

Request for Proposals (RFP)

**The provision of services to undertake a
Refrigeration System Optimisation assessment for a
Company based in the Western Cape**

RFP No. 896/03/10/2019

| | | |
|---------------------|--|--|
| Date of Issue | 18 September 2019 | |
| Closing Date | 03 October 2019 | |
| Place | CHPC Tender Box, CSIR Main entrance, Security Office, 15 Lower Hope Rd, Rosebank, Cape Town 7700 | |
| Enquiries | Strategic Procurement Unit | E-mail: tender@csir.co.za |
| 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 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 NCPC-SA, 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 NCPC-SA 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 undertaking a Refrigeration System Optimisation assessment for a Company based in the Western Cape.

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. number 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 or similar 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. |
| 7. Assessment approach and methodology | In detail outline how the IEE project will be rolled out using NCPC-SA standard approach and methodology. |
| 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.

4.1 PROJECT OUTCOMES AND DELIVERABLES

Purpose of Refrigeration System Optimisation Assessment

The overall purpose of the Refrigeration System Optimisation Assessment at the company is as follows:

- To assist with quantifying energy, and identifying the major consumers within the company refrigeration system processes.
- To utilize the assessment as a tool to identify potential opportunities for the reduction and more efficient use of energy within the company's refrigeration system.
- To verify whether the energy used within the company's refrigeration system is efficient and that there is an ongoing program to monitor and improve the use of this resource.
- To establish an energy consumption baseline of the company's refrigeration system with the preferred method of regression analysis with indicated baseload. (Support from the NCPC-SA can be provided)
- To assist in setting energy efficiency index and targets within the company's refrigeration system.
- To assist in identifying opportunities and provide detailed recommendations for the recovery and re-use of energy from the company's refrigeration system processes wherever feasible.
- To provide detailed recommendations for any other energy efficiency improvements that will result in kWh reduction and economic benefits relating to the company's refrigeration system.
- To undertake an economic feasibility analysis of all identified energy improvement opportunities relating to the company's refrigeration system.
- To present recommendations to the company's plant management team on selected feasible and viable options and prioritisation of implementation options.

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 champions at the company for the duration of the assessment and for any future projects.
- Presentation of an overview of the intended assessment and projected outcomes at the company.
- Completion of the Refrigeration System Optimisation Assessment at the company.
- Preparation and submission of a draft Refrigeration System Optimisation Assessment Report outlining the findings of the investigation at the company, along with the following:
- Report calculations in and excel document

4.2 The following project tasks are to be implemented at the company:

Table 1: Deliverable Task List

| # | Activity | | Receivables | Deliverables | Days | Location |
|---|--|--|--|--|------|--------------------|
| 1 | Project Planning | | | | 0.5 | NCPC Office CPT |
| | 1.1 | Meeting with CSIR to discuss the project brief | CSIR-Service Provider signed agreement | Minutes of the meeting | | |
| | 1.2 | Confirmation of deliverable time frames | - | Activity-chart for project | | |
| 2 | Project Inception | | | | 0.5 | On site |
| | 2.1 | Collect electrical consumption data | Relevant electrical demand info | Energy demand profile | | |
| | 2.2 | Discuss project scope with the company | Needs analysis from client (expectations) | - | | |
| | 2.3 | Understand the process flow of production | Schematic drawings, P&ID | Simplified flow diagram of refrigeration system | | |
| | 2.4 | Identify the refrigeration system cost drivers | Plant Eng. to identify the energy users in system | - | | |
| | 2.5 | Maintenance regime | Historical maintenance and repair details | - | | |
| 3 | Site Survey | | | | 1.5 | On site |
| | 3.1 | Document major equipment manufacturing details | Any supplier/installer info available. Permission for photos | Create high-level asset list | | |
| | 3.2 | Conduct a walk-trough of the process plant | Access to process area. Permission for photos | Create high-level asset list | | |
| | 3.3 | Interview with plant operators and maintenance staff | - | Data collection | | |
| | 3.4 | Understand systems operating conditions | - | - | | |
| 4 | Data Logging (2 Compressors only) | | | | 7 | On site |
| | 4.1 | Connect performance and efficiency analyser | Access to LP, HP, energy-meter connection points | - | | |
| | 4.2 | Setup of real-time efficiency logging for: compressor, evaporator, condenser, cycle and system efficiency index(SEI) | access to the compressor - skid/chiller for a period of 7 days | Compressor skid/chiller health analysis. Understand the process demand. Understand low | | |

