





EXISTING BUILDING
PERFORMANCE (EBP) RATING
WITH PERFORMANCE PERIODS
DURING 2020/COVID-TIME

January 2021 • Version 1





Purpose of this Document 3

Credit-types for Green Star – Existing Building Performance v1 3

Existing Building Performance (EBP) Rating Using its Performance

Period in 2020/COVID-time 4

Outcomes 5

Contacting the GBCSA 10

Considerations for an 'EBP COVID Eligibility Ruling' 10

# **REVISION OF THIS DOCUMENT**

Date Issued	Description	
January 2021	Version 1 issued	





# Purpose of this Document

This document highlights that existing buildings are still able to achieve ratings during periods of lower occupancy or building shut down due to COVID-conditions. And it outlines the guidance for how project teams should address the impacts of COVID-19 on a project and provides technical guidance for rating tools. This document will be continually reviewed and updated as the situation unfolds. The changelog outlines all the changes over time.

# Credit-types for Green Star - Existing Building Performance v1

Existing buildings are still able to achieve ratings during periods of lower occupancy or building shut down due to COVID-conditions.

Projects currently registered/registering for *Green Star – EBP* will be affected by both short and long term impacts of COVID-19, namely due to lower occupancy rates as well as partial or complete shutdown. As *Green Star – EBP* assesses the operational performance of the building during a performance period; the project has potential for an artificial improvement due to lower greenhouse gas emissions, potable water consumption and waste measurement. These potential 'improvements' in ratings may have compound affects when looking at portfolio ratings, projects entering recertification phases.

The following guidance aims to ensure that shutdowns do not artificially influence the rating, however, this cannot be guaranteed.

# Policy & Plan Type Credits for Green Star - EBP

The lower occupancy rates, or the shutdown of a building due to COVID-19 should have no measurable impact on the project's ability to target Policy & Plan Type credits at Initial or Re-certification periods, as they relate to the processes and policies that apply to the building.

The Technical Manual already provides provisions for the implementation of these any time during or within the performance period.

#### Survey Type Credits for Green Star - EBP

Some Survey Type credits such as Transport Surveys or Occupant Satisfaction surveys may be unable to be conducted due to their reliance on building occupants and for public health safety reasons.

For these Type of credits, surveys or audits see 'COVID-19 Impacts on Green Star & GBCSA Ratings\_Rev2', as well as the suggestions in the credits listed below.

## Measurement & Audit Type Credits for Green Star - EBP

These Measurement & Audit Type credits aren't limited to the Indoor Environment Quality (IEQ) category as there are also credits like MAN-3 – Maintenance Management & Tuning Testing, MAN-4 – Cleaning Audits & MAN-7: Learning Resources – Awareness Programmes that require measurement & audits.

However, the majority are in the IEQ category and rely on measurements of internal environment conditions throughout the performance period, under normal occupancy conditions. The Technical Manual already provide provisions for Certifications, allowing for the measurement of these conditions during or within the performance period.

The guidance for buildings affected by lower occupancy or shut down see 'COVID-19 Impacts on Green Star & GBCSA Ratings\_Rev2', as well as the suggestions in the credits listed below.



# Data Type Credits for Green Star - EBP

Data Type credits will be affected by a building having lower occupancy rates or being shut down due to COVID-19 implications. The impact for Greenhouse Gas Emissions, Potable Water and Operational Waste credits, and their outcomes will be affected by the occupancy of the building and the reliance on benchmarks. Further, these three credits account for 43% in the rating tool.

Due to potential lower occupancy rates or building shut down, it may be expected that the energy and water consumption and waste production will be lower than typical months, and result in the building having lower greenhouse gas emissions during the performance period.

For these credits Type see 'COVID-19 Impacts on Green Star & GBCSA Ratings\_Rev2', as well as the suggestions in the credits listed below.

# Building Type Credits for Green Star - EBP

Building Type credits at Initial or Re-certification periods rely on the physical attributes of the building and as such, the lower occupancy rates, or the shutdown of a building due to COVID-19 should have no measurable impact on the project's ability to target this credit Type.

# Existing Building Performance (EBP) Rating Using its Performance Period in 2020/COVID-time

If a project wishes to adapt any of the standard Existing Building Performance v1 criteria, it will be required to put through an 'EBP COVID Eligibility Ruling'. This must be requested via Zendesk before submitting Round 1, and should detail the proposed adjustments as set out in this document (or related to other credits with alternative but equivalent method that still meets the aim of the tool and withholds its integrity).

The GBCSA will need to approve this **'EBP COVID Eligibility Ruling'**, which the project team will need to upload into the General Folder with their Round 1 submission.

## 'EBP COVID Eligibility Ruling' should include:

- Clarification on performance periods being used for the project.
- Explanation of buildings occupancy levels during time period proposed to be rated.
- Clarification on proposed Building's (12) performance period & Energy & Water performance period.
- State if there are any major changes % occupied space or changes/upgrades to the building between the Energy & Water performance period & the building's performance period and normalise accordingly for these.
- Describe the project team's approach to surveys throughout Project submission.

Please submit all 'EBP COVID Eligibility Rulings' via Zendesk with a subject line: EBP COVID ELIGIBILITY.

## Outcomes



#### **ELIGIBILITY CRITERION 1: BUILDING CHARACTERISTICS**

Occupied [based on leased space] at min 70% occupancy throughout the performance period (vacancy rate below 30%). Applies to both performance periods: Building's (12) performance period & Energy & Water performance period – see definition in ELIGIBILITY CRITERION 4: TIMING OF CERTIFICATION)

#### Examples:

- For a commercial office building or retail centre, this would mean that on average 70% of the Gross Lettable Area is to be **let out** over the 12 month performance period.
- For transient occupancy buildings such as convention centres, on average 70% of the building must be operational (available for use) through the performance period.

#### NOTE for 'EBP COVID Eligibility Ruling'

The project team will need to demonstrate that both the ENE&WAT period (2019 if normalised data) and the buildings/certification performance period 2020/COVID period needs to have been occupied at 70% occupancy.

#### **ELIGIBILITY CRITERION 4: TIMING OF CERTIFICATION**

For certifications that fall within the COVID-time period 15 March (a national <u>state of disaster</u> declared), until such a time that the national state of disaster is lifted, the following definitions apply:

- Building's (12) performance period this includes the Policy & Plan Type credits, Survey Type credits,
   Measurement & Audit Type credits & the Building Type credits.
- Energy & Water performance period this includes the Data Type credits which can include waste.
   Projects should specify if they are including waste in their Building's (12) performance period or their Energy & Water performance period.

#### NOTE for 'EBP COVID Eligibility Ruling'

Project teams need to determine and provide evidence that their project was impacted by the lockdown levels – e.g. where a lockdown level allowed for 100% staff to return to an office but none or only a certain percentage returned, this can be taken into consideration. Similarly, where occupancy fluctuates because of positive COVID cases in a tenancy, this can be taken into consideration.

The following requirements apply in terms of timing of certification.

- Must be operational for min 12 months after final completion STILL APPLICABLE
- The building's 'performance period' (period under which the building's performance is measured) is to be 12 consecutive months.
- Energy & Water performance periods must end within 90 days of each other STILL APPLICABLE, however the Energy & Water performance period can be different to the Building's (12) performance period to guarantee that ELIGIBILITY CRITERION 1: BUILDING CHARACTERISTICS is met.
- The project must submit for certification within 90 days of the end of the building's 12 month performance period.

#### **ENE-1 & WAT-1**

Performance period



Performance period relates to the continuous time period during which a credit is measured or data is collected. For Green Star – Existing Building Performance certification, the performance period is normally the most recent 12-month period of operations preceding the submission for certification.

Normally the end of the performance period data-set should not be older than 3 months at the time of submission, however due to COVID-conditions the GBCSA is requiring that project teams normalise (e.g. by removing and replacing with data from the previous year - 2019) data where occupancy was affected for the period between 15 March (a national <u>state of disaster</u> declared) to when your tenant/building occupants due to their industry were allowed to return to work, or a national <u>state of disaster</u> lifted. (Please show **'EBP COVID Eligibility Ruling'** approval with evidence for your project route).

Note: the ENE & WAT data need not be from the exact same period, provided the point above applies. Due to COVID-conditions the GBCSA requires the normalised ENE & WAT data (e.g. by removing and replacing with data from the previous year - 2019).

Minimum requirement – collect metered energy consumption data for the last 12 months of the building's operation. See note above on COVID allowance for ENE & WAT data.

Energy consumption data for the past 12 months must have been collected in order for the minimum requirement criteria in this credit to be met. This data will be used to measure against industry benchmarks and quantify improvements in energy consumption during the performance period, for which points will be awarded. See note above on COVID allowance for ENE & WAT data.

#### NOTE for 'EBP COVID Eligibility Ruling'

Declare if there are any major changes % occupied space or changes/upgrades to the building between the Energy & Water performance period & the Building's performance period and normalise accordingly for these.

'New normal' for ENE & WAT could begin to be measured after national <u>state of disaster</u> lifted (currently scheduled for 15 February 2021).

# MAN-4: Green Cleaning Performance [3.5pts]

Green Cleaning Policy [1pt]

Develop a Green Cleaning Policy as per the Technical Manual guidelines with an Addendum to the Green Cleaning Policy for cleaning during COVID-19 response time.

- Describe cleaning practices during the COVID response time. (See Resources and Additional Information below)

Purchase of Green Cleaning Consumables [up to 2pts]

Up to 2 points can be awarded if consumables in the preceding year (2019) pre-COVID met the credit requirements in the Technical Manual, or where compliant green cleaning chemicals are being used on site they should be cross-referenced to the EPA's List N for efficacy against COVID-19.

Over and above the 0.5 points, which can be achieved for completing the cleaning consumables scorecard for top three cleaning consumables, 2 points can be achieved in one of two ways:

• Where compliant green cleaning chemicals were replaced with chemicals that do not meet the MAN-4 green cleaning requirements during the COVID-19 period, the green cleaning chemicals must have been in use (top three by cost) for at least 6 months prior to the start of the COVID-19 period and the project team is to provide conclusive evidence of this in form of purchase orders/invoices for these green cleaning chemicals during the period preceding the COVID-19 period. The project team is however encouraged to evaluate the cleaning chemicals used during the COVID-19 period in terms of the chemicals listed in List N to evaluate their efficacy against COVID-19.

Where MAN-4 compliant green cleaning consumables are being used during the Building's (12) performance period, the project team should also evaluate the efficacy of the products against COVID-19 by cross-checking the active ingredients against those that are on the "EPA List N Tool: COVID-19 Disinfectants" (click here) which the EPA expects to kill the coronavirus SARS-CoV-2 (COVID-19) when used according to the label directions. A list of those known by 14 December 2020 are

included below. Project teams are advised to review this list prior to deciding on the way forward.

Alternatively, project teams should look for the following active ingredients in their green cleaning chemicals, which use antimicrobial ingredients approved by the EPA's Design for the Environment Programme, which lists certain active ingredients found to be safer for human health and the environment. Those seven ingredients are citric acid, hydrogen peroxide, L-lactic acid, ethanol, isopropanol, peroxyacetic acid and sodium bisulfate (latter not on the List N)

#### Resources and Additional Information

Review available resources from:

#### GreenSeal

WELL - Strategies from the WELL Building Standard to Support in the Fight Against COVID-19

EPA - List N Tool: COVID-19 Disinfectants

USGBC - Maintaining Green Cleaning Practises During the COVID-19 Pandemic

USGBC - (LEED V4.1) Safety First: Cleaning and Disinfecting Your Space

#### EPA List N Tool: COVID-19 Disinfectants (Active Ingredients)

- 1,2-Hexanediol
- Ammonium bicarbonate
- Ammonium carbonate
- Chlorine dioxide
- Citric acid
- Dodecylbenzenesulfonic acid
- Ethanol (Ethyl Alcohol)
- Glutaraldehyde
- Glycolic acid
- Hydrochloric acid
- Hydrogen chloride
- Hydrogen peroxide
- Hypochlorous acid
- lodine
- Isopropanol (Isopropyl Alcohol)
- L-Lactic Acid
- Octanoic acid
- Peroxyacetic Acid (Peracetic Acid)
- Peroxyoctanoic acid
- Phenolic
- Potassium peroxymonosulfate
- Quaternary ammonium

- Silver
- Silver ion
- Sodium carbonate
- Sodium carbonate peroxyhydrate
- Sodium chloride
- Sodium chlorite
- Sodium dichloroisocyanurate
- Sodium dichloroisocyanurate dihydrate
- Sodium hypochlorite
- Tetraacetyl ethylenediamine
- Thymol
- Triethylene glycol



# IEQ-1: Indoor Air Quality (occupancy orientated) [5pts]

IAQ Manager [1pt] still valid particularly to be ready for occupants to come back to building. System performance [1pt] still valid particularly to be ready for occupants to come back to building. Indoor Air Quality Testing

- carbon monoxide (CO) levels [1pt]
- carbon dioxide (CO<sub>2</sub>) levels [2pts]

These audits would need to take place after the building returns to 'new normal' occupancy i.e. after national <u>state of disaster is lifted</u>.  $CO_2$  and CO levels are completely dependent on occupancy. If this is not possible and required occupancy was not obtained during COVID-timelines, then these points cannot be targeted.

#### NOTE for 'EBP COVID Eligibility Ruling'

If the project team does the audits within COVID-timelines they need to confirm that their project had the required occupancy when these audits were done.

# **IEQ-2: Lighting Comfort**

All points still able to be targeted as they are.

#### IEQ-3: Thermal Comfort

Mechanically or Naturally Ventilated Spaces.

- Measure temperature in occupied spaces at least once in the summer and once in the winter. [1pt]
   These measurements can only be taken with the relevant occupancy.
   Where a summer measurement was taken and a winter measurement could not be taken due to lockdown and reduced/no occupancy, consideration will be given to awarding 0.5 points.
- [1pt]
  - Assess via a high-level walk-through audit, any concerns related to radiant heat or draft (air speed) in occupied spaces. still valid particularly to be ready for occupants to come back to building.
  - Gather occupant feedback through a thermal comfort survey feedback form. Surveys can either:
    - 1) Match the 'population' to the amount of occupants present at building on survey day, provided this population is not less than 50% of design occupancy. [Confirmation to be provided of daily population size from Facilities/Building Manager]
    - 2) Or where this is not feasible, this can still be done remotely and delivered to all staff regardless of their location at the time. Standard sample sizes indicated in the Technical Manual will apply.

#### NOTE for 'EBP COVID Eligibility Ruling'

Please provide summary of which option is proposed to be used to target this credit.

# IEQ-4: Occupant Comfort Survey



Occupant Survey. still able to be targeted as it is. [1pt]
Occupant Satisfaction Levels - [1pt]
Surveys can either:

- 1) Match the 'population' to the amount of occupants present at building on survey day, provided this population is not less than 50% of design occupancy. [Confirmation to be provided of daily population size from Facilities/Building Manager]
- 2) Or where this is not feasible, this can still be done remotely and delivered to all staff regardless of their location at the time. Standard sample sizes indicated in the Technical Manual will apply.

#### NOTE for 'EBP COVID Eligibility Ruling'

Please provide evidence of which option is used to target this credit.

#### **IEQ-5: Acoustic Quality**

High-Level Acoustic Audit – [1pt]
The Audit must at a minimum consider:

- 1) Occupant Feedback (conduct survey) see IEQ-4.
- 2) Impact of Plant / Equipment Noise on Occupants. still able to be targeted as it is, as suitably qualified reviewer will know what to look for.
- 3) Impact of Plant / Equipment Noise on Surrounding Properties. still able to be targeted as it is.
- 4) Impact of External Noise Sources on Occupants. still able to be targeted as it is, as suitably qualified reviewer will know what to look for.
- 5) Noise Transference Between Tenancies (or functional areas in single-tenanted buildings) still able to be targeted as it is, as suitably qualified reviewer will know what to look for.
- Operational Guidelines still able to be targeted as it is. [1pt]
- Quantitative Acoustic Testing still able to be targeted as it is. [1pt]

## IEQ-6: Daylight and Views

All points still able to be targeted as they are.

#### TRA-1: Alternative Transportation

Transportation Modes Survey - [1pt] Surveys can either:

- 1) Match the 'population' to the amount of occupants present at building on survey day, provided this population is not less than 50% of design occupancy. [Confirmation to be provided of daily population size from Facilities/Building Manager]
- 2) Or where this is not feasible, this can still be done remotely and delivered to all staff regardless of their location at the time. Standard sample sizes indicated in the Technical Manual will apply.

## NOTE for 'EBP COVID Eligibility Ruling'

Please provide evidence of which option is used to target this credit.







# MAT-2: Solid Waste Management

- Waste Stream Audit of Ongoing Consumables and development of an Operational Waste and Materials Management Plan [1pt] (establish a baseline & identify waste streams for opportunities)
- Waste to Landfill Diversion: Operational waste and materials [up to 3pts]
  - Waste to landfill diversion remains applicable percentages are percentages.
  - Reduction of total waste volume (by at least 10%) for additional point only applicable if waste data extrapolated for periods of reduced occupancy impacted by lockdown levels as applicable.

#### NOTE for 'EBP COVID Eligibility Ruling'

Please provide evidence if targeting the additional point of Reduction of total waste volume of relevant occupancy.

# Contacting the GBCSA

The GBCSA are continually considering the impact of COVID-19 on our products and services. We will update this document accordingly as the South African lockdown conditions evolve.

If you have any queries in relation to COVID-19 and require clarity around alternative methods, criteria etc. Please submit a Zendesk Request, subject line: COVID-19, tool type noted.

If at any time you believe you are being negatively impacted by the current situation or the direction given in this document, and you would like to speak to someone, please contact:

Jenni Lombard Technical Manager Jenni.Lombard@gbcsa.org.za

# Considerations for an 'EBP COVID Eligibility Ruling'

This must be requested via Zendesk before submitting Round 1, and should detail the proposed adjustments as set out in this document (or related to other credits with alternative but equivalent method that still meets the aim of the Tool and withholds its integrity).

#### 'EBP COVID Eligibility Ruling' should include:

Subject line: EBP COVID ELIGIBILITY

- Clarification on the performance periods being used for the project.
- Clarification on proposed Building's (12) performance period & Energy & Water performance period.
  - Building's (12) performance period dates
  - Energy & Water performance period dates
  - State if there are any major changes % occupied space or changes/upgrades to the building between the Energy & Water performance period & the building's performance period and normalise accordingly for these.

#### **ELIGIBILITY CRITERION 4: TIMING OF CERTIFICATION**

Project teams need to determine and provide evidence that their project was impacted by the lockdown levels – e.g. where a lockdown level allowed for 100% staff to return to an office but none or only a certain percentage returned, this can be taken into consideration. Similarly, where occupancy fluctuates because of positive COVID cases in a tenancy, this can be taken into consideration.

Explanation of buildings occupancy levels during time period proposed to be rated.

# **ELIGIBILITY CRITERION 1: BUILDING CHARACTERISTICS**

The project team will need to demonstrate that both the ENE & WAT period (2019 if normalised data) and the buildings/certification performance period 2020/COVID period needs to have been occupied at 70% occupancy.

- If project team is targeting IEQ-1, please confirm that their project had the required occupancy when these audits were done.
- If project team is targeting IEQ-3, IEQ-4 or TRA-1, please provide a summary or evidence of which option is used to target this credit.
- Describe the project team's approach to surveys throughout project submission.
- If project team is targeting MAT-2, please provide evidence for the additional point of reduction of total waste volume of relevant occupancy.

