

**NIECON LIFE SCIENCES CENTRE
CORNER OF HILL & FRAZER STREETS
SOUTHPORT, QLD 4215**



**ECOLOGICALLY SUSTAINABLE DEVELOPMENT
REPORT – DEVELOPMENT APPROVAL**

Prepared for:

NIECON

MDA CONSULTING ENGINEERS

Level 4, 46 Cavill Avenue,

SURFERS PARADISE QLD 4217

Telephone: (07) 5592 0222

Facsimile: (07) 5592 0279

E-mail: info@mdaengineers.com.au

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Author	Brian Koenig – Ecologically Sustainable Design Professional
Signed	
Verified	Maurice Duffill – Director
Signed	

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1 EXECUTIVE SUMMARY

This report provides an overview of the ecologically sustainable design and development initiatives that are proposed for the Niecon Life Sciences Centre project. These initiatives will demonstrate the project's mission to be a leader in sustainability within its local urban environment.

The sustainability initiatives identified within this report are targeted to reduce the overall environmental and social impact of the proposed development. This report covers the following key green building sustainability categories:

- Management
- Indoor Environment Quality
- Energy
- Transport
- Water
- Materials
- Land Use & Ecology
- Emissions

2 INTRODUCTION

2.1 Background

This Ecologically Sustainable Development (ESD) Report has been prepared at the instruction of Niecon for the proposed Niecon Life Sciences Centre located on the corner of Hill & Frazer Streets, Southport. The Niecon Life Sciences Centre is located in the Parklands development that was originally established to accommodate the participants during the 2018 Commonwealth Games. After the Games, the Parklands was integrated into the neighbouring Gold Coast Health and Knowledge Precinct. As the Niecon Life Sciences Centre will be part of the Parklands Priority Development Area Development Scheme, the project will be implementing measures to satisfy all sustainability requirements.

This report outlines the sustainable design initiatives that are included in the proposed project. The sustainable design initiatives are based on the Green Building Council of Australia (GBCA) Green Star environmental rating system. It is the design team's intent, led by Niecon, to achieve a minimum 5-star Green Star Design & As-Built v1.3 Rating. Refer to Appendix A for the Green Star Scorecard outlining the ESD initiatives to be targeted. As the Green Star Rating is achieved by achieving a nominated amount of 'points', the ESD initiatives outlined within the scorecard may change over time yet still maintaining the requirement to achieve the 5-star Green Star Rating.

2.2 Project Overview

Proposed Property	Niecon Life Sciences Centre
Address	Site 6B - Corner of Hill & Frazer Streets, Southport, QLD 4215
Building Class	Class 6, 7a and 9a
NCC Climate Zone	2
Council Authority	City of Gold Coast
Number of Storeys	10 Storeys
Car Parking	Lower Ground, Upper Ground and Level 3
Area/Space Definition	Retail – 60m ² , Healthcare – 11780m ²
Total Site Area	2000m ²
Developer	Niecon
Builder	TBC

Architect	Kris Kowalski Architects
ESD Professional	Brian Koenig – MDA Consulting Engineers

2.3 Sustainability Objectives

The built environment provides the largest contribution to Australia's greenhouse gas emissions, consumes around a third of all potable water, and generates about 40 per cent of the country's waste. It is Niecon's commitment to minimise the impact of the proposed project on the local environment and community. Niecon aims to do this by; addressing energy efficiency; ensuring climatically responsive design is used throughout; and including appropriate solar orientation, shading, cross ventilation, natural lighting and other passive cooling techniques are part of the Niecon Life Sciences Centre's design and operation.

2.4 GBCA Green Star

The Green Building Council of Australia (GBCA) Green Star program is an internationally recognised rating system setting the standard for healthy, resilient, positive buildings and places. Developed for the Australian environment, Green Star has certified thousands of sustainable fitouts, buildings, homes and communities right across the country. Green Star works to:

- Reduce the impact of climate change,
- Enhancing our health and quality of life,
- Restoring and protecting our planet's biodiversity and ecosystems,
- Driving resiliency in buildings, fitouts, and communities, and
- Contributing to market transformation and a sustainable economy.