| | | | | | | |
|----------|--------------------------------|--|---|--|-----------|-------------------------|
| | | | | refrigeration load conditions and control regimes. | | |
| | 4.3 | Logging of data under full load conditions | Full load condition for minimum period of 2-3 hrs | Equipment performance benchmark process | | |
| 5 | Data processing | | | | | |
| | 5.1 | Performance and efficiency indexing | Raw data from analyser | Processed Data Tables and Regression analysis | 3.5 | Service provider office |
| | 5.2 | Heat load calculation | Approximate product through put. | High level energy balance (baseline establishment) | | |
| | 5.3 | Equipment matching | Equipment design criteria | Equipment suitability | | |
| | 5.4 | Performance benchmarking | Raw data from analyser | System health | | |
| | 5.5 | Complete system simulation | Condition inputs for simulation software | Estimated energy savings for implementation of interventions. Estimated lifecycle cost. Estimated CO2 emissions. | | |
| 6 | Feedback report- Draft | | | | | |
| | 6.1 | Executive summary | - | Summary with a business case for intervention implementation ROI (simple payback) | 3 | Service provider office |
| | 6.2 | Findings | - | List that highlights the issues on site | | |
| | 6.3 | Identifying main opportunities | - | Preventative and restorative methods included | | |
| | 6.4 | Recommendations | - | Implementation plan and estimated cost | | |
| 7 | Feedback report - Final | | | | | |
| | 7.1 | Correction and refine | - | Final assessment report | 1.5 | Service provider office |
| | 7.2 | Handover to NCPC | - | | | |
| 8 | Assessment close-out | | | | | |
| | 8.1 | Present final report to client | - | Attendance register | 0.5 | On site |
| | | TOTAL DAYS | | | 15 | |

4.3 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:

| | | | |
|-------------------------------------|--|-----------------|--------------|
| Numbers of full time employees: | ± 950 | | |
| Electricity Consumption | ± 1 063 636 kWh | | |
| Is there any sub-metering in place? | Yes | | |
| Other sources of energy | Diesel (for generators) | | |
| Refrigeration System Details | | | |
| Compressors | No. | kW | Note |
| | 1 | Not operational | |
| | 2 | 110 | Low Stage |
| | 3 | 110 | Low Stage |
| | 4 | 160 | Low Stage |
| | 5 | 250 | Single Stage |
| | 6 | 460 | Single Stage |
| | 7 | 315 | High Stage |
| | 8 | 315 | High Stage |
| Cooling Towers | 5 | | |
| AC Plants | 0 | | |
| VSDs | Yes, on condensers of refrigeration system | | |

4.4 Assessment Protocol and Project Team

The assessment will focus on the aspects as highlighted in Section 2, and an energy champion will be identified and nominated by management of the company, who will remain responsible for providing contact for the project. The energy 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.

4.5 Project Inception and Planning

The service provider will develop and draft a refrigeration system optimisation assessment plan and schedule outlining the proposed activities and visits to be undertaken at the company in a Gantt Chart.

High level refrigeration system information will be made available to the successful service provider, as to gain an insight into the major resource users of the refrigeration system. The inception phases will also involve planning, coordination and review of the activities to be carried out by the project team. The timelines will also be reviewed at this stage.

The project launch phases will include meetings and presentations at the company, 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 the company's management may include but will not be limited to:

- Project outline and projected time schedules,
- The role of the energy Champions / Teams,
- Resource consumption patterns for the refrigeration system,
- Information relating to the refrigeration system resources at the company

4.6 Refrigeration System Survey

Having concluded the inception and planning activities at the company, focus will be placed on execution of the Refrigeration System Optimisation Assessment.

