peak electricity demand

Credit 16

Individual Building  Portfolio

Project Name: [name]

Project Number: GS- [####]

|  |  |  |  |
| --- | --- | --- | --- |
| Total Points available: | 1 | Points claimed: | [#] |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | **Type** | **Criteria** | **Description** | **Claimed** |
| 16A | **Data** | **Peer group of comparable buildings** | **1 point** is available where a building demonstrates a 20% reduction in peak electricity demand against a baseline established from a peer group of like buildings. | [#] |
| 16B | **Data** | **Longitudinal benchmarking** | **1 point** is available where a building demonstrates a 20% reduction in peak electricity demand against a baseline established from historical data from the building seeking Green Star – Performance certification. | [#] |
| 16C | **Data** | **Preliminary Benchmark for Commercial Office Buildings** | **1 point** is available where a building demonstrates a 20% reduction in peak electricity demand against a preliminary baseline. | [#] |

# Project-specific technical questions

|  |  |
| --- | --- |
| There are no project-specific technical questions for this credit. |  |
| There are project-specific technical questions for this credit and all responses received from the GBCA are attached. |  |

## 16.0 Requirements for all pathways

|  |  |  |
| --- | --- | --- |
| Please select the compliance pathway used and complete the corresponding section below. | 16A Peer group of comparable buildings pathway.  ***Complete section 16A only.*** |  |
| 16B Historical baseline (longitudinal benchmarking) pathway.  ***Complete section 16B only.*** |  |
| 16C Preliminary benchmark for commercial office building pathway.  ***Complete section 16C only.*** |  |

## 16A peer group of comparable buildings

### 16A.1 Pathway selection

|  |  |
| --- | --- |
| Three years performance data from at least three comparable buildings is available for this building. | [Y/N] |

### 16A.2 Establishing a baseline

|  |  |  |
| --- | --- | --- |
| The average performer Peak Electricity Demand baseline has been based on three years performance data (from within the past 5 years of operation) from at least three comparable buildings. | | [Y/N] |
| Provide all assumptions or an explanation on how the average baseline was determined in the calculator. |  | |

### 16A.3 Data, calculations and points allocation

Show that all calculation inputs and data collected is in line with the Peak Electricity Demand Calculator and validate that the comparable buildings meet the compliance requirements for each of the items below, by referencing supporting evidence attached to the Submission Template.

| **Requirements** | **Supporting Evidence** | |
| --- | --- | --- |
| 16.0.3.1 Verify that all data collected is in line with the Peak Electricity Demand Calculator. | | |
| Provide a description of Building 1 used in the comparison, and any assumptions or adjustment variables used in the calculator for this building. |  | |
| Provide a description of Building 2 used in the comparison, and any assumptions or adjustment variables used in the calculator for this building. |  | |
| Provide a description of Building 3 used in the comparison and any assumptions or adjustment variables used in the calculator for this building. |  | |
| Describe any additional assumptions or explanation on how the average baseline was determined in the calculator. |  | |
| 16.0.3.2 A reduction on the average performer baseline of over 20% has been achieved for this building and calculated using the Peak Electricity Demand Calculator. | What is the Baseline Peak Electricity Demand of the determined average performer? | **[##]** |
| What is the Baseline Peak Electricity Demand of the building seeking certification? | **[##]** |
| What percentage improvement over the baseline is being claimed? | **[##]** |

Identify where this information can be found within the supporting documentation provided.

|  |  |
| --- | --- |
| **Supporting Documentation**  (Name / title / description of document) | **Reference**  (Page no. or section) |
| *Green Star – Performance* Peak Electricity Demand Calculator 16A | [####] |
| #### | [####] |

## 16B longitudinal benchmarking

### 16B.1 Pathway selection

|  |  |  |
| --- | --- | --- |
| 16B.1.1 Five concurrent years of historical performance data from within the past 10 years of operation is available for this building. | | [Y/N] |
| 16B.1.2 Justify why Pathway 16A was unsuitable for the building seeking Green Star – Performance certification. |  | |

### 16B.2 Establishing a baseline

|  |  |
| --- | --- |
| The average performer Peak Electricity Demand baseline has been based on five concurrent years of performance data (from within the past 10 years of operation) for the building seeking certification. | [Y/N] |

### 16B.3 Data, calculations and points allocation

Show that all calculator inputs and data collected is in line with the Peak Electricity Demand Calculator and describe how the calculations meet the compliance requirements for each of the items below, by referencing supporting evidence attached to the Submission Template.

| **Requirements** | **Supporting Evidence** | |
| --- | --- | --- |
| 16.0.3.1 Verify that all data collected is in line with the Peak Electricity Demand Calculator. | | |
| Provide all assumptions or adjustment variables used in the calculator for this building and an explanation on how the average baseline was determined in the calculator. |  | |
| 16.0.3.2 A reduction on the average performer baseline of over 20% has been achieved for this building and calculated using the Peak Electricity Demand Calculator. | What is the baseline Peak Electricity Demand of the building? | **[##]** |
| What is the baseline Peak Electricity Demand of the building seeking certification? | **[##]** |
| What percentage improvement over the baseline is being claimed? | **[##]** |

Identify where this information can be found within the supporting documentation provided.

|  |  |
| --- | --- |
| **Supporting Documentation**  (Name / title / description of document) | **Reference**  (Page no. or section) |
| *Green Star – Performance* Peak Electricity Demand Calculator 16B | [####] |
| #### | [####] |

### DISCUSSION

Outline any issues you would like to highlight and clarify with the Certified Assessor(s).

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|  |

## 16C Preliminary Benchmark for Commercial Office Buildings

### 16C.1 Pathway selection

|  |  |
| --- | --- |
| 16C.1.1 The asset being certified is a commercial office building, and is a base building only (not whole building). |  |
| 16C.1.2 The project team has submitted a technical question to the GBCA to confirm the use of this pathway prior to submitting for assessment. |  |

### 16C.2 Establishing a baseline

|  |  |
| --- | --- |
| The project team is using the preliminary benchmark of 50VA/m2 established by the GBCA. The GBCA notes that this benchmark may update when more information is gathered. |  |
| Calculation of an average performance baseline has been carried out using the *Peak Electricity Demand Calculator*. |  |

### 16C.3 Data, calculations and points allocation

Show that all calculator inputs and data collected is in line with the Peak Electricity Demand Calculator and describe how the calculations meet the compliance requirements for each of the items below, by referencing supporting evidence attached to the Submission Template.

| **Requirements** | **Supporting Evidence** | |
| --- | --- | --- |
| 16.0.3.1 Verify that all data collected is in line with the Peak Electricity Demand Calculator. | | |
| Provide all assumptions or adjustment variables used in the calculator for this building and an explanation on how the preliminary benchmark established by the GBCA has been improved upon in the calculator. |  | |
| 16.0.3.2 A reduction on the preliminary benchmark established by the GBCA of over 20% has been achieved for this building and calculated using the Peak Electricity Demand Calculator. | What is the baseline Peak Electricity Demand of the building seeking certification? | **[##]** |
| What percentage improvement over the preliminary benchmark is being claimed? | **[##]** |

Identify where this information can be found within the supporting documentation provided.

|  |  |
| --- | --- |
| **Supporting Documentation**  (Name / title / description of document) | **Reference**  (Page no. or section) |
| *Green Star – Performance* Peak Electricity Demand Calculator 16C | [####] |
| #### | [####] |

### DISCUSSION

Outline any issues you would like to highlight and clarify with the Certified Assessor(s).

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|  |

# DECLARATION

I confirm that the information provided in this document is truthful and accurate at the time of completion.

Provide author details, including name, position and email address:

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| --- |
|  |

Click here to enter a date.