

Green Star - Industrial PILOT Documentation Guidelines

Updated 11 November, 2008

This document provides guidance on the documentation required in support of claims for credits under the Green Star – Industrial PILOT rating tool. Compliance Requirements are subject to change, and the Green Building Council of Australia (GBCA) recommends that project teams regularly check for updates to this document on the GBCA website and subscribe to the GBCA newsletter.

Where stated below, projects must submit documentation per ‘the letter’ of the most recent version of the Green Star – Office Design v3 Technical Manual. For credits where benchmarks were changed to accommodate the Industrial sector, the benchmarks in the PILOT rating tool take precedent over benchmarks in the Green Star – Office Design v3 rating tool and Technical Manual.

For credits that are new to the PILOT rating tool, detailed guidelines are provided below. As the tool is in the PILOT stage, there may be some flexibility in interpreting these guidelines and Certified Assessors will provide the final assessment.

As with all Green Star tools, registered PILOT project teams may submit technical queries and/or Credit Interpretation Requests (CIRs) where required. Technical Clarifications (TCs) represent the GBCA response to technical queries, whilst CIRs should be submitted where PILOT project teams believe they can demonstrate that the aim of a credit can be achieved in an alternative method to the one described in the Technical Manual or Documentation Guidelines. Unlike projects registered for other Green Star tools, PILOT projects have an unlimited number of TCs and CIRs and no charges apply. Please refer to the Green Star – Office Design v3 Technical Manual and the GBCA website for more information about TCs and CIRs.

Project teams should note that only Design certification will be considered for the PILOT version of this tool. Projects wishing to achieve As Built certification will need to wait until Version 1 of the tool is released.

General

To be eligible for the precinct credits, the project must be part of a development containing a minimum of three buildings.

Users of these Documentation Guidelines should note that where the Compliance Requirements of Green Star – Office version 3 are referenced, area calculations for industrial facilities must be based on Gross Lettable Area (GLA), rather than Net Lettable Area (NLA). Office components of industrial facilities must use NLA.

Management

Man-1 ‘Green Star Accredited Professional’

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

Man-2 ‘Commissioning - Clauses’

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

Man-3 'Building Tuning'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

Man-4 'Independent Commissioning Agent'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

Man-5 'Building Users Guide'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

In addition to the Compliance Requirements stipulated in the Green Star – Office Design v3 Technical Manual the following is also required:

- Environmental Health and Mission Statement

This must be prepared by the Design team for use by the facility's management to complement the facility's functional design program. This statement shall be retained by the facility with the other design data to ensure that future alterations, additions, and program changes are consistent with the intent of the environmental health and mission statement.

Man-6 'Environmental Management'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

Man-7 'Waste Management'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

Man-8

This credit is not applicable to this tool.

Man-9

This credit is not applicable to this tool.

Man-10

This credit is not applicable to this tool.

Man-11

This credit is not applicable to this tool.

Man-12

This credit is not applicable to this tool.

Man-13

This credit is not applicable to this tool.

Man-14 'Operations Environmental Management'

The following documentation is required to demonstrate compliance:

- Letter of confirmation from the building operator (tenant/building owner) stating that an ISO 14001 Environmental Management System (EMS), including provisions for the management and operation of the building, will be implemented at the completion of the project.

OR

Where the building operator already has an ISO 14001 EMS to be adapted to all their facilities:

- Extracts from the EMS documentation clearly indicating how the EMS provides for management and operation of the building.

For the credit to be considered 'Not Applicable' the following is required to demonstrate compliance:

- Letter of confirmation from the building operator (tenant/building owner) that no lease agreement has been signed.

OR

- The credit Man-15 'Precinct Environmental Management' is achieved.

Man-15 'Precinct Environmental Management'

The following documentation is required to demonstrate compliance:

- Site Plan showing the location of the development within the precinct.
- Letter of confirmation from the precinct operator/owner stating that an ISO 14001 Environmental Management System (EMS), including provisions for the management and operation of the building, will be implemented for the whole precinct at the completion of the project.