Key activities to be undertaken will include:

- **Conducting the assessment at the company**, using the following steps:
 - i. Walk-through & survey
 - ii. Establishment of assessment mandates
 - iii. Establish assessment scope
 - iv. Analyse refrigeration system resource consumption and costs
 - v. Profiling of the refrigeration system resource use patterns
 - vi. Identify refrigeration system resource management opportunities as required
 - vii. Assessment of the benefits of each opportunity
 - viii. Report for action and implementation

The above approaches which is structured more to meet the needs of the company, will enable the CSIR's NCP-SC to gain an overview of the potential for resource 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 service provider 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 NCPC-SA in meeting the objectives as outlined above.

4.7 Identification of Saving Opportunities:

The information will be compiled from the detailed Refrigeration System Optimisation assessment conducted at the company, 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 these resources
- Identify measures to further improve management of these 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
- Simple payback period on implementation option
- The reduction in carbon dioxide equivalent emission

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. | Refrigeration System Optimisation Opportunities | Estimated Savings | | | Investment Cost (Rand per Annum) | Payback Period (Years) |
|---|---|---------------------|-------------------|-------------------------------------|---|------------------------------|
| | | kWh per annum | Rand per annum | Ton Co ₂ per annum | | |
| Electrical Energy Savings Recommendations | | | | | | |
| 1. | | | | | | |
| 2. | | | | | | |
| Energy Savings Recommendations | | | | | | |
| 1. | | | | | | |
| 2. | | | | | | |
| Qualitative Findings | | | | | | |
| 1. | | | | | | |
| 2. | | | | | | |
| TOTALS | | | | | | |

4.8 Reporting and Company Feedback

A detailed Refrigeration System Optimisation report based upon the survey findings, which will comprise of the specific management interventions as indicated above in the Refrigeration System Optimisation summary section. The final report will include highlighting specific areas for potential savings, recommended additional utility metering requirements, as well as further recommendations regarding ongoing resource monitoring & targeting of the refrigeration assessment, 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.

The final report will upon completion, be presented at a formal feedback session with management of the company, 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 company.

4.9 Close Out Report

A Close-Out Report detailing a summary of all the interventions (Refrigeration System Optimisation Report and Feedback), 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.

4.10 Commencement and Completion Dates for each milestone or deliverable:

It is anticipated that the work will commence upon acceptance and signing of a contract with the appropriate Energy specialist appointed by the CSIR's NCPC-SA, and it is expected that the assessment be completed within five (5) months 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 company.

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

| Milestone/Deliverable | Estimated Commencement Date | Completion Date |
|--------------------------------------|------------------------------------|------------------------|
| Project planning | 14 October 2019 | 14 October 2019 |
| Project inception | 14 October 2019 | 14 October 2019 |
| Site survey | 15 October 2019 | 16 October 2019 |
| Data logging (2 compressors only) | 16 October 2019 | 23 October 2019 |
| Data processing | 23 October 2019 | 28 October 2019 |
| Feedback report- Draft | 29 October 2019 | 31 October 2019 |
| Feedback report - Final | 1 November 2019 | 4 November 2019 |
| Assessment close-out | 8 November 2019 | 8 November 2019 |

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 visit 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.

4.11 Timeframes:

The time frames for each deliverable are listed in Table below:

| Deliverables | Days |
|---|------|
| Project planning | 0.5 |
| Minutes of the meeting | |
| Activity-chart for project | |
| Project inception | 0.5 |
| Energy demand profile | |
| Simplified flow diagram of refrigeration system | |
| Site survey | 1.5 |
| Create high-level asset list | |
| Create high-level asset list | |
| Data collection | |
| Data logging (2 Compressors only) | 7 |
| Compressor skid/chiller health analysis. Understand the process demand. Understand low refrigeration load conditions and control regimes. | |
| Equipment performance benchmark process | |
| Data processing | |
| Processed data tables and Regression Analysis | 3.5 |
| High level energy balance | |
| Equipment suitability | |
| System health | |
| Estimated energy savings for implementation of interventions. Estimated lifecycle cost. Estimated CO2 emissions. | |
| Feedback report- Draft | |
| Summary with a business case for intervention implementation | 3 |
| List that highlights the issues on site | |
| Preventative and restorative methods included | |
| Implementation plan and estimated cost | |
| Feedback report - Final | |
| Final assessment report | 1.5 |
| Assessment close-out | 0.5 |
| Attending register | |

This project will be managed by the CSIR's NCPC-SA and staffed by the appointed Energy specialist. The cost of the assessment will be subsidised through the CSIR's NCPC-SA's Industrial Energy Efficiency Project (IEE Project), and will 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 company and the CSIR's NCPC-SA.

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 | 5% |
| Project Team IEE Refrigeration Systems Exposure | 10% |
| Energy thematic experience | 15% |
| Data logging Capabilities | 30% |
| 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 60 % and less than 50 % on any of the individual criteria will be eliminated from further evaluation.

5.3 Refer to Annexure A 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;
- Proposals submitted at incorrect location; and
- Not having access to equipment capable real-time efficiency logging for: compressor, evaporator, condenser, cycle and system efficiency index (SEI).

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;
- 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 Main Entrance (in the CHPC Tender box) at the following address**
Council for Scientific and Industrial Research (CSIR)
15 Lower Hope Road
Rosebank
Cape Town
7700

9 TENDER PROGRAMME

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

- Issue of tender documents: 18 September 2019
- Last date for submission of queries: 27 September 2019
- Closing / submission Date: 03 October 2019
- Estimate appointment date of successful tenderer: 14 October 2019
- Estimated contract duration (in months/years) 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.: 896/03/10/2019

PART 2: Pricing Proposal, B-BBEE and other Mandatory Documentation:
RFP No.: 896/03/10/2019

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 **Thursday, 3 October. 2019** 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 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 six (6) 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 with ***“RFP No 896/03/10/2019 - The provision of services to undertake a Refrigeration System Optimisation assessment for a Company based in the 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)* 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-imbursements, 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

| Weight | Criteria | Scores | | |
|--------|---|--|---|---|
| | | 5 | 7 | 10 |
| 5% | 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 50 000 | 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 50 000 - R 100 000 | 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 above R 100 000 |
| 10% | Project Team IEE Refrigeration Systems Exposure | Team has undertaken less than 5 IEE Refrigeration Systems assessments. | Team has undertaken a minimum of 5 IEE Refrigeration Systems assessments. | Team has undertaken more than 10 IEE Refrigeration Systems assessments - with evidence of quantified savings. |
| 15% | Energy thematic experience | Shown case of conducting 1 energy optimisation assessment within industry - specific to the utilities highlighted in the RFP | Shown case of conducting 2 energy optimisation assessments within industry - specific to the utilities highlighted in the RFP | Shown case of conducting 3 or more energy optimisation assessments within industry - specific to the utilities highlighted in the RFP |
| 30% | Data logging Capabilities | Has equipment capable of real-time efficiency logging for: compressor, evaporator, condenser, cycle and system efficiency index(SEI) | Has equipment capable of real-time efficiency logging for: compressor, evaporator, condenser, cycle and system efficiency index(SEI) along with simulation software. | Has equipment capable of real-time efficiency logging for: compressor, evaporator, condenser, cycle and system efficiency index(SEI) along analysis thereof and using simulation software. |
| 10% | Implementation Support Expertise | Has provided support to least 1 company with implementation of IEE recommendations | Has provided support to between 2 – 3 companies with implementation of IEE recommendations and provides specifics and references thereof. | Has provided support to more than 3 companies with implementation of IEE recommendations and provides specifics and references thereof. |
| 10% | Approach and methodology | Provides evidence of IEE methodology - the systematic approach with use of tools e.g. table of resources against task charts and diagrams, and evidence of measurement to be taken | Provides evidence of IEE methodology - the systematic approach with use of tools e.g. table of resources against task charts and diagrams, and evidence of measurement to be taken | Provides evidence of IEE methodology - the systematic approach with use of tools e.g. table of resources against task charts and diagrams, and evidence of measurement to be taken |
| 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 <i>no</i> 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 |
|------------|------------|--|--|---|