



# Custom Existing Building Performance (EBP) Industrial Tool

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## REQUEST FOR PROPOSALS

Rev 0 – 09 July 2021

All proposals must be submitted in an electronic format  
by close of business (5pm) on Friday, 13 August 2021 to  
[jenni.lombard@gbcsa.org.za](mailto:jenni.lombard@gbcsa.org.za)



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# 1. Introduction

The Green Building Council South Africa (GBCSA) was established in September 2007, and the GBCSA’s purpose is to establish a built environment in which people and planet can thrive. The GBCSA is a membership based company that has three main functions; Advocacy, Training and Certification, and operates as a non-profit Section 21 company.

To this end, the GBCSA is developing and manages a suite of voluntary, market-based environmental rating tools for buildings, precincts and tenants, called Green Star, Energy Water Performance (EWP), Net Zero and EDGE. These are a set of green building standards that projects can be certified through by the GBCSA.

The GBCSA tools listed above enable the evaluation of a building, tenant fit-out or precinct’s environmental attributes in terms of its design, construction and operation. These rating tools are available on the GBCSA website at [www.gbcsa.org.za](http://www.gbcsa.org.za). Additional information about GBCSA, the GBCSA tools and the certification process is also available on this website.

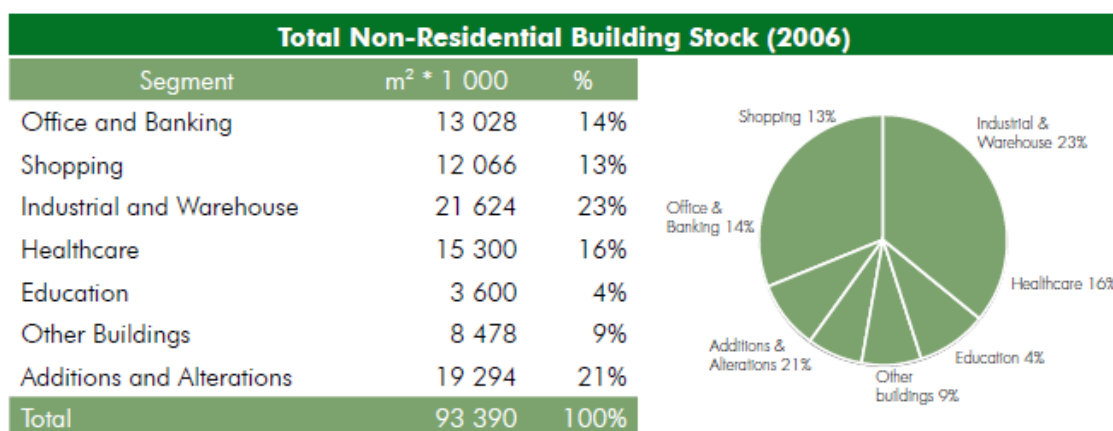
The GBCSA and its stakeholders have identified a gap in the existing building market and intend to expand the Green Star – EBP Tool to better address industrial buildings.

In December 2020 the GBCSA Board gave a directive that although positive progress had been made with Green Star – EBP Tool, the rating tool should be customised further for existing industrial buildings and this should be prioritised.

This was for two main reasons:

1. The majority of this building stock-type (industrial) within the existing building stock has not been able to be reached yet. And this is a significant portion of the existing building stock which has a great potential for decreasing energy and water consumption (and the consequent reduction of carbon emissions related to energy savings), as well as other environmental benefits resulting from better performing buildings.

Below is an extract from the cidb’s publication in 2009 ‘Greenhouse Gas Emissions Baselines and Reduction Potentials from Buildings in South Africa’ which highlight to some extent the reason for pursuing the Custom EBP Industrial adaptations for South Africa, which show the need to prioritise this sector within the existing building stock.



2. At that stage the world economy had begun to experience the now widely recognised financial crisis - many planned new developments have been delayed or shelved as owners and developers elected

rather to assess their current accommodation and in many cases retrofit their existing buildings. This Tool would enable this for a new building stock group.

The GBCSA is now soliciting proposals from a competent Service Provider to provide a PILOT Custom EBP Industrial Tool that holistically address the ongoing operational performance of existing industrial space types.

The main objectives of the Custom EBP Industrial Tool are:

1. First and foremost on ensuring that a suitable energy and water benchmark is found or developed for existing industrial buildings.  
This benchmark must allow buildings to rate their actual energy performance and water consumption against predetermined 'national average' benchmarks. Details of the energy and water benchmarking can be seen in the scope of works.
2. Review of the existing EBP Tool for nuanced updates that are better aligned with the relevant building-type requirements.