OR

Where a precinct ISO 14001 EMS already exists:

- Extracts from the precinct ISO 14001 EMS demonstrating that the scope of the EMS addresses the management and operation of the new buildings within the precinct, allowing them to adhere to its provisions; and
- Letter of confirmation from the building operator (tenant/building owner) stating that the building will adhere to the provisions of the existing ISO 14001 EMS, including the management and operation of the entire precinct; and
- A copy of the ISO 14001 EMS certificate that is current and valid.

For the credit to be considered 'Not Applicable' the following documentation is required to demonstrate compliance:

- Letter of confirmation from the building developer/owner, that the project will not be part of a precinct development.
- Site Plan showing no other buildings adjacent to the development.

Indoor Environment Quality

IEQ-1 'Ventilation Rates'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

IEQ-2 'Air Change Effectiveness'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

IEQ-3 'Carbon Dioxide Monitoring and Control'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

IEQ-4 'Daylight'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

IEQ-5 'Thermal Comfort'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual under IEQ-9. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

IEQ-6 'Hazardous Materials'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual under IEQ-11. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

IEQ-7 'Internal Noise Levels'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual under IEQ-12. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

IEQ-8 'Volatile Organic Compounds'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual under IEQ-13. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

Note that to be considered 'low', Volatile Organic Compounds (VOCs) levels are to be in accordance with the grams per litre (g/l) content limits set out in the table provided in the Additional Guidance Section of IEQ-13 in the Green Star – Office Design v3 Technical Manual.

IEQ-9 'Formaldehyde Minimisation'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual under IEQ-14. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

Note that Formaldehyde emissions are to be in accordance with the content limits set out in the table provided in the Additional Guidance Section of IEQ-14 in the Green Star – Office Design v3 Technical Manual to comply.

IEQ-10 'Mould Prevention'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual under IEQ-15. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

IEQ-11 'Daylight Glare Control'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual under IEQ-5. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

IEQ-12 'High Frequency Ballasts'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual under IEQ-6. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

In addition to the Compliance Requirements stipulated in the Green Star – Office Design v3 Technical Manual the following documentation is required:

- Extracts from the specifications stipulating that the frequency of the ballasts, for fluorescent and for HID lamps (where installed), meet the Credit Criteria.

IEQ-13 'Electric Lighting Levels'

The following documentation is required to demonstrate compliance:

- Short report prepared by a suitable professional that describes how the Credit Criteria have been met by:
 - Listing each typical lighting layout;
 - Showing the GLA served by each layout;
 - Providing an area summary (for office areas) demonstrating that areas with maintained illuminance of no more than 400 Lux account for at least 95% of the GFA;
 - Providing illuminance calculations demonstrating:
 - The maximum lighting levels for each layout;
 - The working plane used; and
 - Compliance with the Credit Criteria.
- Extract(s) from the specification(s) where the maximum maintained illuminance lighting levels are stipulated.
- Tender reflected ceiling plan (RCP) drawings for each typical ceiling layout, marked up to demonstrate compliance with the Credit Criteria, with the location, type and expected maintained illuminance of all luminaires clearly indicated.
- Isometric lighting measurement drawings marked up to show the location and size of all areas where maintained illuminance levels exceed the above minimum requirements.

IEQ-14 'External Views'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual under IEQ-8. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

IEQ-15 'Individual Thermal Comfort Control'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual under IEQ-10. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

IEQ-16 'Tenant Exhaust Riser'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

IEQ-17

This credit is not applicable to this tool.

IEQ-18

This credit is not applicable to this tool.

IEQ-19 'Breakout Space'

The following documentation is required to demonstrate compliance:

- Short report prepared by a suitable professional that describes how the Credit Criteria have been met by:
 - Referencing the Tender Drawings to describe the location(s) of the breakout space(s), the identification of these places and how they can be accessed by visitors and staff;
 - Referencing the area of the breakout space(s) and demonstrating how the requirement for a minimum of 30% of the total area is landscaped has been achieved;
 - Referencing the GLA for the building(s) and describing how the 1% of the nominated area and minimum of 40m² benchmark has been achieved;
- Tender drawing(s) of the building(s) showing:
 - The locations and size(s) of the breakout space(s) and the access path(s) for visitors and staff;
 - The landscaping provisions within the breakout space(s);
 - The shading equipment; and
 - Wind protection equipment.
- Extract(s) from the specification(s) outlining:
 - The design criteria for the breakout space(s), including signage, landscaping, equipment for shading and wind protection;
 - The signage and landscaping to be provided within these areas;
 - Equipment for shading; and
 - Equipment for wind protection.
- Drawing(s) of the breakout space(s) showing:
 - The location of non-smoking signs within the breakout space(s).