3 SUSTAINABLE DESIGN INITIATIVES

3.1 Management

The Green Star – Design & As Built 'Management' category encourages and rewards the adoption of practices and processes that enable and support best practice sustainability outcomes throughout the different phases of a project's design, construction and its ongoing operation.

Objectives

- To encourage and recognise commissioning, handover and tuning initiatives that ensure all building services operate to their full potential and as designed.
- To encourage and recognise projects that are resilient to the impacts of a changing climate and natural disasters.
- To recognise the development and provision of building information that facilitates operator and user understanding of a building's systems, their operation and maintenance requirements, and their environmental targets, to enable optimised performance.
- To recognise practices that encourage building owners, building occupants and facilities management teams to set targets and monitor environmental performance in a collaborative way.
- To recognise the implementation of effective energy and water metering and monitoring systems.
- To reward responsible construction practices that manage environmental impacts, enhance staff health and wellbeing, and improve sustainability knowledge on site.
- To recognise projects that implement waste management plans that facilitate the re-use, upcycling, or conversion of waste into energy, and stewardship of items to reduce the quantity of outgoing waste.

3.2 Indoor Environment Quality

The Green Star – Design & As Built 'Indoor Environment Quality' category aims to encourage and reward initiatives that enhance the comfort and well-being of occupants. The credits within this category address issues such as air quality, thermal comfort and acoustic comfort.

Objectives

- To recognise projects that provide high indoor air quality to occupants.
- To reward projects that provide appropriate and comfortable acoustic conditions for occupants.
- To encourage and recognise well-lit spaces that provide a high degree of comfort to users.
- To recognise the delivery of well-lit spaces that provide high levels of visual comfort to building occupants.
- To recognise projects that safeguard occupant health through the reduction in internal air pollutant levels.
- To recognise projects that achieve high levels of thermal comfort.

3.3 Energy

The Green Star - Design & As Built 'Energy' category aims to reward projects that are designed and constructed to reduce their overall operational energy consumption below that of a comparable standard-practice building. Such reductions are directly related to reduced greenhouse gas emissions, lower overall energy demand as well as reductions in operating costs for building owners and occupants.

Objectives

- To encourage reduction of greenhouse gas (GHG) emissions associated through energy efficiency measures and to drive uptake of renewable energy.
- The implementation of well-designed systems, aimed at lower operating emissions.
- The selection of high efficiency equipment over less energy efficient alternatives.
- The implementation of well-designed and zoned lighting that is energy efficient and appropriate for a space's use.
- The use of efficient supplementary equipment.
- The procurement of zero carbon and low carbon energy sources.
- With the inclusion of a large solar PV array, peak energy demand will be reduced by approximately 30 per cent and greenhouse gas production by 20 per cent.

3.4 Transport

The Green Star - Design & As Built 'Transport' category aims to reward projects that facilitate a reduction of the dependency of occupants on private car use as an important means of reducing overall greenhouse gas emissions. The use of motor vehicles directly contributes to climate change in two ways - through the high amounts of energy required to produce cars and build and maintain supporting road transport infrastructure and services; and the direct emissions that result from car operations.

Objectives

- To recognise projects that implement strategies to increase the accessibility of the site by public transport.
- To reward projects where there is a reduction of car parking for the proposed building when compared to the maximum local planning allowance.
- To encourage projects where parking spaces and/or dedicated infrastructure is provided to support the uptake of low-emission vehicles. This project will include the provision of 3-4 EV rapid charging stations and provision for EV trickle charging stations at a rate of approximately 25-30 per cent of total parking bays.
- To reward projects where bicycle parking and associated facilities are provided to a proportion of the building's occupants and visitors.
- To reward projects that are located in close proximity to community amenities.
- To reduce the reliance on motor vehicles and promote walking, cycling and use of public transport.

3.5 Water

The Green Star – Design & As Built 'Water' category aims to encourage and reward initiatives that reduce the consumption of potable water through measures such as the incorporation of water efficient fixtures and building systems and water re-use.

Objectives

- To encourage projects to install sanitary fixtures with high WELS efficiency ratings.
- To reward projects when a rainwater tank is installed to collect and reuse rainwater.
- To reward projects where no potable water is used for irrigation or drip irrigation with moisture sensors are employed.
- Reduce potable water usage by at least 20 per cent compared to a similar building.