## 2 Companies eligible to submit a proposal

The GBCSA is looking for a Service Provider that has the following qualifications and experience:

Qualifications and experience	Description of qualifications and experience criteria	Yes/No
Green Star & Custom	1. ONE OR MORE CUSTOM INDUSTRIAL SUBMISSION AND CERTIFICATION. List these projects.  AP Status: 2. MORE THAN 3 YEARS' EXPERIENCE OF GREEN STAR EBP SUBMISSIONS AND CERTIFICATIONS. Provide AP certificate as proof of EBP AP qualification.	
Certification	3. CERTIFICATION SUBMISSION EXPERIENCE AND CUSTOMISATION EXPERIENCE. List least 3 EBP certified projects from last 3 years.  4. CUSTOM PROJECT OR ACTING AS A PEER REVIEWER FOR A CUSTOM TOOL. List least 2 EBP or New Build projects.  5. TECHNICAL OWNERSHIP OF ANY ENE-1 AND WAT-1 REPORTS WITHIN A SUBMISSION AND/OR PROVIDING INPUT INTO THE EBP ENERGY OR WATER CALCULATOR TOOL DEVELOPMENT TWGs. List projects involved with on this role.	
Tool Development	6. TECHNICAL TOOL DEVELOPMENT EXPERIENCE Provide information of rating tool development either as a lead technical consultant or as a member of the Technical Working Group (TWG).	
Understanding of Brief	7. Custom tool and stakeholder methodology	

Proposals must provide evidence of all of the above, including references and project examples. Please also see 'Submission Requirements' for company details required.

## 3 Scope of works

The appointed Service Provider will be expected to perform the following services as duties and responsibilities:

1. The Service Provider is expected to drive the custom tool process and address all project management and administrative needs to deliver the end product. The GBCSA only provides technical review input on any proposed customisations.
2. The Service Provider is expected to then incorporate all the feedback obtained from Energy & Water benchmark options, and focused reviews for a limited number of specific Credit & criteria updates where alternative standards needs to be reviewed, into an excel spreadsheet that provides visual track changes of credit customisations.  
The Service Provider must incorporate the final feedback into the excel spreadsheet with visual track changes and issue.

At the end of the Green Star – Custom process, a customised rating tool will be issued. As part of the development/customisation process. The Service Provider will be required to provide the following deliverables to the GBCSA for approval:

- A Green Star – EBP Custom Industrial Rating Tool spreadsheet
- A Green Star – EBP Custom Industrial Rating Tool documentation requirements
- Relevant Green Star – EBP Custom Industrial Rating Tool calculators, and calculator guides
- Summary of changes made for each credit in the tool as well as any changes made to calculators and guides. This must accompany each of the deliverables above.

3. The base tool for the customization is Existing Building Performance (EBP) v1 Tool.

As the existing EBP v1 Tool’s ELIGIBILITY CRITERION 2: BUILDING USE doesn’t allow industrial building types to be rated without an Eligibility Ruling this customisation process will enable project teams to avoid this step and use this new Custom EBP Industrial Tool.

Building Types to be considered for Custom EBP Industrial are:

Building Type	Classification of Occupation (SANS 10400-A)
- Industrial Warehouse	J1- High risk Storage
	J2- Moderate risk Storage
	J3- Low risk Storage
- Industrial Manufacture	D1- High risk Industrial
	D2- Moderate risk Industrial
	D3- Low risk Industrial

4. Target audience: Keep in mind that the target user for this Tool could be portfolio owners/managers as well as individual building owners with the intention that categories and credits should be looked at from these vantage points. Nevertheless, one Tool should be put forward for adapting.

It should also be kept in mind that the EBP Custom Industrial Rating Tool will need to account for different ownership models that are particular to the industrial building-type.

The GBCA NABERS idea of relating credits into “whole building” or “base building” credits that are targeted by owner and/or tenant can be considered, or the Service Provider is able to propose another way to overcome the concerns around different ownership models within the tool. Due to the nature of the industrial building-type very limited aspects are left in the control of the building owner who might be seeking the certification, and therefore the “base building” credits could be limited and then a lower star-rating would be available to the building owner if they pursued this option.

It should also be noted that process loads can be removed from ENE measurements. However, operational tenant ENE demands should be included in the buildings performance period ENE measurement calculation whether it is a “whole building” or “base building” rating. Therefore the relationship with the tenant and how tenant operations happen should be considered and how it impacts on the “base building” ’s energy use.

Potential definition of

- “base building”:
    - WASTE: measures only waste contractors managed & operated by the entity seeking the rating
    - IEQ & MAN: for the entity that are managing & operating the thermal services, air systems and building cleaning services.
- ENE& WAT: not relevant in an EBP rating of any sort, especially an industrial if the property owner is requesting the rating and has no control over even very limited common areas.

They will have no WAT or ENE information that is solely ‘theirs’; it will all be tenant controlled. And so there are no central services like heating or cooling, lifts and lobby lighting

- “whole building”:
  - ENE: this rates the base building and tenant/s occupied space excluding process energy use.
  - WAT: measures all of the water used in a building, including the base building and tenant occupied space.
  - WASTE: measures any waste that leaves from the building, where it can be reliably measured. This rating suits a building with highly engaged tenants who are working with building management.
  - IEQ & MAN: this is for organisations that both manage and occupy their space, or in some cases where a single tenant occupies the entirety of a building.

It would be beneficial if the Tool could still be kept on the Certification Engine, but this is not a top priority for the Service Provider. The focus should be on a viable Tool for the existing building industrial market.

#### 5. Custom Tool Process & Principals

The GBCSA & a Peer Reviewer will undertake an initial review of what the Service Provider proposed, and provides comment where any changes are required. The Service Provider will be required to submit a revised proposal according to the comments provided by the GBCSA & the Peer Reviewer. Once the Service Provider has adequately addressed the GBCSA comments, the GBCSA will approve the Custom Tool in principle.

This is not a major tool update that will allow for benchmarks to be adjusted, except for the Energy & Water Categories. The Custom tool scope is limited to the principles outlined below.

- **Leverage existing credit Library using 80/20 principal:** Any new custom tool must consist of at least approximately 80% existing GBCSA credits and credit criteria, which are to be taken from a mix of existing Green Star credits and credit criteria.
- **Limited changes likely, based on other GBCSA rating tools and/or based sound arguments:** The Service Provider is to propose any alterations to existing credits or any new credits, through soundly motivated arguments presented to the GBCSA – this can only be in the form of referencing other GBC rating tool credits and benchmarks already established in Green Star (SA and Australia), LEED, BREEAM, WELL & The Living Building Challenge. No completely new credit criteria and benchmarks can be developed, and no completely new credits can be added that don’t exist in other Green Star tools (SA or Australia).
- **The final un-weighted points available within the tool should remain within 5% of the total points within the Green Star – EBP v1 rating tool:** Deviations beyond this must be clearly motivated.

Approaches put forward for Customisations typically show relatively minor adaptations, mostly using credit criteria already developed in current Green Star tools. The adaptation (development) work will be undertaken by the Service Provider themselves as opposed to the GBCSA, and leaves the testing of the applicability of credit criteria with GBCSA after the tool has been developed, who will be most familiar with the specific technical requirements of the credit in application to the buildings. The testing of the Custom tool falls outside of the project scope.

Minor adaptation would typically involve the following:

- Minor edits to some credits to make them less prescriptive to specific building type
- Introduction of N/A clauses to exclude certain spaces from some credit criteria

- Review the number of points allocated
- Updating documentation requirements to better align with specific building type

Major adaptation would typically involve the following:

- As per 'minor' adaptation
- Editing the points allocation to credits
- Re-working of calculators, modelling protocols etc.

6. Industry/Consultant Peer Review: The proposed draft Custom Tool developed by the Service Provider will be Peer Reviewed by GBCSA and industry-based experts in a Peer Review, as well as the overall tool. Any proposed changes and additions will go back to the Service Provider for the Custom Tool to be adapted after which it will be approved.

The Peer Reviewer will consider the following:

- Do any proposed alterations to a credit detract from the aim of credit?
- Do any proposed alterations to a credit conflict with other parts of that credit?
- Do any proposed alterations to a credit make it more difficult for the assessment panel to verify compliance with credit criteria?
- In the case of new credits, is the information required for each new credit sufficient for the assessment panel to verify compliance with credit criteria?
- In the case of credits that were not included in the new rating tool, is the justification for them not to be included sufficient? If not, why not?

As mentioned in Main Objectives the existing EBP Tool is to be reviewed in two aspects:

7. Firstly, the suitable energy and water benchmark is found or developed for existing industrial buildings. The existing technical manual on PDF page 122-124 & PDF page 159-162 puts forward 3 x ways to motivate new benchmarks, namely:

- Benchmarks based on statistical data
- Benchmarks based on calculated or simulated performance
- Published National / International Standards

The Checklist, normalising & variance factors as well as other criteria set out here should be considered when proposing a new robust benchmark.