Where an indoor space is used as a breakout space, the report should also include:

- Reference to the Daylight Modelling Report, including confirmation that the Daylight Factor within the space (when modelled in accordance with the Compliance Requirements of the Green Star – Office Design V3 Credit IEQ-4 Daylight) meets or exceeds a Daylight Factor of 3.5%.

OR

- Short report prepared by a relevant project team member and supported by the design and referencing drawings. The report shall be prepared in accordance with the methodology described in the Green Star – Office Design v3 Credit IEQ-4 Daylight confirming that the Daylight Factor within the space meets or exceeds the benchmark within the Green Star – Industrial PILOT tool.

Energy

Ene-Conditional Requirement & Ene-1 'Greenhouse Gas Emissions'

The Certified Assessor(s) will not deem the Conditional Requirement to be met unless:

- The project's predicted greenhouse gas emissions meet the Green Star – Industrial PILOT greenhouse gas emissions benchmark. The Green Star – Industrial PILOT Energy Calculator determines the benchmark for each project based on the composition of space types within the building.

- Energy modelling for the project was undertaken using the methodology as detailed in the Green Star – Industrial PILOT Energy Calculator Guide document current at the time of project registration or more recent.

The methodology used to establish the Conditional Requirement for each space type is detailed in the Green Star – Industrial PILOT Energy Calculator Standard Practice Benchmark document.

Note: The Green Star – Industrial PILOT ‘Energy Calculator Guide’ and the Green Star – Industrial PILOT ‘Energy Calculator Standard Practice Benchmark’ document are available from the Industrial page of the Rating Tools section of the GBCA website.

The following documentation is required to demonstrate compliance:

- A copy of the completed Green Star – Industrial PILOT Energy Calculator;
- An energy modelling report describing the modelling process for the base building in accordance with the Green Star – Industrial PILOT Energy Calculator Guide; and
- Extracts from the design brief, specification(s) and design drawings to clearly demonstrate that all modelling data used in the energy simulations reflects the current design.

Ene-2 ‘Energy Sub-metering’

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

For the purposes of this credit, primary functional areas include, but are not limited to:

- Warehouses
- Office/Administrative Spaces
- Workshops
- Laboratories
- Showrooms
- Clean rooms
- Manufacturing/Process spaces

Where a functional area is less than 200m² it may be grouped with an adjacent functional area providing the total area being metered does not exceed 1000m².

Ene-3 ‘Peak Energy Demand Reduction’

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual under Ene-5. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

Ene-4 ‘Lighting Zoning’

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

In addition to the Compliance Requirements stipulated in the Green Star – Office Design v3 Technical Manual the following is also required for the industrial component:

- An extract of specification showing that an automated lighting control system or addressable lighting system, including occupant detection and daylight adjustment system is provided.

Ene-5

This credit is not applicable to this tool.

Ene-6 'Car Park Ventilation'

For the purposes of this credit 'passive supply' to an enclosed car park is considered to be a car park area that is ventilated by air supplied by natural means (e.g. ventilated with open louvers to naturally supply air). 'Passive exhaust' to an enclosed car park is considered to be a car park that is exhausted without the need for mechanical equipment (e.g. ventilated with open louvers to naturally exhaust air).

The following documentation is required to demonstrate compliance:

- Short report prepared by a mechanical engineer that describes how the Credit Criteria have been met by:
 - Detailing the areas of all types of car parking provided for the development;
 - Clearly demonstrating that the claimed area of the car park meets the Credit Criteria; and
 - Referencing the documentation provided to demonstrate compliance for the relevant mode of car park ventilation.

Where the additional point is claimed,

- Describing how the carbon monoxide sensors have been located to adequately detect carbon monoxide and how the system responds to changes in the carbon monoxide level.
- Extract(s) from the specification(s):
 - For mechanically ventilated car parks, a copy of the section of the mechanical specification clearly describing the operation of the mechanical system, including the passive supply and/or exhaust.

