be submitted at the address mentioned above no later than the closing date of **10 November 2017** during CSIR's business hours. The CSIR business hours are between 08h00 and 16h30.

Where a proposal is not received by the CSIR by the due date and stipulated place, it will be regarded as a late tender. Late tenders will not be considered.

## **12 AWARDING OF TENDERS**

12.1 Awarding of tenders will be published on the National Treasury e-tender portal or the CSIR's tender website. No regret letters will be sent out.

## **13 EVALUATION PROCESS**

### **13.1 Evaluation of proposals**

All proposals will be evaluated by an evaluation team for functionality, price and B-BBEE. Based on the results of the evaluation process and upon successful negotiations, the CSIR will approve the awarding of the contract to successful tenderers.

A two-phase evaluation process will be followed.

- The first phase includes evaluation of **elimination** and **functionality criteria**.
- The second phase includes the evaluation of **price** and **B-BBEE** status.

Pricing Proposals will only be considered after functionality phase has been adjudicated and accepted. Only proposals that achieved the specified minimum qualification scores for functionality will be evaluated further using the preference points system.

### **13.2 Preference points system**

*The 80/20 preference point system will be used where 80 points will be dedicated to price and 20 points to B-BBEE status. If all tenders received are more than R50m, the proposal will be cancelled and re-issued.*

## **14 PRICING PROPOSAL**

14.1 Pricing proposal must be cross-referenced to the sections in the Technical Proposal. Any options offered must be clearly labelled. Separate pricing must be provided for each option offered to ensure that pricing comparisons are clear and unambiguous.

14.2 Price needs to be provided in South African Rand (excl. VAT), with details on price elements that are subject to escalation and exchange rate fluctuations clearly indicated.

14.3 Price should include additional cost elements such as freight, insurance until acceptance, duty where applicable.

14.4 Only firm prices\* will be accepted during the tender validity period. Non-firm prices\*\* (including prices subject to rates of exchange variations) will not be considered.

*\*Firm price is the price that is only subject to adjustments in accordance with the actual increase or decrease resulting from the change, imposition, or abolition of customs or excise duty and any other duty, levy, or tax which, in terms of a law or regulation is binding on the contractor and demonstrably has an influence on the price of any supplies, or the rendering costs of any service, for the execution of the contract;*

*\*\*Non-firm price is all prices other than "firm" prices.*

14.5 Payment will be according to the CSIR Payment Terms and Conditions.

## **15 VALIDITY PERIOD OF PROPOSAL**

Each **proposal** shall be valid for a minimum period of three (3) months calculated from the closing date.

## **16 APPOINTMENT OF SERVICE PROVIDER**

16.1 The contract will be awarded to the tenderer who scores the highest total number of points during the evaluation process, except where the law permits otherwise.

16.2 Appointment as a successful service provider shall be subject to the parties agreeing to mutually acceptable contractual terms and conditions. In the event of the parties failing to reach such agreement CSIR reserves the right to appoint an alternative supplier.

16.3 Awarding of contracts will be announced on the National Treasury website and no regret letters will be sent to unsuccessful bidders.

## **17 ENQUIRIES AND CONTACT WITH THE CSIR**

Any enquiry regarding this RFP shall be submitted in writing to CSIR at [tender@csir.co.za](mailto:tender@csir.co.za) with ***"RFP No 804/10/11/2017 - The provision of services to undertake a General Energy Assessment at a Hotel located in Cape Town, Western Cape"*** as the subject.

Any other contact with CSIR personnel involved in this tender is not permitted during the RFP process other than as required through existing service arrangements or as requested by the CSIR as part of the RFP process.

## **18 MEDIUM OF COMMUNICATION**

All documentation submitted in response to this RFP must be in English.

## **19 COST OF PROPOSAL**

Tenderers are expected to fully acquaint themselves with the conditions, requirements and specifications of this RFP before submitting proposals. Each tenderer assumes all risks for resource commitment and expenses, direct or indirect, of proposal preparation and participation throughout the RFP process. The CSIR is not responsible directly or indirectly for any costs incurred by tenderers.

## **20 CORRECTNESS OF RESPONSES**

20.1 The tenderer must confirm satisfaction regarding the correctness and validity of their proposal and that all prices and rates quoted cover all the work/items specified in the RFP. The prices and rates quoted must cover all obligations under any resulting contract.