3.6 Materials

The Green Star – Design & As Built 'Materials' category aims to address the consumption of resources within a building construction context, by encouraging the selection of lower-impact materials. The category also encourages absolute reductions in the amount of waste generated or the recycling of as much of the waste generated as possible.

Objectives

- To encourage and recognise the reduction in greenhouse gas emissions and resource use associated with the use of concrete.
- To encourage environmentally responsible production, design and fabrication methods that result in efficient use of steel as a building material.
- To reward projects that include building materials that are responsibly sourced or have a sustainable supply chain.
- To encourage sustainability and transparency in product specification.
- To reward projects that reduce construction waste going to landfill by reusing or recycling building materials. It is anticipated a minimum 90 per cent will be diverted from landfill.

3.7 Land Use & Ecology

The Green Star - Design & As Built 'Land Use & Ecology' category aims to reduce the negative impacts on a sites' ecological value as a result of urban development and reward projects that minimise harm and enhance the quality of local ecology.

Objectives

- To reward projects that improve the ecological value of their site.

- To reward projects that choose to develop sites that have limited ecological value, that reuse previously developed land, and that remediate contaminated land.
- To encourage and recognise projects that reduce the contribution of the project site to the 'heat island effect'.
- The development will aim to protect or enhance the health and sustainability of natural systems and encourage biodiversity.

3.8 Emissions

The Green Star - Design & As Built 'Emissions' category aims to assess the environmental impacts of 'point source' pollution generated by projects. Negative impacts commonly associated with buildings include damage to the environment through refrigerant leaks or disturbances to native animals and their migratory patterns as a result of light pollution.

Objectives

- To reward projects that minimise peak storm water outflows from the site and reduce pollutants entering the public stormwater.
- To reward projects that minimise light pollution.
- To recognise projects that implement systems to minimise the impacts associated with harmful microbes in building cooling systems.
- To encourage practices that minimise the environmental impacts of refrigeration and air conditioning equipment.

4 CONCLUSION

This Ecologically Sustainable Development (ESD) Report provides an overview of the sustainable design initiatives that are proposed to be implemented at Niecon Life Sciences Centre. These sustainable design initiatives have been identified under the GBCA Green Star Rating system. If these initiatives are employed as proposed, the project will achieve a minimum 5-star Green Star Design & As-Built v1.3 Rating.

5 APPENDIX A – GBCA Green Star DA Scorecard

Green Star - Design & As Built Scorecard

Project:	NECON LIFE SCIENCES CENTRE	Round:	1
Targeted Rating:	5 Star (60-74 points)		

Green Star and the Green Star certification logo are trade marks owned by Green Building Council of Australia (GBCA). They constitute valuable intellectual property and are protected by law. Any unauthorised use of the trade marks constitutes infringement of our rights and may result in legal action. Projects that are not registered cannot refer to Green Star. Once registered, a project may state they are targeting Green Star. Once certified, a project may promote their certification, and use the certification logo. The Marketing Rules and Style Guide sets out the rules for the use of the trade marks and provides marketing ideas to help promote your Green Star project.