Where the additional point is claimed,

- Stating that the car park mechanical ventilation fans include variable-speed drives controlled by carbon monoxide monitoring.
- Tender drawings:
 - Showing all areas of car parking provided for the development under assessment;
 - For mechanically ventilated car park areas, drawings clearly illustrating the proposed location of the passive supply or exhaust provisions; and
 - For naturally ventilated car park areas, drawings showing openings and ventilation inlets and outlets.
- Schedule of ventilation openings:
 - Identifying all spaces within the car park providing their sizes in terms of the nominated area;
 - Identifying naturally ventilated areas; and
 - Listing the sizes of the ventilation openings.

Where the additional point is claimed,

- Drawings or schematics of the design showing the proposed location of carbon monoxide sensors.

Where the credit is claimed as 'Not Applicable',

- Confirmation from the architect confirming that all car parking provision for the development is single storey open-air car parking; and
- Tender drawings showing all areas of car parking provided for the development under assessment; and for the development under assessment.

Ene-7

This credit is not applicable to this tool.

Ene-8

This credit is not applicable to this tool.

Ene-9

This credit is not applicable to this tool.

Ene-10 'Precinct Energy Systems'

The Certified Assessors will not award points unless it can be demonstrated that the use of a decentralised energy system that is shared amongst a number of buildings provides a net benefit to the development over having such decentralised energy system servicing only one building.

Examples of net benefit include, but are not limited to:

A building under assessment with a high electricity demand and minimal hot water demand (building A), adjacent to a building with high hot water demand (building B).

In this example if a co-generation plant was providing electricity and hot water to building A, with excess hot water going to building B, this could be considered to be a net benefit.

The following documentation is required to demonstrate compliance:

- Short report prepared by a relevant project team member and supported by the design describing how the Credit Criteria has been met by:
 - Describing the system and how the design meets the Credit Criteria;
 - Describing how the system supplies 50% of the total energy to the base building;
 - Describing the energy type in use (i.e. renewable, biomass or natural gas): and
 - Referencing specification and drawings below.
- Extract from the contract between the supplier of the system and the building owner stipulating when the system is to be installed and the scope of the system. The contract must demonstrate that the buildings stated will be connected to the system.
- Extract(s) from the specification(s) showing the de-centralised shared energy system and demonstrating compliance with the Credit Criteria.
- Tender drawings marked up to demonstrate the location of the centralised energy system and connection to multiple buildings.

For the credit to be deemed Not Applicable:

- Site Plan marked up to show that:
 - A single building is being assessed; or
 - The precinct contains two or fewer buildings; or
 - No buildings are within 200m of the project building(s) (for refurbishment projects only).

Transport

Tra-1 'Provision of Car Parking'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

Tra-2 'Fuel Efficient Transport'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

Tra-3 'Cyclist Facilities'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

For the purposes of this credit, the number of staff in the building must be calculated using the prescribed staff densities provided in Table 1 below for each of the given space types. The space types and areas used for this credit must match those used in the Green Star – Industrial PILOT Energy Calculator.

The number of required cyclist facilities for staff must then be based on the percentage required in the Credit Criteria as expressed in the formulas below. Where calculations result in fractions please note that the number of required bicycle facilities must always be rounded up to the nearest whole number.

For the additional point, the number of bicycle facilities must be calculated using the prescribed bicycle visitor density values provided in Table 2 below. This means that bicycle facilities do not have to be provided for all potential visitors to the facilities but, rather the prescribed proportion of them based on each building's area. For 1 point: 5% x Area of each space type x staff density, i.e.:

$$5\% \times ((m^2_{\text{warehouse}} \times \text{staff density}_{\text{warehouse}}) + (m^2_{\text{office}} \times \text{staff density}_{\text{office}}) + (m^2_{\text{workshop}} \times \text{staff density}_{\text{workshop}}) + (m^2_{\text{Laboratory}} \times \text{staff density}_{\text{Laboratory}}) + (m^2_{\text{Showroom}} \times \text{staff density}_{\text{Showroom}}) + (m^2_{\text{Clean Room}} \times \text{staff density}_{\text{Clean Room}}) + (m^2_{\text{Manufacturing/Process}} \times \text{staff density}_{\text{Manufacturing/Process}}))$$