20.2 The tenderer accepts that any mistakes regarding prices and calculations will be at their own risk.

## **21 VERIFICATION OF DOCUMENTS**

21.1 Tenderers should check the numbers of the pages to satisfy themselves that none are missing or duplicated. No liability will be accepted by the CSIR in regard to anything arising from the fact that pages are missing or duplicated.

21.2 ***One hard copy and one electronic copy (CD or USB memory key)*** of each proposal must be submitted. In the event of a contradiction between the submitted copies, the hard copy shall take precedence.

- 21.3 Pricing schedule and B-BBEE credentials should be submitted with the proposal, but as a separate document and no such information should be available in the technical proposal.
- 21.4 If a courier service company is being used for delivery of the proposal document, the RFP description must be endorsed on the delivery note/courier packaging to ensure that documents are delivered to the tender box, by the stipulated due date.

## **22 SUB-CONTRACTING**

- 22.1 A tenderer will not be awarded points for B-BBEE status level if it is indicated in the tender documents that such a tenderer intends sub-contracting more than **25%** of the value of the contract to any other enterprise that does not qualify for at least the points that such a tenderer qualifies for, unless the intended sub-contractor is an exempted micro enterprise that has the capability and ability to execute the sub-contract.
- 22.2 A tenderer awarded a contract may not sub-contract more than **25%** of the value of the contract to any other enterprise that does not have an equal or higher B-BBEE status level than the person concerned, unless the contract is sub-contracted to an exempted micro enterprise that has the capability and ability to execute the sub-contract.

## **23 ENGAGEMENT OF CONSULTANTS**

The consultants will only be remunerated at the rates:

- 23.1 Determined in the "Guideline for fees", issued by the South African Institute of Chartered Accountants (SAICA); or
- 23.2 Set out in the "Guide on Hourly Fee Rates for Consultants", by the Department of Public Service and Administration (DPSA); or
- 23.3 Prescribed by the body - regulating the profession of the consultant.

## **24 TRAVEL EXPENSES**

- 24.1 All travel expenses for the CSIR's account, be it directly via the CSIR's travel agent or indirectly via re-imburements, must be in line with the CSIR's travel policy. The following will apply:
- 24.1.1 Only economy class tickets will be used.
- 24.1.2 A maximum of R1300 per night for accommodation, dinner, breakfast and parking will be allowed.

24.1.3 No car rentals of more than a Group B will be accommodated.

## **25 ADDITIONAL TERMS AND CONDITIONS**

25.1 A tenderer shall not assume that information and/or documents supplied to CSIR, at any time prior to this request, are still available to CSIR, and shall consequently not make any reference to such information document in its response to this request.

25.2 Copies of any affiliations, memberships and/or accreditations that support your submission must be included in the tender.

25.3 In case of proposal from a joint venture, the following must be submitted together with the proposal:

- Joint venture Agreement including split of work signed by both parties;
- The original or certified copy of the B-BBEE certificate of the joint venture;
- The Tax Clearance Certificate of each joint venture member;
- Proof of ownership/shareholder certificates/copies; and
- Company registration certificates.

25.4 An omission to disclose material information, a factual inaccuracy, and/or a misrepresentation of fact may result in the disqualification of a tender, or cancellation of any subsequent contract.

25.5 Failure to comply with any of the terms and conditions as set out in this document will invalidate the Proposal.

## **26 CSIR RESERVES THE RIGHT TO**

26.1 Extend the closing date;

26.2 Verify any information contained in a proposal;

26.3 Request documentary proof regarding any tendering issue;

26.4 Give preference to locally manufactured goods;

26.5 Appoint one or more service providers, separately or jointly (whether or not they submitted a joint proposal);

26.6 Award this RFP as a whole or in part;

26.7 Cancel or withdraw this RFP as a whole or in part.

## **27 DISCLAIMER**

This RFP is a request for proposals only and not an offer document. Answers to this RFP must not be construed as acceptance of an offer or imply the existence of a contract between the parties. By submission of its proposal, tenderers shall be deemed to have satisfied themselves with and to have accepted all Terms & Conditions of this RFP. The CSIR makes no representation, warranty, assurance, guarantee or endorsements to tenderer concerning the RFP, whether with regard to its accuracy, completeness or otherwise and the CSIR shall have no liability towards the tenderer or any other party in connection therewith.

## DECLARATION BY TENDERER

**Only tenderers who completed the declaration below will be considered for evaluation.**

**RFP No:** .....

I hereby undertake to render services described in the attached tendering documents to CSIR in accordance with the requirements and task directives / proposal specifications stipulated in RFP No..... at the price/s quoted. My offer/s remains binding upon me and open for acceptance by the CSIR during the validity period indicated and calculated from the closing date of the proposal.

I confirm that I am satisfied with regards to the correctness and validity of my proposal; that the price(s) and rate(s) quoted cover all the services specified in the proposal documents; that the price(s) and rate(s) cover all my obligations and I accept that any mistakes regarding price(s) and rate(s) and calculations will be at my own risk.

I accept full responsibility for the proper execution and fulfilment of all obligations and conditions devolving on me under this proposal as the principal liable for the due fulfilment of this proposal.

I declare that I have no participation in any collusive practices with any tenderer or any other person regarding this or any other proposal.

I accept that the CSIR may take appropriate actions, deemed necessary, should there be a conflict of interest or if this declaration proves to be false.

I confirm that I am duly authorised to sign this proposal.

NAME (PRINT) .....  
CAPACITY .....  
SIGNATURE .....  
NAME OF FIRM .....  
DATE .....

WITNESSES	
1	.....
2	.....
DATE: .....	

## 28 ANNEXURE A

The overall purpose of the General Energy assessment is as follows:

- To assist with quantifying energy, and identifying other major consumers within their processes.
- To use the assessment as a tool to identify potential opportunities for the reduction and more efficient use of energy within their production pipelines.
- To verify whether the energy used is efficient and that there is an ongoing program to monitor and improve the use of this resource.
- To establish an energy consumption baseline (regression analysis with indicated baseload).
- To assist in setting energy efficiency index and targets
- To collect quantitative data to determine the percentage energy consumption by specific areas or significant energy users (all energy sources to be considered).
- To review the current tariff in line with production and business requirements, and identify potential opportunities for tariff optimisation.
- To provide detailed recommendations for any other energy efficiency improvements that will result in kWh reduction and economic benefits.
- To undertake an economic feasibility analysis of all identified energy improvement opportunities
- To present recommendations to the facility management team on selected feasible and viable options and prioritisation of implementation options.
- To provide implementation support to the company (only if agreed to by management of the company) where no cost to low cost resource saving opportunities might arise.

It is anticipated that the following **DELIVERABLES** will be key to the successful completion of the assessment:

- Development of project activity plan and schedule for the assessment to be undertaken.
- Determination to support the internal Energy Efficiency champions at the facility for the duration of the assessment and for any future projects.
- Presentation of an overview of the intended assessment and projected outcomes at the facility.
- Completion of the IEE General Energy Assessment at the facility.
- Preparation and presentation of the Quick Scan findings following the walk-through at the facility.
- Preparation and submission of a draft General Energy Assessment Report outlining the findings of the investigation at the facility, along with the following:
  - Report calculations in and excel document
  - All digital and infrared pictures taken on-site during the assessment
- Visual presentation of the findings to management of the facility.
- Conducting a two (2) hour Awareness Raising Session on the day of the final feedback meeting, with key employees of the company relating to the assessment and specific topics.

- Presentation of the Final General Energy Assessment Report with Implementation Plan, identifying cost and dates to management of the facility, and identifying the way forward on implementation of potential options as highlighted in the final report.
- A close-out report summarising the interventions at the facility, inclusive of the views of management and their intended way forward.
- Submission of meeting minutes for the inception and feedback meetings.
- Submission of an implementation report (only if agreed upon by management of the company) as to the assistance provided for all the no-cost to low-cost recommendations that have been implemented.

## 29 APPROACH AND METHODOLOGY

Once on-site, the Service Provider must confirm accuracy of the information provided in the table below by updating any information in the table that may be incorrect or inaccurate.

Neither the CSIR nor the NCPC-SA will be held liable for any inaccuracies that may be contained in the table below.

The list contains the equipment identification, ratings data for the equipment and other relevant information located on-site the Hotel:

Activity:	Hotel
Aproximate m <sup>2</sup> :	± 95 000 m <sup>2</sup>
Numbers of full time employees:	± 250
Approximate number of contract employees:	± 50
Electricity Consumption	± 496 000 kWh per month
Is there any sub-metering in place?	yes
Other sources of energy	LPG
Chillers	4 ranging from 200kW to 250kW
Water Heating	16 Geysers, 8 Heat Pumps and 4 LPG Burners
Refrigeration	<ul style="list-style-type: none"> <li>- All refrigeration units run 24 hours.</li> <li>- 7 Ice Machines at 1.6 kW</li> <li>- 10 Walk in Cold Rooms at 1.1 kW</li> <li>- 15 Under Counter Fridges at 0.66 kW</li> </ul>
Pumps	14 x Centrifugal Circulation Pumps ranging from 250 kW to 1100 kW
Fans	4 x Ventilation fans at 230 kW
Electric Motors	<ul style="list-style-type: none"> <li>- Irrigation Pump x 2 at 5.5 kW</li> <li>- Laundry Motor at 1.1 kW</li> </ul>

### **30 Assessment Protocol and IEE Team**

The assessment will focus on the aspects as highlighted in Section 2, and an IEE champion will be identified and nominated by management of the facility, who will remain responsible for providing contact for the project. The IEE champion of site may be required to undertake tasks and investigations as part of the survey's investigations.

The project will be approached through the phases outlined below.

#### **Project Inception and Planning**

The Consultant will develop and draft an IEE assessment plan and schedule outlining the proposed activities and visits to be undertaken at the facility in a Gantt chart.

The inception phases will also involve planning, coordination and review of the activities to be carried out by the project team, and the timelines will also be reviewed at this stage.

The project launch phases will include meetings and presentations at the facility, to give an outline of the intended project programmes and requirements of the assessment team.

Topics to be addressed at the inception meeting to be held with management may include but will not be limited to:

- Project outline and projected time schedules,
- The role of the IEE Champions / Teams,
- Initial findings from provided information
- Energy consumption patterns for the facility,
- Proposed IEE interventions based on the information provided, and
- Information relating to the resources at the facility

## IEE Survey

Having concluded the inception and planning activities at the facility focus will be placed on execution of the IEE Assessment with specific emphasis on the focus areas.

Key activities to be undertaken will include:

- **Collation and interpretation of the Pre-Site Visit Questionnaire data for the facility,** including historical data analysis, identification of existing measurement points.
- **Conducting the assessment at the facility,** using the following steps:
  - i. Walk-through & survey
  - ii. Establishment of assessment mandates
  - iii. Establish assessment scope
  - iv. Analyse energy consumption and costs
  - v. Compare individual energy resource performance
  - vi. Profiling of individual energy use patterns
  - vii. Inventory of individual energy use and costs
  - viii. Identify energy management opportunities as required
  - ix. Assessment of the benefits of each opportunity
  - x. Two (2) hour Awareness Raising Session for employees
  - xi. Report for action and implementation

The above approaches which is structured more to meet the needs company, will enable the CSIR's NCP-CA to gain an overview of the potential for energy savings, as well as gain a good insight into the relevant management issues of these resources.

Where no-cost and low cost opportunities might be identified and highlighted to management, support will be provided by the consultant to implement accordingly. This though will only be done should the company agree to the implementation support provided.

This will also support the CSIR's NCP-CA in meeting the objectives as outlined above.

Identification of Saving Opportunities:

The information will be compiled from the detailed assessment conducted at the facility, and this will be used to identify areas where there is potential for the reduction of the resources as per the focus areas highlighted in Section 2 above.

The information will be analysed according to the following criteria:

- Identify potential for reduction of energy resources
- Identify measures to further improve management of energy resources
- Quantify the order of magnitude and cost estimate for each identified option
- Quantify potential savings based on pricing structure, as well as optimising use and demand patterns

- Prioritise saving options

The findings from this phase will be incorporated as part of the final assessment report for the company, and the areas for resource savings must include:

- % reduction in electrical energy usage,
- kWh reduction in electrical energy usage,
- Rand value reduction in electrical energy usage
- % reduction in energy usage,
- Litres reduction in paraffin or LPG
- Rand reduction in energy usage

The summary of recommendations should be reported in the Executive Summary Table of the report, and the table below serves as an example of how to report on this.

No.	Resource Optimisation Opportunities	Estimated Savings			Investment Cost (Rand per Annum)	Payback Period (Years)
		kWh per annum	Rand per annum	Ton Co <sub>2</sub> per annum		
<b>Electrical Energy Savings Recommendations</b>						
1.						
2.						
<b>Energy Savings Recommendations</b>						
1.						
2.						
<b>Qualitative Findings</b>						
1.						
2.						
<b>TOTALS</b>						

### Reporting and Company Feedback

A Quick Scan Presentation will be presented to management of the facility following the walk-through, as well as a detailed General Energy report based upon the IEE survey findings, which will comprise of the specific management interventions as indicated above in the IEE Survey section. The final report will include a utility audit, highlighting of specific areas for potential savings, recommended additional utility metering requirements, as well as further recommendations regarding ongoing energy resource monitoring & targeting, etc.

Historical resource usage data will be expertly analysed in detail through a process of regression, and the report where applicable will include benchmarking data based upon performance indices. These will be used in comparison with known performance indices to further establish the scope for savings potential. On request from management at the facility, it is also expected that the assessment report also include renewable energy recommendations, and this will appear separate from the main table.

The final report will upon completion, be presented at a formal feedback session with management of the facility, and the intended purpose is to outline the project focus and confirming the options identified for implementation.

A plan of action for possible implementation of the options is then to be agreed upon with management of the facility.

#### Awareness Raising Session

It is expected that on the day of the final feedback meeting with management of the facility, an awareness raising session be conducted with all relevant staff members and management, and this is to transfer the benefits and highlight the findings of the General Energy assessment through a two (2) hours workshop. This is to be conducted in the following manner:

- Using visual power point presentations, and
- Supported by printed documentation with relevant cases or examples to adequately explain concepts.

#### **Close Out Report**

A Close-Out Report detailing a summary of all the interventions (Quick Scan, General Energy Assessment Report, Feedback and Awareness training), and inclusive of all the information related to the project (spreadsheets and word documents) will be required to be submitted to the Project Manager at the end of the project.

### 31 COMMENCEMENT AND COMPLETION DATES

It is anticipated that the work will commence upon acceptance and signing of a contract with an appropriate IEE specialist appointed by the CSIR's NCPC-SA, and it is expected that the assessment be completed within one (1) month of commencement of the project, depending on the extent of the project at the plant. Consideration will also be given to the measurement and monitoring needed to be undertaken at the facility.

The table below outlines the sequence of completion along with estimated commencement dates, and also the amount of days budgeted for each:

Activity	Assessment Estimated Commencement Date	Amount of On-Site Days	On-Site Assessment Completion Date
Inception Meeting	20 November 2017	0.5	20 November 2017
Plant walk-through & Quick Scan	20 November 2017	1.5	21 November 2017
Detailed Assessment	21 November 2017	3	24 November 2017
Implementation Support	27 November 2017	3	30 November 2017

**Note:** *Implementation Support will be included in the contract, but this deliverable will only be considered for payment should the company agree for the consultant to provide this form of technical assistance.*

The Consultant will provide the CSIR's NCPC-SA with projected schedules of the proposed activities with projected times scales and reporting deadlines to keep the CSIR's NCPC-SA informed of progress. The CSIR's NCPC-SA is to be informed of all meetings scheduled with the company and all the necessary arrangements should be made to ensure that the CSIR's NCPC-SA is present during the initial Quick-Scan Assessment visits and feedback sessions.

All reports issued and presented to the company will be completed under the CSIR's NCPC-SA brand, and the final report and feedback meetings will be concluded within 3 weeks of on-site assessment completion.

## **32 ALLOCATE BUDGET FOR THE CONTRACTED SERVICES**

This project will be managed by the CSIR's NCPC-SA and staffed by the appointed IEE specialist. The cost of the assessment will be subsidised through the CSIR's NCPC-SA's IEE Project, but will not include instances where it may be necessary to install specific monitoring equipment for the assessments. However, no installation will be undertaken without the consent and understanding of management of the facility and the CSIR's NCPC-SA.

The following NCPC-SA measuring equipment is available to Service Providers:-

- Infrared thermometers
- Single phase power analyser
- Current Meter
- Voltmeter
- Lux meter
- etc

The following NCPC-SA measuring equipment is available to Service Providers that have completed the Expert Level UNIDO based systems optimisation training for the purpose of conducting specific systems optimisation assessment:-

- Fans Flowkinetics measurement kit
- Pumps Systems Optimisation measuring kit
- Compressed Air Systems Optimisation measuring kit
- Flue Gas Analyser and related equipment making up the Steam Systems Optimisation Measurement Kit
- 3 Phase Power Analyser
- etc

Once the tender is awarded to the winning bidder, the Service Provider is advised to contact the NCPC-SA Project Co-ordinator directly to inquire on the use / availability of the equipment to be loaned. All equipment queries are communicated directly to the NCPC-SA Project Co-ordinator.

The name and contact details of the NCPC-SA Project Co-ordinator will be made available to the winning bidder upon request thereof at the end of this tender process. There is no cost to the service provider for the loan of NCPC-SA equipment. An "equipment loan document" and a "test equipment hiring policy" document have to be signed & completed by the service provider ahead of receiving the equipment from the Cape Town-based NCPC-SA regional office.

### 33 Annexure “B” Functionality Evaluation Score-Sheet

Weight	Criteria	Scores		
		5	7	10
10%	Proposal Structure	Proposal contains detailed information about the service provider, project team, technical capabilities, industry exposure, and addresses the actual project specifications as identified in the RFP. Less than 2 years IEE experience with previous project value of less than R 500 000	Proposal contains extensive detail on the service provider, actual project team and qualifications, industry and more than 2- 5 years IEE experience, references, and outlines how the objectives of the project will be achieved in terms of meeting the specified outcomes and deliverables as in the RFP. Previous project value from: R 500 000 - R 1000 000	Excellent proposal displaying extensive evidence of the service provider, actual project team and qualifications, more than 5 years IEE experience, references, highlights implementation success stories, as well as details pertaining to how they will address the required outcomes and specific deliverables. The proposal also includes potential risk factors involved, a detailed approach and methodology intended for this project, as well as specifics to the commencement and completion dates. Previous project value from: R 1 500 000 and above R 2000 000
10%	Project Team IEE Hospitality Sector Exposure	Team has undertaken less than 10 IEE assessments in the Hospitality Sector	Team has undertaken a minimum of 20 IEE assessments in the Hospitality Sector	Team has undertaken more than 20 IEE assessments with evidence of quantified savings in the Hospitality Sector.
40%	Energy thematic experience	Attending NCPCC-SA expert level training e.g. 6-12 month training in energy related courses specific to the utilities highlighted in the RFP	Conducting at least one (1) NCPCC-SA training based assessment in energy related courses specific to the utilities highlighted in the RFP	Conducting multiple assessments in energy related courses specific to the utilities highlighted in the RFP, that is beyond a training based assessment
10%	Implementation Support Expertise	Has provided support to least 3 companies with implementation of IEE recommendations	Has provided support to between 3 – 5 companies with implementation of IEE recommendations and provides specifics and references thereof.	Has provided support to more than 5 companies with implementation of IEE recommendations and provides specifics and references thereof.
10%	Approach and methodology	Provides evidence of IEE methodology with use of tools e.g. table of resources against task charts and diagrams, and evidence of measurement to be taken by 2 or more basic tools for taking measurements e.g. thermometers and clamp on ammeter and lux meters	Provides evidence of IEE tools to be used, no source given e.g. table of resources against task spreadsheet and survey tools, and evidence of measurement to be taken by basic tools and at least 1 advanced tool for taking measurements e.g. thermal Imaging camera or flow meters or power quality analyser	Provides evidence of Proven IEE tools to be used e.g. table of resources against task, and evidence of measurement to be taken by basic tools and at least 2 advanced tools for taking measurements e.g. thermal Imaging camera, flow meters, power quality analyser
10%	Planning	Appropriation of team members to deliverables (no indication of best suited according to skills or experience) as per RFP focus areas	Effective appropriation (according to skills and experience) of project team members to deliverables, but no table of resources against tasks as per RFP focus areas	Effective appropriation (according to skills and experience) of project team members to deliverables with table of resources against tasks which meets the expectations of the focus areas specified in the RFP
10%	Scheduling	Provides logical sequencing of events with timing e.g. including a basic Gantt chart	Provides logical sequencing of events with acceptable timing e.g. including a Gantt chart with team resource allocated	Provides logical sequencing of events with desirable timing e.g. including advanced Gantt chart with timing of individual resources allocated