Ensure that the variance factors indicated in the normalising benchmark Table 4 must be taken into account by the chosen Benchmark where applicable. And that should any normalising be required for the benchmark you chose to put forward, such normalising must be conducted by a suitably qualified professional (Mechanical / Electrical Engineer or Technician with min 3 years relevant experience in Energy benchmarking, or a Measurement & Verification (M&V) professional).

A guideline of a suggested simplified normalising methodology is provided under 'Additional Guidance' in the Existing Building Performance v1 Technical Manual on PDF page 127 & page 165.

The GBCSA is able to facilitate that the Service Provider has access to existing industrial building data from at least 3 x Portfolio Owners in order for the Service Provider to establish a baseline for the various classification as identified in point 3 of the scope of works.

This data will most likely be in the form of a spreadsheet with the following:

- Energy and water data over 12 month consumption period
- Industrial type (warehouse, light industrial, etc.)
- Building size (GLA)
- Hours of occupation
- Number of occupants | Occupancy density  $m^2$  / occupant
- Other common denominator energy consumers (lifts, escalators, refrigeration etc.)



- HVAC system (mechanical, natural, mixed)
- Building address

8. Secondly, the review of the existing EBP Tool aimed at industrial-specific amendments.

While maintaining the holistic approach by addressing all current Green Star – EBP categories and credits the Service Provider should investigate if a credit or sub-credit, and/or the points associated with those credits should be adjusted, then these should be highlighted and proposed. Good motivation is required if adjustment is required to align with the building typology.

Consideration should be taken of all aspects:

- Aim of Credit;
- Credit Criteria;
- Documentation Requirements;
- Additional Guidance/Background; and
- References & Further Information

In some instances, credits (or points within credits) may be ‘not applicable’ to the building typology context. These instances would also require motivation.

*Service Provider to consider the following which has been gleaned from GBCA insight:*

- 1) *The transport category might not be relevant to this sector, as the location is chosen due to logistics, not staff movement = rewrite?*
- 2) *Points most target that related to EBP Industrial-specific Tool:*
  - *GS AP*
  - *Commissioning & Tuning (albeit expensive)*
  - *Building info*
  - *Metering and monitoring*
  - *Commitment to performance*
  - *Responsible construction practises*
  - *Indoor pollutants*
  - *Ene-1*
  - *Ene-2*
  - *Wat-1*
  - *Responsible / sustainable products*
  - *Legionella management / control*
- 3) *Clearer guidance for an Industrial-specific Tool:*  
*IEQ credits – Indoor air quality, lighting comfort, visual comfort, indoor pollutants, stormwater peak discharge, light pollution.*
- 4) *Credits not targeted in an Industrial-specific Tool:*  
*Operational waste (related to “whole building”), sustainable transport: reduced car park provision & walkable neighbourhoods, refrigerant impacts.*
- 5) *Key areas that could be addressed in an Industrial-specific Tool:*
  - *Industrial-specific approach: pathways and compliance requirements that reflect the asset classes.*
  - *Clearer guidance: making clear the intent of criteria in an industrial asset context.*

## 4 Working Hours Estimation

TASKS	TIME	ROLE REQUIRED
Service Provider kick-off meeting	2hr each (4hrs) / ½ day each	Snr Manager AP Consultant
Collect Data via GBCSA from Portfolio Owners	6hrs each (12hrs) / 1.5 day	Snr Manager AP Consultant
Tool adaptations	8hrs / 1 day 20hrs / 2.5 day	Snr Manager AP Consultant
Data Analysis and Normalisation	20hrs / 2.5 day 20hrs / 2.5 day	Snr Manager AP Consultant
Create documentation & calculators required for Tool customisation	8hrs / 1 day 40hrs / 5 day	Snr Manager AP Consultant
Progress update meetings & delivery of Tool (4 times)	3hr each (24hrs) / 3 day	Snr Manager AP Consultant
Service Provider coordinates meeting & provides meeting minutes	2hrs 6hrs = total 1 day	Snr Manager AP Consultant
Peer Review		
Service Provider adapts Tool per GBCSA & Peer Review suggestions	8hrs / 1day 16hrs / 2 day	Snr Manager AP Consultant
Service Provider presents final Tool	2hr each (4hrs) / ½ day	Snr Manager AP Consultant
<b>TOTAL</b>	<b>192hrs / 24 days</b>	