For 2 points: 10% x Area of each space type x staff density, i.e:

$$10\% \times ((m^2_{\text{warehouse}} \times \text{staff density}_{\text{warehouse}}) + (m^2_{\text{office}} \times \text{staff density}_{\text{office}}) + (m^2_{\text{workshop}} \times \text{staff density}_{\text{workshop}}) + (m^2_{\text{Laboratory}} \times \text{staff density}_{\text{Laboratory}}) + (m^2_{\text{Showroom}} \times \text{staff density}_{\text{Showroom}}) + (m^2_{\text{Clean Room}} \times \text{staff density}_{\text{Clean Room}}) + (m^2_{\text{Manufacturing/Process}} \times \text{staff density}_{\text{Manufacturing/Process}}))$$

Table 1. Staff density values

Space type	Staff density (person/m ²)
Warehouse	1/100
Office	1/15
Workshop	1/30
Laboratory	1/10
Showroom	1/10
Clean room	1/10
Manufacturing/Process	1/5

For the additional point: 100% x m² x bicycle visitor density, i.e.:

$$100\% \times ((m^2_{\text{warehouse}} \times \text{bicycle visitor density}_{\text{warehouse}}) + (m^2_{\text{office}} \times \text{bicycle visitor density}_{\text{office}}) + (m^2_{\text{workshop}} \times \text{bicycle visitor density}_{\text{workshop}}) + (m^2_{\text{Laboratory}} \times \text{bicycle visitor density}_{\text{Laboratory}}) + (m^2_{\text{Showroom}} \times \text{bicycle visitor density}_{\text{Showroom}}) + (m^2_{\text{Clean Room}} \times \text{bicycle visitor density}_{\text{Clean Room}}) + (m^2_{\text{Manufacturing/Process}} \times \text{bicycle visitor density}_{\text{Manufacturing/Process}}))$$

Table 2. Bicycle Visitor density values

Space type	Bicycle visitor density (person/m ²)
Warehouse	1/5000
Office	1/750
Workshop	1/1500
Laboratory	1/500
Showroom	1/500

Clean room	1/1000
Manufacturing/Process	1/250

Example

A project includes the following building areas:

Warehouse: 8,000 m ²
Office: 1,000 m ²
Showroom: 500 m ²
Manufacturing Area: 500 m ²

Calculations for the first two points are as follows:

$$0.05 \times ((8,000 \times 1/100) + (1,000 \times 1/15) + (500 \times 1/10) + (500 \times 1/5)) = \mathbf{14.83}$$

$$0.10 \times ((8,000 \times 1/100) + (1,000 \times 1/15) + (500 \times 1/10) + (5,000 \times 1/5)) = \mathbf{29.66}$$

Since figures should be rounded up, the project must then provide 15 bicycle facilities for staff to achieve 1 point and 30 bicycle facilities to achieve 2 points.

Calculations for the additional point are as follows:

$$1 \times ((8,000 \times 1/5,000) + (1,000 \times 1/750) + (500 \times 1/500) + (500 \times 1/250)) = \mathbf{5.93}$$

Since figures should be rounded up, the project must then provide 6 bicycle facilities for visitors to achieve the additional point.

Projects may wish to submit a Credit Interpretation Request (CIR) where it can be demonstrated that the number of staff in the facility differ significantly from the figures suggested above, on the condition that the aim of the credit is met.

Tra-4 'Commuting Public Transport'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

Tra-5 'Trip Reduction Mixed Use'

The Certified Assessor(s) will not award the point unless it is clearly demonstrated that the following is met:

- Dedicated pathways and cycle lanes must be safe and accessible and provided for both pedestrians and cyclists, in line with AP-11.13/95 Guide to Traffic Engineering Practice – Pedestrians and AP-11.14/99 Guide to Traffic Engineering Practice – Bicycles.
- Cycle lanes must provide direct access to any cycle racks provided on the site.
- Foot and cycle paths on site must be connected to foot and cycle paths off the site providing access to amenities with dedicated crossings where these paths cross vehicular routes (e.g. pathway, corridor, overpass, or underpass).
- Adequate lighting to foot and cycle paths must be provided in accordance with AS1158 – Lighting for roads and public spaces, Part 3.1 Pedestrian area lighting.