CATEGORY / CREDIT		AIM OF THE CREDIT / SELECTION	CODE	CREDIT CRITERIA	POINTS AVAILABLE	POINTS TARGETED			NA AVAILABLE
Management					14				
Green Star Accredited Professional	To recognise the appointment and active involvement of a Green Star Accredited Professional in order to ensure that the rating tool is applied effectively and as intended.	1.1	Accredited Professional		1			1	-
		2.0	Environmental Performance Targets		-	Complies			-
		2.1	Services and Maintainability Review		1	1			-
		2.2	Building Commissioning		1			0	-
Commissioning and Tuning	To encourage and recognise commissioning, handover and tuning initiatives that ensure all building services operate to their full potential.	2.3	Building Systems Tuning		1	1		-	
		2.4	Independent Commissioning Agent		1		1	0	-
Adaptation and Resilience		To encourage and recognise projects that are resilient to the impacts of a changing climate and natural disasters.	3.1	Implementation of a Climate Adaptation Plan	2			2	-
Building Information		To recognise the development and provision of building information that facilitates understanding of a building's systems, operation and maintenance requirements, and environmental targets to enable the optimised performance.	4.1	Building Information	1	1			-
Commitment to Performance	To recognise practices that encourage building owners, building occupants and facilities management teams to set targets and monitor environmental performance in a collaborative way.	5.1	Environmental Building Performance		1	1		-	
		5.2	End of Life Waste Performance	A. Contractual Agreements	1		1	-	
Metering and Monitoring	To recognise the implementation of effective energy and water metering and monitoring systems.	6.0	Metering		-	Complies		-	
		6.1	Monitoring Systems		1	1		-	
Responsible Construction Practices	To reward projects that use best practice formal environmental management procedures during construction.	7.0	Environmental Management Plan		-	Complies		-	
		7.1	Environmental Management System		1	1		-	
		7.2	High Quality Staff Support		1	1		-	
Operational Waste	B, Prescriptive Pathway	8A	Performance Pathway: Specialist Plan		0			-	
		8B	Prescriptive Pathway: Facilities		1	1		-	
Total					14	9	2	2	

Indoor Environment Quality									
Indoor Air Quality	To recognise projects that provide high air quality to occupants.	9.1	Ventilation System Attributes						17
		9.2	Provision of Outdoor Air	A. Comparison to Industry Standards					
				B. Performance Based Approach					
		C. Natural Ventilation							
		9.3	Exhaust or Elimination of Pollutants	A. Removing the Source of Pollutants					
Acoustic Comfort	To reward projects that provide appropriate and comfortable acoustic conditions for occupants.	10.1	Internal Noise Levels	B. Exhausting the Pollutants Directly to the Outside					
		10.2	Reverberation						
		10.3	Acoustic Separation	A. Sound Reduction					

Ventilation systems, to be designed to ASHRAE Standard 62.1, designed for ease of maintenance and cleaning, and ductwork to be cleaned prior to occupation.	50% increase on AS1688 outside air requirements, Or an appropriate CO2 monitoring and design system.	Provision for exhausting pollutants to meet GS parameters	Ambient noise levels to meet GS parameters. Qualified acoustic consultant to measure and document.	Reverberation time (persistent prolonged reflections of sound) to meet GS parameters. Qualified acoustic consultant to measure and document.	Noise transmission between enclosed spaces to meet GS parameters. Qualified acoustic consultant to measure and document.
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	11.0	Minimum Lighting Comfort		Complies	Complies				-
Lighting Comfort	11.1	General Illuminance and Glare 11.1.1 General Illuminance 11.1.2 Glare Reduction	A. Non Residential Spaces						
			B. Residential Spaces						
			A. Prescriptive Method 1 B. Prescriptive Method 2 C. Performance Method	1.00	1		0.00		
	11.2	Surface Illuminance	A. Prescriptive Method						
			B. Performance Method	1.00		1	0.00		
			C. Residential Spaces (Prescriptive Method)						
	11.3	Localised Lighting Control							
				1.00	1		0.00		
	Visual Comfort	12.0	Glare Reduction	A. Fixed Shading Devices B. Shading Devices C. Daylight Glare Model	Complies				-
12.1		Daylight	A. Prescriptive Methodology B. Compliance Using Daylight Factor C. Compliance Using Daylight Autonomy	2.00	1		0.0		
				1.00		1	0.0		
Indoor Pollutants		13.1	Paints, Adhesives and Sealants 13.1.1 Paints, Adhesives and Sealants 13.1.2 Carpets	A. Product Certification B. Laboratory Testing C. No Paints, Adhesives or Sealants	1.00	1		0.00	
	13.2	Engineered Wood Products	A. Product Certification B. Laboratory Testing	1.00	1		0.00		
			A. Naturally Ventilated Spaces B. Mechanically Ventilated Spaces						
Thermal Comfort	14.1	Thermal Comfort	C. Residential Spaces	1.00		1	0.0		
	14.2	Advanced Thermal Comfort	A. Naturally Ventilated Spaces B. Mechanically Ventilated Spaces C. Residential Spaces D. Industrial Spaces	1.00		0	0.0		
Total				17	7	5	2		

