***Request for Quotation (RFQ) to conduct RECP Assessment at four (4) Tigerbrands Sites; (Albany Bakeries Mobeni (Durban), Albany Bakeries Bellville (Cape Town), Jam Paarl (Cape Town), Langerberg and Ashton (Cape Town) on behalf of CSIR***

***RFQ No. 9212/31/01/2020***

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| Date of issue: | Thursday, 16 January 2020 |
| Closing Date and Time | Friday, 31 January 2020 at 16h30<br>(**Late submissions will not be considered**) |
| RFQ Number | 9212/31/01/2020 |
| Submissions and Enquiries | For submission and enquiries email: tender@csir.co.za<br>(**Please use RFQ Number as subject reference**) |

## 1. INVITATION FOR QUOTATION

The National Cleaner Production Centre South Africa (NCPC – SA) is an Implementation Programme of the Department of Trade and Industry (the dti), hosted by the Council for Scientific and Industrial Research (CSIR). The NCPC-SA is currently requesting submissions of quotations from RECP Service Providers/ Consultants to conduct and execute an RECP Assessment with the company mentioned below for the NCPC-SA 2019/2020 financial year.

The purpose of the study is to assist NCPC-SA and the respective client companies to build an understanding of industrial input resources such as: water, energy and materials efficiency as well as waste output resources treatment and recovery potentials in South Africa. Most importantly, the study aims to identify viable resource use efficiency opportunities that can be employed to lower the risks of access to input resources and stimulate the demand too invest in new technologies that can be best employed on sites to drive sustainability. This assessment will need to be conducted to provide solutions that can be easily be implemented so that case studies could be developed within short period. The consultant will work with the NCPC-SA to keep up to date with the progress of implementation so that case studies can be generated.

## 2. QUOTATION REQUIREMENTS

Please note to quote to conduct the assessments per site and include the over-all costs of travelling to sites outside of the bidder's area of residence.

Note:

- Service providers are encouraged to send separate quotations for four companies
- **I**f one service provider wins more than one site, the next site will be awarded to the second runners-up according to the final score.
- A minimum of 5 working days must be spent **on site** doing these assessment.

## 3. Project Management

The NCPC-SA will be responsible for developing an activity plan for the assessment project to be undertaken. The activity plan will include the following outputs:

1. NCPC-SA will screen proposals and appoint consultants to undertake the assessments.
2. NCPC-SA will develop and finalise a Memorandum of Agreement, non-disclosure agreements and contracts with the relevant company and consultant.

## 4. Planning and Organisation

On selection of the bidder, the bidder will draft an Inception Note providing a detailed approach and methodology to be applied during the project. In addition to the Inception note, the following activities must take place:

An inception meeting will be arranged by the NCPC-SA with the consultant. The aim of the meeting will be to discuss the proposed approach and methodology, as well as the broader framework to achieve the objectives and outputs of the project (i.e. approach, methodology, report format, programme, etc.)

Background documentation will be provided by the NCPC-SA to the Consultant in preparation for the introductory meeting .Pre-Assessment questionnaire to be forwarded to the company 2 weeks before the introductory meeting.

## 5. SCOPE OF WORKS

The NCPC-SA through the bidder will undertake an input resources such as: water, energy and materials assessment project for Tigerbrands Group 4 Sites (**Albany Bakeries Durban& Cape Town sites**), (**Jam, Langerberg and Ashton both in Cape Town**). The company is in the Agro-processing -Food Sector. The key objectives of the assessment linked to the company's environmental policy, is to reduce input resources such as: water, energy and materials usage across operations as well as limit the generation of solid and liquid waste and the impact of their disposal on the environment. The details of the site are as follows;

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| Company: | Tigerbrands<br>• Agro-processing Sector- Food manufacturing |
| Some of the key input resources such as: water, energy and materials consumers include: | • Manufacturing<br>• Boilers<br>• Cleaning/washing |
| Note: | • This is a beverage manufacturing company |
| Note: | • The facility has its own input resources such as: water, energy and materials treatment facilities |

The bidder is expected to make a comparison of current process practise against the best available technology and undertake detailed on-site investigations and data collection, to deliver the results in a suite of appropriate formats, including MS reports, MS worksheets, and concise MS presentations, as the required by the NCPC-SA.
It should be noted that tasks can also have a crosscutting character and hence descriptions should not be considered fixed to one specific task.

**Task 1: RECP practices and standards at the Site – Analyse all resources used on site including, input resources such as: water, energy and materials and their management practices with focus on how resource efficiency is typically approached in plants.**

The assessment should bring about international best practices, standards methodologies on doing industrial input resources such as: water, energy and materials efficiency at the sites. It must also help in providing international best practices or sector benchmarks instruments to address barriers to re efficiency by companies. The task should offer an analysis of the relative merits of approaches to how input resources efficiency is conducted at an industrial plant, and what standards and best practices can be applied to drive input resources management, especially in relation to resource efficiency objectives. The task should further analyse and measure how input resources are consumed/converted to products/wasted in the selected areas of the plant to improve efficiency; reflect on how can these areas/processes decrease input resources demand as well as identify opportunities for reuse of wasted resources. The analysis and measurements should work out solutions that can decrease input resources in the plants. In the same line of reasoning, the task should also consider and provide knowledge on which tools are the most cost effective (based on empirical evidence) to reduce input resources (i.e. increase resource efficiency), setting standards for input resources resource management and governance as well as business conduct, including performance indicators and monitoring systems, to ensure compliance with the environmental and participatory requirements for other companies to follow.

Considering the above-mentioned resource efficient approach to input resources, this task should further analyse the plant's opportunities for recycling of wasted resources such as: water, energy and materials and other waste treatment opportunities. The task should analyse effluent quality and consider the treatment of pH and organic pollutants (such as the reduction of COD, reduction of chemical oxygen demand (COD), etc.). The analysis of the input resources and the treatment process should provide alternate options, solutions for improvement of the existing treatment process and address areas that can improve wastewater quality, resulting in the improved quality of effluent discharged that reduces the liability, risk and impact on the environment.
The outcomes of this task will assist in lobbying to the management of the sites, to develop input resources efficiency management policies and methodologies that they can make use of to account for their input resources usage and minimize costs while driving sustainability. The study must assess the need for standardised management systems and protocols by the site, providing capacity building and assistance in adopting the following:

- International best practice in managing resources, and
- Input resources such as: water, energy and materials efficiency standards for equipment and processes.

The study must inform the site of reduce, recycle and reuse input resources such as: water, energy and materials in-process opportunities and effluent quality improvement.

**Task 2: Development of a report**

Based on the above tasks, develop a report based on a comparison of current process practise against the best available technology including a quantitative and qualitative analysis of the results. This will entail responding to different questions that are addressing issues of implementation of international best practices on input resources such as: water, energy and materials efficiency that will be tailor made to meet of the plant conditions that NCPC-SA is doing the assessment on. The report should further provide relevant implementable recommendations, identify saving options, quantify the implementation cost and saving benefits; and include preliminary implementation plans for recommendations. The final recommendations should also provide a plot outlining the cost of inaction or non-implementation vs implementation savings.

## 6. Deliverables

The expected activities and deliverables below are to be clearly incorporated in the task:

***Table 1: Tasks and Deliverables***

| Task | Activity | Deliverable |
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| **1** | **Input resources such as: water, energy and materials Efficiency Practices and Standards at the Sites** | |
| | **1.1 Planning and Kick-off Meeting**<br>• Meet with CSIR (skype/webinar/face-to-face), and<br>• Discuss project brief, finalise the assessment schedule and confirm any amendments to the scope. | Minutes of meeting (skype/webinar/face-to-face) |
| | **1.2 Inception Meeting**<br>• Meet company owners/managers on site to discuss the programme of the Input resources such as: water, energy and materials Assessment, discuss project deliverables, expectations and schedule.<br>• Explore the plant to gain solid understanding of the on-site operations and production processes.<br>• Identify and become familiar with input resources; and the wastage of these resources and their volumes and treatment processes.<br>• Review previous study/assessment/audit reports<br>• Complete a preliminary assessment with systems scoping tools and guidelines.<br>• Gather supplier specifications of the input resources and their treatment systems (from supply to discharge).<br>• Installation of measuring equipment (if required) | Inception meeting minutes and site visit (on-site at the bidder's company). |
| | **1.3 Detailed Assessment**<br>***1.3.1. Best Practice Study***<br>Do a comparison of current process practise against the best available technology referencing BREF Notes etc. | Best Practice Study and Detailed assessment (bidder's office |

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| | ***1.3.2. Site Visits & Data Gathering***<br><br>• Document the input resources in the reticulation network<br><br>• Take spot measurements or log data relating to input resources: their flow rates, temperatures, conductivity, possible leaks, volumes and quality etc.<br><br>• Record the company's input resources materials supply through key points in the distribution piping to end use applications.<br><br>• Record production output for same period as logged input resources such as: water, energy and materials use and discharge data.<br><br>• Confirm measurements to develop trends and fluctuating demand and generation curves, verify information, and collate data,<br><br>• Review operational controls and record consumption patterns,<br><br>• Review operator training,<br><br>• Note the operating parameters (Min and Max volume)<br><br>***1.3.3. Data Interpretation***<br><br>• Develop a materials balance of the site and quantify individual input resources and their end users. Evaluate significant users or discharge streams.<br><br>• Model the company's resources (layout) covering the supply, distribution and end use stages to establish the assessment baselines, system profiles and trends.<br><br>• Benchmark the company's resources use efficiency and wastewater treatment systems against best practice in the Food Processing industry standards, environmental, industrial and participatory requirements | |

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| | • Analysis of data from laboratory for final effluent compliance with the necessary by-laws, guidelines, environmental, industrial and participatory requirements; and investigate options for improvement of final effluent quality and reduce effluent discharge penalties and surcharges.<br>• Identify options that would reduce input consumption and quantify the potential reduction usage.<br>• Assess process wastewater water volumes and identify options for reuse of uncontaminated or treated input resources for non-sensitive activities/processes within the plant.<br>• Assess the opportunities and identify relevant improvement opportunities, | Discuss findings and targeted areas of focus for detailed assessment with the NCPC-SA. |
| | **1.4 Implementation recommendations**<br>• Determine what are the input resources use objectives and targets from: supply, usage, optimisation, treatment, etc.<br>• Continue developing input resources efficiency projects for saving options and quantify the implementation cost and saving benefits. Conduct research into process optimisation opportunities and current applicable trends in the dairy industry,<br>• Consider the most appropriate options bearing in mind and current and future input resources and waste treatment needs as well as environmental, industrial and municipal constraints/legislation.<br>• Investigate saving options and quantify the implementation cost and saving benefit | Detailed assessment findings and feasibility analysis conducted.<br>(Bidder's office and on-site at the company). |
| **2** | **Development of Reports** | |
| | **2.1 Draft report**<br>• Develop a detailed report will full details on how the assessment was done, be of best international standards with detailed list of references, highlighting areas of interest, best methodologies that the site can use to measure resource use | Detailed assessment report |

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| | efficiency, with recommendations that are implementable, preliminary implementation plans for recommendations, etc.<br>• Draft report, table recommendations and submit to NCPC-SA for review.<br>• Revise report, table recommendations and meet owners/management (on-site at the company) to present and explain the report findings.<br>• Address any queries that the company may have | (skype/webinar/ face-to-face, on-site at the company) |
| | **2.2 Finalization of reports**<br><br>• Correct and refine the Assessment report and conduct further research on various input resources saving, treatment and reuse; and performance improvement options identified (skype/webinar/ face-to-face) | Final detailed assessment report |
| | **2.3 Assessment Close Out**<br><br>• Present assessment findings and quantified improvement opportunities together with implementation plan guidelines for the company.<br>• Final Assessment report sign-off by company<br>• Strongly encourage the company to implement by emphasising on the benefits to be derived, and utilising the cost of inaction projection and support frameworks (incentive mechanisms, funding schemes, and NCPC-SA implementation support) as tools.<br>• Conduct two-hour awareness raising presentation for all staff that influence the input resources (on-site at the company) | Final assessment report sign-off, PowerPoint presentation and awareness raising presentation. |
| **This assessment project is expected to be completed by the end March, from the date of Inception (Task1.1) to Assessment Close-Out (Task2.3)** | | |

## 7. DURATION OF THE PROJECT AND CONTRACT

It is anticipated that the proposed project will be completed within 2 months of acceptance of the Inception Note.

## 8. EVALUATION CRITERIA

8.1. The evaluation process will be based on the 80/20 preference point system for the quotation.
8.2. Please take note that the submitted BBBEE Certificate should be SANAS Accredited or Sworn Affidavit with the dti template. Any Certificate which is not as mentioned will not be considered for evaluation( will equal to zero point)
8.3. **I**f one service provider wins more than one site, the next site will be awarded to the second runners-up according to the final score
8.4. No service provider will be awarded more than one company, unless the winning bidder is tax non-compliant and fails to sort it within seven days of notification.
8.5. Indicate CSD number (National Treasury Central Supplier Database) on quotation. If not registered yet on CSD, use www.csd.gov.za to register.
8.6. No order will be issued or no contract will be signed without a valid CSD number.

## 9. PRICING QUOTATION

9.1. 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.
9.2. Price should include additional cost elements such as freight, insurance until acceptance, duty where applicable, etc.
9.3. Payment will be according to the CSIR Payment Terms and Conditions.

## 10. OTHER TERMS AND CONDITIONS

10.1. The supplier shall under no circumstances offer, promise or make any gift, payment, loan, reward, inducement, benefit or other advantage, which may be construed as being made to solicit any favour, to any CSIR employee or its representatives.
10.2. Such an act shall constitute a material breach of the Agreement and the CSIR shall be entitled to terminate the Agreement forthwith, without prejudice to any of its rights.
10.3. A validity period of 90 days will apply to all quotations except where indicated differently on the quote.

**11. No goods and/or services should be delivered to the CSIR without an official CSIR Purchase order. Note: This is not a Purchase Order.**