## 5 Programme

The draft project timeline with associated deliverables below:		
9 July-27 Aug 2021	Call for data from prospective Data Providers	7 weeks
16 July-13 Aug	Call for RFP issue to prospective Service Providers	4 weeks
27 Aug	Data received from Data Providers	
30 Aug-10 Sept	Data collated from Data Providers	2 weeks
13 Aug	<b>RFP response closure date</b>	
16 Aug-1 Sept	GBCSA review prospective Service Providers	2.5 weeks
1-3 Sept	GBCSA Technical Steering Committee (TSC) endorsement	
6 Sept	<b>Appointment of Service Provider</b>	
9 Sept	Service Provider kick-off meeting with GBCSA	
13 Sept-4 Oct	<b>Service Provider commence with Tool adaptations</b>	4 weeks
	<i>Data analytics and normalisation begins</i>	
	<i>Tool adaptations begin</i>	
4 Oct	GBCSA Tool Group detail progress update 1	
4 Oct-8 Nov	<b>Service Provider continue with Tool adaptations</b>	4 weeks

	<i>Data analytics and normalisation cont.</i>	
	<i>Tool adaptations cont.</i>	
2-4 Nov	<i>[GBCSA Green Building Convention Week]</i>	
8 Nov	GBCSA Tool Group detail progress update 2	
8-22 Nov	Service Provider continue with Tool adaptations	2 weeks
22 Nov	Service Provider delivers Tool	
23 Nov-14 Dec	GBCSA & Peer Review evaluate the suggested Custom EBP Industrial Tool	3 weeks
16 Dec-3 Jan	<i>[GBCSA Holiday break]</i>	
10-14 Jan 2022	GBCSA provide adaptations to Service Provider	1 week
17-25 Jan	Service Provider adapts Tool	1.5 week
26 Jan	Service Provider delivers Tool	
27 Jan-2 Feb	GBCSA & Peer Review appraise the adapted Custom EBP Industrial Tool	1 week
2 Feb	GBCSA recommendation to TSC	
3-4 Feb	GBCSA TSC endorsement	
7 Feb	Ready to launch PILOT Custom EBP Industrial Tool	

*(Require marketing material etc. to be run in conjunction to customisation process)*

(Short PILOT period of a few Project will be available this year to address any in-practise issues that might become evident.)

## 6 Submission Requirements

Proposals must include as a minimum the following:

- Description of resources to be allocated to deliver on the development of rating tool proposal, including an indication of which team members will be allocated which portions of work.
- Demonstrated understanding of the brief; and
- Proposed overall approach tool development, including:
  - Energy & Water benchmarking
  - Overall improvement of the tool for specific building typology
- Detailed fee quote
- Detailed cost breakdowns for scope of work (the price must be valid for 6 months from date of this RFP)
- Proposed payment schedule (cash flow), based on deliverables at progressive milestone stages of the project
- Company's experience on such projects
- Company's B-BBEE certificate
- Company's Tax Clearance Certificate
- Proposals should not be more than 25 pages

### Joint Venture

The GBCSA is not opposed to Joint Venture (JV) proposals from companies, however all proposal requirements given in this RFP need to be adhered to. In addition, where JV's between local and international firms are proposed, the South African company must lead and project manage the project, and as such should be adequately equipped and staffed to fulfil the requirements as laid out in this RFP.

Any variations or alternatives to the brief within this RFP must be proposed as a separate alternative offer within the proposal. The main offer in the proposal must be fully compliant with this RFP.

Each proposal must include the Service Providers nominated list of team members and their (brief) CV's, and which role they will play or service they will provide.

## **6 GBCSA Selection Criteria**

The GBCSA will assess the proposals against the following criteria:

- Relevant experience of the company and team, particularly previous industrial experience
- Understanding of brief and requirements
- Detailed fee quote
- Proposal and company Unique Selling Points
- Quality of proposal
- Financial standing of the company (as project payments will be made by the GBCSA on completion of deliverables)
- B-BEE status of the company and its approach to transformation

## **7 Submission Details and Selection Process**

**All proposals must be submitted in an electronic format by cob (5pm) on Friday, 13 August 2021**, to Jenni Lombard, at [jenni.lombard@gbcsa.org.za](mailto:jenni.lombard@gbcsa.org.za) (please make sure the submissions are not larger than 5Mb).

Once the GBCSA has reviewed all of the proposals, it will contact all candidates that have prepared competitive and conforming submissions within 3 weeks of receipt.

The final appointment is expected to be made by mid-September 2021, followed by signing of the GBCSA's standard appointment letter and acknowledgement that all content and material associated with the product is the exclusive (intellectual) property of the GBCSA.

The GBCSA will review the draft Custom Tool approach and approve in principle the go-ahead of the Custom development process. The GBCSA may suggest alterations to the quote put forward and reserves the right to approve or reject all proposed changes.