Energy					22				
Greenhouse Gas Emissions	A, Prescriptive Pathway	15A.0	Conditional Requirement, Prescriptive Pathway	-	Complies				-
		15A.1	Building Envelope	1	1				-
		15A.2	Wall-Glazing Construction and Retail Display Glazing	1	1				-
		15A.3	Lighting	1,00	1				0,00
		15A.4	Ventilation and Air Conditioning	1	1				-
		15A.5	Domestic Hot Water	1	1				-
		15A.6	Transition Plan	1					-
		15A.7	Fuel Switching	1	1				-
		15A.8	On-Site Storage	1					-
		15A.9	Vertical Transportation	1	1				-
15A.10	On-Site Renewables	5	5				-		
Peak Electricity Demand Reduction	A, Prescriptive Pathway	16A	Prescriptive Pathway, On-Site Energy Generation	1	1			-	
		16B	Modelled Performance Pathway, Reference Building	0				-	
Total		11			11	0	0	0	

Transport					10
	17A	Performance Pathway		0	-
	17B.1	Access by Public Transport		3	-
	17B.2	Reduced Car Parking Provision		1	0.0

Sustainable Transport	B, Prescriptive Pathway	12							0.0
		17B.3 Low Emission Vehicle Infrastructure	B, Parking for Electric Vehicles	1	1				
		17B.4 Active Transport Facilities		1		1			-
		17B.5 Walkable Neighbourhoods	A, Proximity to Amenities	1	1				-
		17C.1 Access by Public Transport		0					-
		17C.2 Reduced Car Parking Provision		0					-
		17C.3 Low Emission Vehicle Infrastructure	A, Parking for Fuel-Efficient Vehicles B, Parking for Electric Vehicles C, Parking for Car Share Vehicles D, No Parking Spaces Provided E, Low Emission Facility Transport	0					-
		17C.4 Active Transport Facilities		0					-
		17C.5 Proximity to Amenities		0					-
Total				7	3	1	0		

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Water		12							0.0
		16A Potable Water - Performance Pathway		0					
		18B.1 Sanitary Fixture Efficiency		1	1				-
		18B.2 Rainwater Reuse		1			1		-
		18B.3 Heat Rejection		2		2	0		-
		18B.4 Landscape Irrigation		1	1				0.0
		18B.5 Fire Protection System Test Water		1	1				0.0
Total				6	3	2	1		

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Materials		14							0.0
		19A.1 Comparative Life Cycle Assessment		0					
		19A.2 Additional Reporting	A, Additional Life Cycle Impact Reporting B, Material Selection Improvement C, Construction Process Improvement D, LCA Design Review	0					-
		19B.1 Concrete	19B.1.1 Portland Cement Reduction 19B.1.2 Water Reduction 19B.1.3 Aggregates Reduction	2 0.5 0.5		2 0.5 0.5			-
		19B.2 Steel	A, Reduced Mass of Steel Framing	1					-
		19B.3 Building Reuse	19B.3.1 Façade Reuse 19B.3.2 Structure Reuse	2 2			0 0		-
		19B.4 Structural Timber	19B.4.0 Responsible Sourcing 19B.4.1 Reduced Embodied Impacts	- 3					-
		19C.1 Concrete	19C.1.1 Portland Cement Reduction 19C.1.2 Water Reduction	0 0					-
		19C.2 Steel	19C.2.1 Reduced Mass of Steel Framing 19C.2.2 Reduced Mass of Steel Reinforcement	0 0					-
		19C.3 Building Reuse	19C.3.1 Façade Reuse 19C.3.2 Structure Reuse	0 0					-
		19C.4 Structural Timber	19B.4.0 Responsible Sourcing 19B.4.1 Reduced Embodied Impacts	- 0					-
Life Cycle Impacts		B, Prescriptive Pathway - Life Cycle Impacts	20.1.0 Responsible Steel Maker	-	Complies				-

Steel maker to have ISO 14001 EMS certificates and be a member of World Steel Association's Climate Action Programme.

Responsible Building Materials	To reward projects that include materials that are responsibly sourced or have a sustainable supply chain.	20.1	Structural and Reinforcing Steel	A. Responsible Steel Fabricator	1.00	1				0.0
		20.2	Timber	A. Certified Timber B. Reused Timber	1.00	1				0.0
		20.3	Permanent Formwork, Pipes, Flooring, Blinds and Cables	A. Products That Do Not Contain PVC	1.00	1				0.0
Sustainable Products	To encourage sustainability and transparency in product specification.	21.1	Product Transparency and Sustainability	A. Reused Products B. Recycled Content Products C. Environmental Product Declarations (EPDs) D. Third Party Certification E. Stewardship Programs	3					1
		22.0	Reporting Accuracy	A. Compliance Verification Summary	-	Complies				-
		22A	Fixed Benchmark		0					-
Construction and Demolition Waste	B. Percentage Benchmark	22B	Percentage Benchmark		1	1				-
		Total			12	4	3	1		

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Land Use & Ecology										
Ecological Value	To reward projects that improve the ecological value of their site.	23.0	Endangered, Threatened or Vulnerable Species	A. EPBC	-	Complies				-
		23.1	Ecological Value		3	1		1		-
Sustainable Sites	To reward projects that choose to develop sites that have limited ecological value, re-use previously developed land and remediate contaminate land.	24.0	Conditional Requirement		-	Complies				-
		24.1	Reuse of Land	A. Previously Developed Land	1			1		-
		24.2	Contamination and Hazardous Materials	A. Site Contamination B. Hazardous Materials	1			0		0.0
Heat Island Effect	To encourage and recognise projects that reduce the contribution of the project site to the heat island effect.	25.1	Heat Island Effect Reduction		1	1				-
Total					6	2	0	2		

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Emissions										
Stormwater	To reward projects that minimise peak stormwater flows and reduce pollutants entering public sewer infrastructure.	26.1	Stormwater Peak Discharge		1		1			-
		26.2	Stormwater Pollution Targets		1		1			-
Light Pollution	To reward projects that minimise light pollution.	27.0	Light Pollution to Neighbouring Bodies		-	Complies				-
		27.1	Light Pollution to Night Sky	A. Control of Upward Light Output Ratio (ULOR)	1	1				-
		28A	Natural Ventilation		0					-
Microbial Control: Legionella Impacts from Cooling Systems	C. Water-Based Heat Rejection Systems	28B	Water/ase Heat Rejection Systems		0					-
		28C	Water-Based Heat Rejection Systems		1		0	1		-
Refrigerant Impacts	To encourage operational practices that minimise the environmental impacts of refrigeration equipment.	29.1	Refrigerants Impacts	A. Calculating 'SDEI	1			1		-
Total					5	1	2	2		

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Innovation										
Innovative Technology or Process	The project meets the aims of an existing credit using a technology or process that is considered innovative in Australia or the world.	30A	Innovative Technology or Process				1			-
		30B	Market Transformation							-

Steel fabricator to be member of AS3's Environmental Sustainability Charter Group, Or	Steel fabricator to be member of AS3's Environmental Sustainability Charter Group, Or
Reinforcing steel products manufactured using Polymer Injection Technology required.	Reinforcing steel products manufactured using Polymer Injection Technology required.
All timber used on site to be certified by a forest certification scheme. This includes formwork, temporary installations, flooring, joinery, window furnishings, furniture...	All timber used on site to be certified by a forest certification scheme. This includes formwork, temporary installations, flooring, joinery, window furnishings, furniture...
All PVC used in project to meet Best Practice Guidelines as specified by GS parameters.	All PVC used in project to meet Best Practice Guidelines as specified by GS parameters.
Total contract value to be calculated.	Total contract value to be calculated.
3% / 6% / 9% compliant products weighed to GS sustainability factor.	3% / 6% / 9% compliant products weighed to GS sustainability factor.
Products include furniture, internal partitions, joinery, flooring, wallcladding coverings, cladding, masonry, glazing, timber, steel, concrete.	Products include furniture, internal partitions, joinery, flooring, wallcladding coverings, cladding, masonry, glazing, timber, steel, concrete.
Green Star Construction and Demolition Waste Reporting Criteria compliance required.	Green Star Construction and Demolition Waste Reporting Criteria compliance required.
Minimum 90% of waste generated during construction and demolition to be diverted from landfill.	Minimum 90% of waste generated during construction and demolition to be diverted from landfill.
1 innovation point if waste to landfill meets fixed benchmark of 5kg per 1m2 GFA.	1 innovation point if waste to landfill meets fixed benchmark of 5kg per 1m2 GFA.

No critically endangered, endangered or vulnerable species were present on the site at time of purchase.	No critically endangered, endangered or vulnerable species were present on the site at time of purchase.
Ecological value of site to increase from time of purchase as per GS parameters.	Ecological value of site to increase from time of purchase as per GS parameters.
Was at least 75% of the site previously developed land at the date of purchase? Parklands showgrounds?	Was at least 75% of the site previously developed land at the date of purchase? Parklands showgrounds?
Clear site at time of purchase? No hazardous materials?	Clear site at time of purchase? No hazardous materials?
75% of total project site areas to comprise building or landscape elements that reduce the impact on the heat island effect. This includes but is not limited to: trees, shrubs, vegetation, roofing materials with high SRI, water bodies, etc.	75% of total project site areas to comprise building or landscape elements that reduce the impact on the heat island effect. This includes but is not limited to: trees, shrubs, vegetation, roofing materials with high SRI, water bodies, etc.

Stormwater discharge from site not to exceed pre-development peak Average Recurrence Interval (ARI), 1 and 5 years. Modelling completed using HUSC.	Stormwater discharge from site not to exceed pre-development peak Average Recurrence Interval (ARI), 1 and 5 years. Modelling completed using HUSC.
26.1 achieved. Existing infrastructure solutions to meet requirements. To be approved by GBOA.	26.1 achieved. Existing infrastructure solutions to meet requirements. To be approved by GBOA.
Lighting design to meet AS4292 Control of the obtrusive effects of outdoor lighting.	Lighting design to meet AS4292 Control of the obtrusive effects of outdoor lighting.
External lighting to either: control the upward light output ratio (ULOR) ; or control of lighting direct illuminance.	External lighting to either: control the upward light output ratio (ULOR) ; or control of lighting direct illuminance.
System to be designed and built in accordance with AS3666 and risks managed in accordance with Victorian Public Health and Wellbeing Act 2003. System must also maintain constant movement of water, water never to be between 20-50 degrees C while not moving.	System to be designed and built in accordance with AS3666 and risks managed in accordance with Victorian Public Health and Wellbeing Act 2003. System must also maintain constant movement of water, water never to be between 20-50 degrees C while not moving.
Legionella Risk Management Plan.	Legionella Risk Management Plan.
To be reviewed.	To be reviewed.

Onsite renewable Energy, 15-30% + 1 or 2 points.	Onsite renewable Energy, 15-30% + 1 or 2 points.
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Improving on Green Star Benchmarks		The project has achieved full points in a Green Star credit and demonstrates a substantial improvement on the benchmark required to achieve full points.	30C	Improving on Green Star Benchmarks	10	2		-
Innovation Challenge	Where the project addresses an sustainability issue not included within any of the Credits in the existing Green Star rating tools.							
Global Sustainability	Project teams may adopt an approved credit from a Global Green Building Rating tool that addresses a sustainability issue that is currently outside the scope of							
Total								

Building Air Permeability Rates - 1 or 2 points 50% (by volume) of paints to have lower TVOC - 1 point. Indoor planting 0.05m2 per 10m2 evenly distributed - 1 point. Supplied mattresses meet GreenGuard emission criteria - 1 point. No new car parks on site - 1 point. Construction and demolition waste going to landfill at 5kg per m2 of GFA - 1 point. Stormwater Pollution Reduction Targets increased - 1 or 2 points. Financial Transparency (details kept private) - 1 point High performance site offices - 1 point Occupant Engagement - 1 point GS Performance - Green Cleaning - 1, 2 or 3 points GS Performance - Groundskeeping Practices GS Interiors - Quality of Amenities - 1 point	
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TOTALS	TARGETED
CORE POINTS	40.0 15.0 10.0
INNOVATION POINTS	0.0 9.0 0.0
NA POINTS	0.0 0.0 0.0
POINTS AVAILABLE	100.0 100.0 100.0
PROJECT SCORE	40.0 24.0 10.0