In order for the credit to be awarded, the following documentation is required to demonstrate compliance:

- Short report prepared by a suitable professional that describes how the Credit Criteria have been met by:
 - Stating how the development satisfies the Credit Criteria, referencing the evidence provided.
 - Detailing how the dedicated pathways and cycle lanes have been designed in line with AP-11.13/95 and AP-11.14/99.

- Detailing the lighting provision to foot and cycle paths, demonstrating that it is in accordance with the requirements of AS1158. Part 3.1.
- A copy of the site plan in context of the surrounding area showing the location of the local amenities and the distance from the site to each amenity (via a dedicated safe and accessible connection for pedestrians and cyclists); and
- Evidence of the location and type of each local amenity, such as White Pages address listing.

Examples of amenities for the purpose of this credit include but are not limited to:

- Convenience Store
- Pharmacy
- Post Office
- Restaurant or Food & Beverage outlet
- Gym, Pool or sport facilities
- Hospital, Clinic or Health Centre
- Childcare Centre
- Newsagency
- Retail Centre
- Cinema or Theatre
- Supermarket or Grocery Store
- Library
- ATM
- Community Centre
- School

Projects are invited to submit a CIR if it is considered that other amenities should be added to this list.

Tra-6

This credit is not applicable to this tool.

Tra-7 'Proximity to Major Cargo Transport Services'

In order for the credit to be awarded, the following documentation is required to demonstrate compliance:

- A copy of a map of the area showing the location of the relevant major cargo services (airport, seaport, railway or freeway) and the distance from the site to the main entrance of the assessed facilities.
- Confirmation from the owner or operator of the transport facility that the airport, seaport or railway has cargo facilities

Note: The building or the precinct's (if applicable and as defined in the General section of these guidelines) main entrance should be:

- Within a 10 km radius of cargo services; and
- Within a 5 km radius of a major freeway entrance

Water

Wat-1 'Occupant Amenity Water'

For the first five points, projects must use the Green Star – Industrial PILOT Potable Water Calculator and submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual.

Note that run-off coefficients for the ‘Simple Rainwater Calculator’ section of the tool’s Potable Water Calculator are as below:

Steel Roof (> 30° Pitch)	0.9
Non-Absorbent Roof (> 30° Pitch)	0.9
Flat Non-Absorbent Roof (< 30° Pitch)	0.8
Flat Gravel or Turf Roof (< 30° Pitch)	0.8 – 0.15 evaporation/transpiration = 0.65

For the additional three points the following documentation is required to demonstrate compliance:

- Short report prepared by a relevant project team member and supported by the design describing how the Credit Criteria has been met by:
 - Describing the system and how the design meets the Credit Criteria;
 - Describing how the system supplies non-potable water to the base building;
 - Describing the potential volume of the water captured: and
 - Referencing specification and drawings.

For the credit to be considered ‘Not Applicable’ the following documentation is required to demonstrate compliance:

- Letter of confirmation from the building developer/owner, that the project will not be part of a precinct development.
- Site plan showing no other buildings adjacent to the development.

Wat-2 ‘Water Meters’

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

Wat-3 ‘Landscape Irrigation’

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

Wat-4 ‘Heat Rejection Water’

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

Wat-5 ‘Fire System Water Consumption’

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

Materials

Mat-1 ‘Recycling Waste Storage’

For the first two points, projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

For the two additional points to be awarded the following documentation is required, as a minimum, to demonstrate compliance:

- Letter of confirmation from the tenant or building owner stating that a compliant 'Waste and Recycling Management Plan' will be implemented for the industrial precinct.
- Short report prepared by a waste auditor that describes how the Credit Criteria have been met by:
 - Identifying how the design complies with the access requirements of NSW document 'Policy for Waste Minimisation in New Developments' (2004): Section A, points A-12 through A-17, and Section C, points C14 and C15 and referencing drawings;
 - Identifying how the design provides adequately sized waste storage to handle the recyclable waste streams required by this credit;
 - Providing and appended profile of the projected waste generation produced by a waste auditor;
 - Describing the provision for recycled waste collection;
 - Providing calculations that demonstrate that the area provided is adequately sized to handle the recyclable waste streams specified in the Compliance Requirements based on:
 - Projected waste generated (from appended waste profile); and
 - Collection frequency for each recyclable waste stream.
- Tender drawings marked up to show:
 - The location of the shared waste storage facility space with dimensions indicated. The shared waste storage area must be sufficiently sized to accommodate the storage equipment for the following recyclables as a minimum:
 - Cardboard;
 - Glass;
 - Plastics – Mixed Containers;
 - Plastics – Soft Plastics;
 - Metals;
 - Used cooking oil; and
 - Organic (compost) materials
 - The dock layout, for all docks, showing equipment location, labelled with recyclable type; and
 - The route connecting the building to the waste storage facilities, indicating level changes and where goods lifts are being provided.
- Tender schematic hydraulic drawings clearly indicating:
 - The location of a grey or black water treatment plant;
 - The supply of treated grey or black water; and
 - The location of wash down equipment.

For the two additional points to be considered 'Not Applicable' the following documentation is required to demonstrate compliance:

- Letter of confirmation from the building developer/owner, that the project will not be part of a precinct development.
- Site plan showing no other buildings adjacent to the development.

Mat-2 'Building Reuse'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

Mat-3 'Recycled Content & Reused Products and Materials'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

For the two additional points to be awarded the following documentation is also required, as a minimum, to demonstrate compliance:

- Extract(s) from specification(s) where the post-consumer recycled content of the re-used products and materials in the project as well as the associated quantities of these materials are stipulated;

Reused products and materials must either be pre-existing in the building or purchased from a second hand retailer.

Mat-4 'Concrete'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual under Mat-5. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

Mat-5 'Steel'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual under Mat-6. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

Mat-6 'PVC Minimisation'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual under Mat-7. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

Mat-7 'Sustainable Timber'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual under Mat-8. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

Mat-8

This credit is not applicable to this tool

Mat-9 'Dematerialisation'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual under Mat-10. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

Mat-10 'Shell & Core' or 'Integrated Fitout'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual under Mat-10. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

Land Use & Ecology

Eco- 'Conditional Requirement'

AMENDED CONDITIONAL REQUIREMENT IN ABEYANCE

Whilst ongoing items are finalised any changes to this conditional requirement are in abeyance, therefore the existing Eco-Conditional Requirement should be adhered to, to ensure eligibility. For further details please refer to the GBCA [website](#).

Eco-1 'Topsoil'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

Eco-2 'Reuse of Land'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

Eco-3 'Reclaimed Contaminated Land'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

Eco-4 'Change of Ecological Value'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

Emissions

Emi-1 'Refrigerant ODP'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

Emi-2 'Refrigerant GWP'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

Emi-3 'Refrigerant Leaks'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual. Note that points remain as per the Green Star – Industrial PILOT rating tool.

Emi-4 'Insulant ODP'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

Emi-5 'Watercourse Pollution'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

Emi-6 'Discharge to Sewer'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual. Note that points remain as per the Green Star – Industrial PILOT rating tool.

Emi-7 'Light Pollution'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

Emi-8 'Legionella'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual. Note that the points available and the Credit Criteria remain as per the Green Star – Industrial PILOT rating tool.

Emi-9

This credit is not applicable to this tool

Emi-10

This credit is not applicable to this tool

Emi-11 'Noise Pollution'

In order for the credit to be awarded, the following documentation must be provided:

- Short report prepared by a qualified acoustic consultant that describes how the Credit Criteria have been met by detailing:
 - All relevant noise sources and noise levels; and
 - The design features required to demonstrate that the Credit Criteria have been achieved
- Tender drawings for all areas:
 - Indicating any noise control features included within the design

Innovation

Inn-1 'Innovative Strategies & Technologies'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual.

Inn-2 'Exceeding Green Star Benchmarks'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual.

Inn-3 'Environmental Design Initiatives'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual.