



GREEN BUILDING COUNCIL SOUTH AFRICA
GREEN STAR



INNOVATIONS REGISTER
Office Tool v1 and v1.1, Retail Tool v1,
Public & Education (PEB) Tool v1, Multi-Unit Residential (MUR) tool v1

Date of Issue: 5 April 2019

IMPORTANT NOTE TO REGISTERED PROJECTS REGARDING THIS REGISTER:

This innovation register of innovation points awarded has been drawn up by the Green Building Council South Africa (GBCSA) and is intended for use by project teams, contractors and interested parties for innovation purposes only. Please note that the initiatives listed below have been awarded for innovation points based on specific circumstances on each project, as well as the manner that these circumstances have been presented to the GBCSA for assessment. The GBCSA in no way guarantees that where initiatives have been awarded in the past, these will be awarded again for future projects. Each innovation submission is reviewed in the context of the specific project and documentation submitted. Any single initiative under INN-1 will only be awarded to ten projects under the same rating tool before no longer being available for innovation points under the Green Star rating tool for buildings of that type-i.e. where on the table below you see under the column 'number of times awarded' that it is the 10th time that it has been awarded for a building of that type, the same type of initiative will not be able to achieve points in the same building type. Where the number for a type of building has not yet reached 10, this initiative may still be targeted for innovation points under that same building type.

PLEASE NOTE THE FOLLOWING:

'number' of times per Innovation:

INN-1: First or Early Adapters:

projects can be the 'first' or 'early adopter' for the first 10 (ten) projects per Tool (Office v1, Retail v1, PEB v1, MUR v1, Office v1.1 & Interiors v1 & EBP v1).

INN-2: Exceeding Green Star Benchmarks:

There is no limit on the number of times different projects, within each tool, can submit the same innovation under INN-2 (e.g. zero potable water usage under WAT-1).

INN-3: Environmental Initiatives:

There is no limit on the number of times different projects, within each tool, can submit the same innovation under INN-3 (e.g. Stairs for Office submission)."

The Innovation Register may **ONLY** be used for reference purposes. This document may **NOT** be used as evidence within a submission.

	Initiative	Points Available	Points awarded	Status and Ruling	Number of times awarded
	Electric vehicles/Motorbike etc. Charging Infrastructures/Points				
Inn-1	Recharging Infrastructure for Electric Cars 6% of the parking bays on the site have been furnished with plug points for electric vehicle charging. The charging points use electricity that has been generated from an energy centre using natural gas turbine generators.	2	1	Awarded Awarded INN-1: The GBCSA notes that this initiative is a first or early adopter in South Africa (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	1 x Office v1 & 0 x Office v1.1 0 x Retail v1 0 x MURT v1 0 x PEB v1 0 xCUS
Inn-1	Solar Powered Electric Car charging points Electric car charging points permanent installation of a showcase unit of solar powered electric charging station. The project team has a small fleet of electric vehicles in operation used as technology, education and awareness.	2	1	Awarded Awarded INN-1: The GBCSA notes that this initiative contributes significantly towards market transformation in the South African property and construction industry (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	1 x Office v1 & 0 x Office v1.1 0 x Retail v1 0 x MURT v1 0 x PEB v1 0 xCUS
Inn-1	Electric Vehicles Rechargeable facility The project is an early adaptor to incorporate the installation of rechargeable infrastructure for the operation of completely electric vehicles.	2	1	Awarded Awarded INN-1: The GBCSA notes that this initiative is a first or early adopter in South Africa (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	4 x Office v1 & 0 x Office v1.1 0 x Retail v1 0 x MURT v1 0 x PEB v1 0 xCUS
Inn-1	Electric Minibus The project team saw an opportunity to lead private sector commitment to reduce transport carbon emissions while providing a reliable service through the Minibus	2	1	Awarded Awarded INN-1: The GBCSA notes that this initiative is a first or early adopter in South Africa (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	1 x Office v1 & 0 x Office v1.1 0 x Retail v1 0 x MURT v1 0 x PEB v1 0 xCUS
	Energy Consumption Reducing Initiatives				
Inn-1	CCHP Plant: Energy Efficient HVAC A fresh air system preheats the outside air with a combination of heat recovery ventilators and Solar Hot Water coils completely eliminating the ventilation energy load and resulting to less energy consumption by the HVAC equipment thereby reducing the building's carbon footprint.	2	1	Awarded Awarded INN-1: The GBCSA notes that this initiative is a first or early adopter in South Africa (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	3 x Office v1 & 0 x Office v1.1 0 x Retail v1 0 x MURT v1 0 x PEB v1 0 xCUS
	First Community Cycle facility				
Inn-1	First Tall Building in SA designed as an integrated Green Building The project is the first Green Star registered project commercial building in South Africa for which a community bicycle parking facility has been provided for additional visitors (i.e. beyond those accommodated by the Green Star Office v1 credit Tra-3) and the greater community.	2	1	Awarded Awarded INN-1: The GBCSA notes that this initiative is a first or early adopter in South Africa (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	2 x Office v1 & 0 x Office v1.1 0 x Retail v1 0 x MURT v1 0 x PEB v1 0 xCUS

	Initiative	Points Available	Points awarded	Status and Ruling	Number of times awarded
Gaseous Fire Suppression GWP					
Inn-1	Gaseous Fire Suppression GWP Market transformation of the industry as it relates to fire suppression gases achieving significantly reduced GWP values.	2	1	Awarded Awarded INN-1: The GBCSA notes that this initiative contributes significantly towards market transformation in the South African property and construction industry (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	1 x Office v1 & 0 x Office v1.1 0 x Retail v1 0 x MURT v1 0 x PEB v1 0 xCUS
Green Roof Initiatives					
Inn-1	Urban Farming Initiative The project is installing a vegetable garden on the roof top. This forms part of a precinct initiative to provide urban grown vegetables for the commercial office canteen. Furthermore, the data obtained from the garden will be fed into the online assessment tool. This data is considered to be of potential benefits through motivating other projects to implement urban farming initiatives.	2	1	Awarded Awarded INN-1: The GBCSA notes that this initiative is a first or early adopter in South Africa (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	1 x Office v1 & 0 x Office v1.1 0 x Retail v1 0 x MURT v1 0 x PEB v1 0 xCUS
Green Wall/Hoarding Initiatives					
Inn-1	Green Hoarding-Mitigating dust/noise & CO2 From a social perspective, green hoarding assist in mitigating the impact construction has on daily commuters who are forced to endure the discomfort that construction creates. From an environmental perspective, green hoarding assist in mitigating three construction environmental impacts: dust, noise and carbon dioxide.	2	1	Awarded Awarded INN-1: The GBCSA notes that this initiative contributes significantly towards market transformation in the South African property and construction industry (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	0 x Office v1 & 0 x Office v1.1 0 x Retail v1 1 x MURT v1 0 x PEB v1 0 xCUS
Innovative/Green Façade Initiatives					
Inn-1	Argon filled double skin glazed façade The system comprises of three different types of glass that are mounted into a single unit, and installed from the inside of the building. The double skin façade with an argon insulate double glazed inner skin ensures thermal comfort. The environmental benefits are estimated at 168 802 Co2 p/a. The large quantities of argon required for the project resulted in Glass South Africa opening an argon gas operation in Springs; further creating jobs. Previously argon filled units were only available as an imported product; the project has since allowed for this product to be manifested locally.	2	1	Awarded Awarded INN-1: The GBCSA notes that this initiative is a first or early adopter in South Africa (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	1 x Office v1 & 0 x Office v1.1 0 x Retail v1 0 x MURT v1 0 x PEB v1 0 xCUS
Inn-1	Closed cavity unitised façade The project has developed a unitised, closed-cavity double skin façade with a dehumidified air supply which is considered a first in South Africa, which has an environmental benefit of 751 010 CO2e.	2	1	Awarded Awarded INN-1: The GBCSA notes that this initiative is a first or early adopter in South Africa (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	1 x Office v1 & 0 x Office v1.1 0 x Retail v1 0 x MURT v1 0 x PEB v1 0 xCUS
Inn-1	Facade designed for Disassembly The project is the first tall building in South Africa for which the façade has been specifically designed to be disassembled and reused by a third party. The project team has ensured environmental benefits by designing the façade for disassemble and reuse, these are: saving materials and embodied carbon.	2	1	Awarded Awarded INN-1: The GBCSA notes that this initiative is a first or early adopter in South Africa (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	1 x Office v1 & 0 x Office v1.1 0 x Retail v1 0 x MURT v1 0 x PEB v1 0 xCUS

	Initiative	Points Available	Points awarded	Status and Ruling	Number of times awarded
Inn-1	<p>Automatic light redirecting blinds</p> <p>The project team has developed and implemented automated blinds that track the solar incidence of sunlight on each façade and automatically adjust the blinds to omit direct glare from the office space. This technology was pioneered in South Africa specifically for the this project transforming the market.</p>	2	1	<p>Awarded</p> <p>Awarded INN-1: The GBCSA notes that this initiative contributes significantly towards market transformation in the South African property and construction industry (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.</p>	<p>1 x Office v1 & 0 x Office v1.1 0 x Retail v1 0 x MURT v1 0 x PEB v1 0 xCUS</p>
Inn-1	<p>Fritted glass and Solar Controlled Louvres</p> <p>The system comprises of vertically-mounted shading fins, which are made of glass and have a 50% frit. The frit is grey in colour, so as to reduce glare. The first pass control is achieved through sun-tracking based on date and time. In the event of cloud cover, low daylight levels will trigger the opening of the fins to improve daylight increases.</p>	2	1	<p>Awarded</p> <p>Awarded INN-1: The GBCSA notes that this initiative is a first or early adopter in South Africa (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.</p>	<p>1 x Office v1 & 0 x Office v1.1 0 x Retail v1 0 x MURT v1 0 x PEB v1 0 xCUS</p>
Inn-1	<p>The 'smart window' E-glass technology</p> <p>This uses a combination of spectrally-selective optical structures and Nano-particle assisted waveguides. These structures include micro-engineered phase elements and layers of nanoparticles deposited between the panes both designed to deflect infrared light to the window edges, where it is picked up by a photovoltaic cell which converts it to electricity. The technology is based on the integration of micro and Nano engineered structures and materials to provide shatterproof, extremely stable clear glass panels that not only block the UV and IR radiations, but also harvest them and convert them to electricity via PV panels cells placed within the window frames.</p>	2	2	<p>Awarded</p> <p>Awarded INN-1: The GBCSA notes that this initiative is a first or early adopter in the world (two points); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.</p>	<p>1 x Office v1 & 0 x Office v1.1 0 x Retail v1 0 x MURT v1 0 x PEB v1 0 xCUS</p>
Inn-1	<p>A double skin facade (fabric sun control screen filled Cavity)</p> <p>This is a system consisting of two glass skins with an intermediate ventilated cavity. The double skin facade is a European trend mostly driven by increased desire for transparency and access to daylight with highly glazed buildings, the need of improving the indoor environment, improved acoustic insulation, protection of shading devices and the reduction of energy use during the occupation stage of a building.</p>	2	1	<p>Awarded</p> <p>Awarded INN-1: The GBCSA notes that this initiative is a first or early adopter in South Africa (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.</p>	<p>1 x Office v1 & 0 x Office v1.1 0 x Retail v1 0 x MURT v1 0 x PEB v1 0 xCUS</p>
Inn-1	<p>Façade Mock-up</p> <p>Using a physical facade mock-up in the design stage to conduct a detailed experimental and numerical analysis to determine a suitable glazing and study the physical mechanism influencing occupant thermal comfort.</p>	2	1	<p>Awarded</p> <p>Awarded INN-1: The GBCSA notes that this initiative is a first or early adopter in South Africa (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.</p>	<p>1 x Office v1 & 0 x Office v1.1 0 x Retail v1 0 x MURT v1 0 x PEB v1 0 xCUS</p>
Internal Environment Cooling & Ventilation Initiatives					
Inn-1	<p>Thermally Activated Building System (TABS)</p> <p>By virtue of it being the first commercial building to take advantage of the TABS technology, the development will be instrumental in changing market perception of TABS, thereby making it become not only a viable HVAC alternative for future projects but an alternative that is also largely climatically responsive system with a very low comparative energy impact.</p>	2	1	<p>Awarded</p> <p>Awarded INN-1: The GBCSA notes that this initiative is a first or early adopter in South Africa (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.</p>	<p>1 x Office v1 & 0 x Office v1.1 0 x Retail v1 0 x MURT v1 0 x PEB v1 0 xCUS</p>

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Inn-1	<p>The sea water cooling system</p> <p>The sea water cooling system is a sustainable design initiative which is the first in South Africa for commercial/office development. A sea water exchange system is utilised to reduce the buildings water consumption.</p>	2	1	<p>Awarded</p> <p>Awarded INN-1: The GBCSA notes that this initiative is a first or early adopter in South Africa (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.</p>	<p>3 x Office v1 & 0 x Office v1.1 0 x Retail v1 1 x MURT v1 0 x PEB v1 0 xCUS</p>
Inn-1	<p>Under floor displacement ventilation system</p> <p>The under floor air displacement (UFAD) HVAC system serves to the open plan section of the office. Air is supplied to a floor void from air handling units on the roof. Air is let into the space at low velocity via grilles placed in the floor. The temperature of the air is a few degrees below room temperature. As it picks up heat from occupants and equipment in the space it rises taking pollutants with it to a high level where it is extracted back to the air handling unit on the roof.</p>	2	1	<p>Awarded</p> <p>Awarded INN-1: The GBCSA notes that this initiative is a first or early adopter in South Africa (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.</p>	<p>2 x Office v1 & 0 x Office v1.1 0 x Retail v1 0 x MURT v1 0 x PEB v1 0 xCUS</p>
LED Lighting Initiatives					
Inn-1	<p>100% LED Light Fitting</p> <p>100% of the building is designed to be fitted with LED luminaries. Environmental benefits include direct reduction in greenhouse gas emissions from lighting energy use.</p>	2	1	<p>Awarded</p> <p>Awarded INN-1: The GBCSA notes that this initiative is a first or early adopter in South Africa (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.</p>	<p>1 x Office v1 & 1 x Office v1.1 0 x Retail v1 0 x MURT v1 1 x PEB v1 0 xCUS</p>
Inn-1	<p>LED Lighting Initiative</p> <p>The project makes use Light Emitting Diode (LED) light fittings for over 99% of the building. Over 95% of all lighting, including external fittings, makes use of LED fittings..</p>	2	1	<p>Awarded</p> <p>Awarded INN-1: The GBCSA notes that this initiative is a first or early adopter in South Africa (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.</p>	<p>4 x Office v1 & 1 x Office v1.1 0 x Retail v1 0 x MURT v1 0 x PEB v1 0 xCUS</p>
Low VOC Paints-Market Transformation					
Inn-1	<p>Market Transformation-Low VOC paints</p> <p>The design team has been instrumental in driving market transformation by significantly influencing the South African paint market in terms of the supply of low VOC paints.</p>	2	1	<p>Awarded</p> <p>Awarded INN-1: The GBCSA notes that this initiative contributes significantly towards market transformation in the South African property and construction industry (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.</p>	<p>2 x Office v1 & 0 x Office v1.1 0 x Retail v1 0 x MURT v1 0 x PEB v1 0 xCUS</p>
Rainwater/Stormwater Harvesting & Treatment					
Inn-1	<p>Stormwater treatment system design</p> <p>The system is a first for a South Africa as it consists of a combination of horizontally and vertically configured aerobic trickle and anaerobic filter trays as opposed to the 'normal' constructed reed-bed type of system. The proposed initiative may substantially contribute to the broader market transformation towards sustainable development with regards to storwater quality.</p>	2	1	<p>Awarded</p> <p>Awarded INN-1: The GBCSA notes that this initiative is a first or early adopter in South Africa (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.</p>	<p>1 x Office v1 & 0 x Office v1.1 0 x Retail v1 0 x MURT v1 0 x PEB v1 0 xCUS</p>

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Refrigerant Detection					
Inn-1	Refrigerant Leak Detection A leak detection system that will provide detect leak in refrigerant in the HVAC system no matter how small, and reduces loss of refrigerant from 30-40% to 5%.	2	1	Awarded Awarded INN-1: The GBCSA notes that this initiative is a first or early adopter in South Africa (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	0 x Office v1 & 1 x Office v1.1 0 x Retail v1 0 x MURT v1 0 x PEB v1 1 xCUS
Renewable Energy Initiatives					
Inn-1	Innovative Funding-For renewable energy A joint venture which is a first of it's kind has been undertaken with the national utility for the provision of large scale building integrated renewable energy. Market transformation in pioneering innovative funding mechanisms for renewable energy.	2	1	Awarded Awarded INN-1: The GBCSA notes that this initiative is a first or early adopter in South Africa (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	1 x Office v1 & 0 x Office v1.1 0 x Retail v1 0 x MURT v1 0 x PEB v1 0 xCUS
Inn-1	Energy reducing renewal technology Where glass facades require an integrated approach where the window pane as an integrated product has clear visible light and generates electricity in tandem, acting as a photovoltaic cell. The results of the research will be published and could become the strategic model for the future implementation of the cost effective PV panels in Southern Africa. The research will utilize data confirmed by the Building Management System (BMS).	2	1	Awarded Awarded INN-1: The GBCSA notes that this initiative is a first or early adopter in South Africa (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	1 x Office v1 & 0 x Office v1.1 0 x Retail v1 0 x MURT v1 0 x PEB v1 0 xCUS
Inn-1	Combined Cooling heat and power (CCHP Plant) The use of the combined Heat and Power plant generate significant energy. Benefits includes significant reduction of CO2.	2	1	Awarded Awarded INN-1: The GBCSA notes that this initiative is a first or early adopter in South Africa (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	3 x Office v1 & 0 x Office v1.1 0 x Retail v1 0 x MURT v1 0 x PEB v1 0 xCUS
Research & Studies-Green Features/Initiatives					
Inn-1	Productivity Study The study will be conducted to assess building occupant perception of workplace wellbeing and productivity in relation to validated work productivity.	2	1	Awarded Awarded INN-1: The GBCSA notes that this initiative contributes significantly towards market transformation in the South African property and construction industry (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	2 x Office v1 & 0 x Office v1.1 0 x Retail v1 0 x MURT v1 0 x PEB v1 0 xCUS
Inn-1	Post Occupancy Evaluation (POE) The project indicated commitment to conducting a Post Occupancy Evaluation (POE) on the building upon completion. POE are systematic investigations of building, once they have been occupied for some time, to evaluate how the building users experience and perceive the building and to examine actual building operational performance and productivity.	2	1	Awarded Awarded INN-1: The GBCSA notes that this initiative is a first or early adopter in South Africa (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	2 x Office v1 & 0 x Office v1.1 0 x Retail v1 0 x MURT v1 0 x PEB v1 0 xCUS

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Inn-1	<p>Study Tour The Professional Team undertook an international study tour to learn about sustainable building practices such as architectural design; building service design; innovative designs and technologies as well as interior designs. The project team has the capability of taking this newfound information to a range of projects outside of this specific project, having an industry impact.</p>	2	1	<p>Awarded Awarded INN-1: The GBCSA notes that this initiative is a first or early adopter in South Africa (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.</p>	0 x Office v1 & 0 x Office v1.1 0 x Retail v1 0 x MURT v1 0 x PEB v1 1 xCUS
Inn-1	<p>Tropiglass An innovative Roof Solar Research Project for PV, innovative E-Glass technologies involving University of Johannesburg.</p>	2	1	<p>Awarded Awarded INN-1: The GBCSA notes that this initiative is a first or early adopter in South Africa (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.</p>	0 x Office v1 & 0 x Office v1.1 0 x Retail v1 0 x MURT v1 0 x PEB v1 1 xCUS
Sustainable Procurement initiatives					
Inn-1	<p>FSC Certified Roof Trusses FSC Certified Roof Trusses now readily available from a retailer as a direct result of this project.</p>	2	1	<p>Awarded Awarded INN-1: The GBCSA notes that this initiative is a first or early adopter in South Africa (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.</p>	0 x Office v1 & 0 x Office v1.1 0 x Retail v1 0 x MURT v1 1 x PEB v1 0 xCUS
Inn-1	<p>Private Public Partnership model The project implemented a contract between a public sector institution and a private party (PPP), in which the private party, single tenant; assumes substantial financial, technical and operational risk in the design, financing, building and operation of a project for a period between 5-30 years. The PPP agreement requires that the consortium operates and facilitates the operational targets of the building for 25 years, this will ensure that the energy efficiency of the building is kept as a main priority.</p>	2	1	<p>Awarded Awarded INN-1: The GBCSA notes that this initiative is a first or early adopter in South Africa (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.</p>	1 x Office v1 & 0 x Office v1.1 0 x Retail v1 0 x MURT v1 0 x PEB v1 0 xCUS
Waste Water Re-use & Treatment Initiatives					
Inn-1	<p>Waste water and purification treatment system The project installed a bespoke Waste Water Treatment and Purification System (WWTPS) which recycles all waste water effluent from the building and treats this through a bespoke (world first) WWTPS to potable water standards which is re-used on site as potable water for the tenants.</p>	2	2	<p>Awarded Awarded INN-1: The GBCSA notes that this initiative is a first or early adopter in the world (two points); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.</p>	1 x Office v1 & 0 x Office v1.1 0 x Retail v1 0 x MURT v1 0 x PEB v1 0 xCUS
Inn-1	<p>Black Water Treatment System The Blackwater treatment system is a first in a South African urban environment and results in water savings and reduction of discharge to the sewer.</p>	2	1	<p>Awarded Awarded INN-1: The GBCSA notes that this initiative is a first or early adopter in South Africa (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.</p>	2 x Office v1 & 1 x Office v1.1 0 x Retail v1 0 x MURT v1 0 x PEB v1 0 xCUS
Inn-1	<p>Blackwater treatment plant & re-used for HVAC cooling The project has an on-site Blackwater treatment plant, where the treated water is re-used for HVAC cooling tower make-up water supply.</p>	2	1	<p>Awarded Awarded INN-1: The GBCSA notes that this initiative is a first or early adopter in South Africa (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.</p>	1 x Office v1 & 0 x Office v1.1 0 x Retail v1 0 x MURT v1 0 x PEB v1 0 xCUS

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Inn-1	Urine Capture for Production of Fertiliser Urine captured within the building is removed and converted into an inorganic fertilizer called struvite.	2	1	Awarded Awarded INN-1: The GBCSA notes that this initiative is a first or early adopter in South Africa (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	0 x Office v1 & 1 x Office v1.1 0 x Retail v1 0 x MURT v1 0 x PEB v1 0 xCUS
Inn-1	Re-use of Treated Blackwater in HVAC This is considered the 1st office development to treat black water and re-use it for HVAC. The project substantially contributes to broader market transformation toward further sustainable development in South Africa, noting that the owner and tenants of the building are government and as a result are a large influential figure in the South African economy and property industry.	2	1	Awarded Awarded INN-1: The GBCSA notes that this initiative is a first or early adopter in South Africa (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	1 x Office v1 & 0 x Office v1.1 0 x Retail v1 0 x MURT v1 0 x PEB v1 0 xCUS
Inn-1	Treated effluent water usage Treated effluent water usage for toilet and urinal flushing and cooling towers make up water in Office Buildings: Municipal supplied treated effluent water used for irrigation, toilet and urinal flushing as well as cooling tower make up water.	2	1	Awarded Awarded INN-1: The GBCSA notes that this initiative is a first or early adopter in South Africa (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	1 x Office v1 & 0 x Office v1.1 0 x Retail v1 0 x MURT v1 0 x PEB v1 1 xCUS
ISO 50001 Accreditation - Energy Management System					
Inn-1	ISO 50001 Accreditation - Energy Management System ISO 50001:2011 - Energy management systems – Requirements with guidance for use is a standard created by the International Organization for Standardization (ISO) for an energy management system.	1	1	Awarded Awarded INN-1: The GBCSA notes that this initiative is a first or early adopter in South Africa (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	0 x Office v1 & 1 x Office v1.1 0 x Retail v1 0 x MURT v1 0 x PEB v1 0 xCUS
Construction Waste					
Inn-1	Create With Waste The project has recognised the need for integrated waste planning, and has developed a comprehensive Waste & recycling Management Plan that facilitates the recovery and recycling of resources used within the building to reduce waste going to landfill.	1	1	Awarded Awarded INN-1: The GBCSA notes that this initiative is a first or early adopter in South Africa (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	0 x Office v1 & 1 x Office v1.1 0 x Retail v1 0 x MURT v1 0 x PEB v1 0 xCUS
Man-1					
Inn-2	Green Star SA Accredited - Professional Team The project is targeting an innovation point for exceeding Green Star SA Benchmarks , within the Office v1 Manual is Man-01, by certifying all members of the professional Design team as a Green Star SA Accredited Professional	2	1	Awarded Awarded INN-2: The GBCSA notes that this initiative achieves the threshold required to eliminate/neutralise the environmental impact (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT
Man-2					
Inn-2	Commissioning Clauses Early appointment of the Technical Facilities Manager enable seamless transfer of knowledge by the professional team, participation in commissioning and training activities before handover of the building and better understanding of complex design and construction.	2	1	Awarded Awarded INN-2: The GBCSA notes that this initiative achieves the threshold required to eliminate/neutralise the environmental impact (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT

	Initiative	Points Available	Points awarded	Status and Ruling	Number of times awarded
Man-3					
Inn-2	Building Tuning This initiative aims at eliminating the negative environmental impact by ensuring that building tuning and maintenance goes beyond the mandatory period. An additional 5 years beyond the mandatory 12 month maintenance and guarantee period will ensure that building systems are operating to specification.	2	1	Awarded Awarded INN-2: The GBCSA notes that this initiative achieves the threshold required to eliminate/neutralise the environmental impact (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT
IEQ-8					
Inn-2	External Views The project exceeded current credit benchmark through building design that provide 100% of the occupied space with a direct line of sight to the outdoors.	2	1	Awarded Awarded INN-2: The GBCSA notes that this initiative achieves the threshold required to eliminate/neutralise the environmental impact (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT
IEQ-13					
Inn-2	Volatile Organic Compounds The project exceeded current credit benchmark by 5% by insuring that 100% of paints, adhesives and sealants used were VOC complaint, and that no carpets or floor finishes are used within the building.	2	1	Awarded Awarded INN-2: The GBCSA notes that this initiative achieves the threshold required to eliminate/neutralise the environmental impact (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT
ENE-1					
Inn-2	Reduction of Greenhouse gas emissions The project exceeded current credit benchmarks- 58% above neutral by designing a system that produce more energy than it consumes via the addition of Photovoltaic panels over an annual period.	2	2	Awarded Awarded INN-2: The GBCSA notes that this initiative achieves the threshold required to have a restorative environmental impact of at least 5% (two points); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT
Inn-2	Reduction of Greenhouse gas emissions This initiative aims to reward projects that produces a substantial (>5% above neutral) restorative environmental impact improvement in carbon emissions over the SANS204 notional building, of which the project achieved.	2	2	Awarded Awarded INN-2: The GBCSA notes that this initiative achieves the threshold required to have a restorative environmental impact of at least 5% (two points); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT
Inn-2	Reduction of Greenhouse gas emissions The project has achieved a 124% improvement over the notional building as calculated in the ENE-1 Energy Calculator and 90% above neutral. Before the project considered renewable energy, the buildings energy usage was reduced substantially over the reference building by optimizing the energy use of the mechanical and electrical installation.	2	2	Awarded Awarded INN-2: The GBCSA notes that this initiative achieves the threshold required to have a restorative environmental impact of at least 5% (two points); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT
	Reduction of Greenhouse gas emissions	2	1	Awarded	

	Initiative	Points Available	Points awarded	Status and Ruling	Number of times awarded
Inn-2	109.3% targeted in Round 1 - 104.5% achieved per Ene-1 calculator in Round 2			Awarded INN-2: The GBCSA notes that this initiative achieves the threshold required to have a restorative environmental impact which results in the elimination of the specific negative environmental impact of the project targeted by an existing credit	NO LIMIT
Inn-2	Reduction of Greenhouse gas emissions The building achieves a >5% improvement above neutral, and thus in excess of the current Green Star SA benchmarks and has a restorative environmental impact.	2	2 Awarded	Awarded INN-2: The GBCSA notes that this initiative achieves the threshold required to have a restorative environmental impact of at least 5% (two points); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT
ENE-2					
Inn-2	Energy Sub Metering The extent of the energy sub-metering in the building far exceeds Green Star recommendations and extensive sub-metering have been installed in the building (661 meters). This has a mitigating impact on unmetered energy losses and the associated environmental impact of associated GHG emission as well as providing an invaluable historical data pool that supports heuristic energy management and enables continued targeted building optimisation over the project contract life.	2	1 Awarded	Awarded INN-2: The GBCSA notes that this initiative achieves the threshold required to eliminate/neutralise the environmental impact (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT
ENE-5					
Inn-2	Reduction of Peak Energy Demand The aim of the initiative is to eliminate peak energy demand during periods where the demand on the electricity network is high (i.e. at certain times during the day) by >5% above the neutral. This was achieved due to the large solar PV component of the design.	2	2 Awarded	Awarded INN-2: The GBCSA notes that this initiative achieves the threshold required to have a restorative environmental impact of at least 5% (two points); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT
Inn-2	Reduction of Peak Energy Demand On-site electricity generation eliminates the total impacts of the project by meeting 100% of the peak demand and also results in a substantial (>5% above neutral) restorative environmental impact.	2	2 Awarded	Awarded INN-2: The GBCSA notes that this initiative achieves the threshold required to have a restorative environmental impact of at least 5% (two points); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT

	Initiative	Points Available	Points awarded	Status and Ruling	Number of times awarded
TRA-4					
Inn-2	<p>Community Mass Transport</p> <p>The initiative promotes the connectively of buildings to its surrounding and to public infrastructure as well as promotive active living. The environmental benefit is calculated through a conservative calculation of CO2 reduction through the estimated reduced use of private vehicles.</p>	2	1	<p>Awarded</p> <p>Awarded INN-2: The GBCSA notes that this initiative achieves the threshold required to eliminate/neutralise the environmental impact (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.</p>	NO LIMIT
WAT-1					
Inn-2	<p>Occupants Amenity Water</p> <p>Rain Water Harvesting:</p> <p>This innovation not only mitigates the impact of potable water use in the building but has a substantial restorative impact through off-setting >5% of the buildings total potable water usage through the diversion of excess recovered rainwater to the neighbouring building.</p>	2	2	<p>Awarded</p> <p>Awarded INN-2: The GBCSA notes that this initiative achieves the threshold required to have a restorative environmental impact of at least 5% (two points); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.</p>	NO LIMIT
Inn-2	<p>Occupants Amenity Water</p> <p>Rain harvested Treated water:</p> <p>The The Project incorporates a rainwater harvesting system that enables the capturing and treatment of rain water to drinking quality. The quantity of the available treated rain water exceeds the potable water demand of the building, except in the dry winter months.</p>	2	1	<p>Awarded</p> <p>Awarded INN-2: The GBCSA notes that this initiative achieves the threshold required to eliminate/neutralise the environmental impact (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.</p>	NO LIMIT
Inn-2	<p>Occupants Amenity Water</p> <p>Water neutral/saving:</p> <p>Project Eliminated environmental impact by providing solutions that resulted in the elimination of the specific negative environmental of credit Wat-1 i.e. for effectively being water neutral.</p>	2	1	<p>Awarded</p> <p>Awarded INN-2: The GBCSA notes that this initiative achieves the threshold required to eliminate/neutralise the environmental impact (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.</p>	NO LIMIT
EMI-5					
Inn-2	<p>Watercourse pollution- Storm Water Storage</p> <p>The project team has used natural landscaping as the watercourse pollution mitigation strategy. The sites storm water system is not connected to the municipal system. The design incorporates retention areas large enough to attenuate and infiltrate a 1-in-100 year storm.</p>	2	1	<p>Awarded</p> <p>Awarded INN-2: The GBCSA notes that this initiative achieves the threshold required to eliminate/neutralise the environmental impact (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.</p>	NO LIMIT
ENE-4					
Inn-2	<p>Lighting Zoning</p> <p>The embedded sensor solution designed and installed results in a sustantial environmental impact targeted by Ene-4 existing credit</p>	2	1	<p>Awarded</p> <p>Awarded INN-2: The GBCSA notes that this initiative achieves the threshold required to eliminate/neutralise the environmental impact (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.</p>	NO LIMIT

	Initiative	Points Available	Points awarded	Status and Ruling	Number of times awarded
TRA-3					
	Cyclist Facilities	2	1	Awarded	
Inn-2	More than 90% improvement on the Tra-3 credit for visitor bicycle.			Awarded INN-2: The GBCSA notes that this initiative achieves the threshold required to eliminate/neutralise the environmental impact (one point); the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT
Cyclist Facilities Initiatives					
	Decongest Electrical Bike	1	1	Awarded	
Inn-3	The project's initiative aims to actively advocate Green Building and sustainable mobility. To achieve this, the building owner has offered 4 parking bays at the building to store 20 electric bicycles, and opened the site up to visitors as part of an electric bike tour of the city.			Awarded INN-3: The GBCSA notes that this initiative addresses a valid environmental concern outside the current scope of this Green Star SA tool; the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT
Transport					
	Transport Connectivity	1	1	Awarded	
Inn-3	Project is providing a paved pedestrian and cyclist pathway to link the building to the closest transport node.			Awarded INN-3: The GBCSA notes that this initiative addresses a valid environmental concern outside the current scope of this Green Star SA tool; the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT
Ecosystem improvement initiatives					
	Improving Surrounding Eco-system	1	1	Awarded	
Inn-3	To reward projects for improving the surrounding river conditions that fall outside the specified extent of the refurbishment by clearing alien plants, pruning existing trees, treatment of existing cut tree stumps to prevent further growth, collection and removal of rubbish			Awarded INN-3: The GBCSA notes that this initiative addresses a valid environmental concern outside the current scope of this Green Star SA tool; the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT
	Ecological 'Search & Rescue'	1	1	Awarded	
Inn-3	To reward projects for undertaking a detailed 'Search & Rescue' exercise prior to construction.			Awarded INN-3: The GBCSA notes that this initiative addresses a valid environmental concern outside the current scope of this Green Star SA tool; the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT
	Silt Fence	1	1	Awarded	
Inn-3	To reward projects where a Silt Fence is installed to retain the soil on disturbed land to allow revegetation and permanent soil stabilisation after construction.			Awarded INN-3: The GBCSA notes that this initiative addresses a valid environmental concern outside the current scope of this Green Star SA tool; the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT

	Initiative	Points Available	Points awarded	Status and Ruling	Number of times awarded
Green Lease Initiatives					
Inn-3	Green Lease To reward projects which require tenants to monitor the performance of energy, water and waste reduction of the building on an on-going basis and to prepare a procurement policy for the use of environmentally friendly consumables. This lease is signed by both the tenant and owner.	1	1	Awarded Awarded INN-3: The GBCSA notes that this initiative addresses a valid environmental concern outside the current scope of this Green Star SA tool; the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT
Innovation Challenges					
Inn-3	Financial Transparency To reward projects which provide all costs of the project for the purposes of research towards understanding the Cost of building Green Buildings.	2	2	Awarded Awarded INN-3: The GBCSA notes that this initiative addresses a valid environmental concern outside the current scope of this Green Star SA tool; the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT
Inn-3	Online AP Course To reward projects which ensure the involvement of qualified individuals who will direct & assist the owner/ project team with the integration of Green Star SA aims & processes throughout the design, construction &/or operational process by ensuring that significant number of professionals in the project team including the contractor have successfully completed the online course under New Build, Interiors or EBP	2	2	Awarded Awarded INN-3: The GBCSA notes that this initiative addresses a valid environmental concern outside the current scope of this Green Star SA tool; the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT
Inn-3	More than One Certification To reward projects which take advantage of the value that independent verification of sustainability credentials (via certification) offer at the various project stages of a building/space.	2	2	Awarded Awarded INN-3: The GBCSA notes that this initiative addresses a valid environmental concern outside the current scope of this Green Star SA tool; the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT
Inn-3	Local Sourcing -SEC To reward projects which use materials, products, services (including labour) used that were produced or generated within the borders of South Africa and exceed 70% of the total Contract Value.	1	1	Awarded Awarded INN-3: The GBCSA notes that this initiative addresses a valid environmental concern outside the current scope of this Green Star SA tool; the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT

	Initiative	Points Available	Points awarded	Status and Ruling	Number of times awarded
Recycled and Re-used Materials					
Inn-3	<p>Recycled Content To reward projects which use of a product with a high recycled content. The initiative is deemed to be a valid environmental concern outside the current scope of this Green Star SA Office v1 as it is currently included in another Green Star tool. The innovation is based on the Mat-3 Recycled Content & Reused Materials credit found within the Public and Education Building v1 technical manual.</p>	1	1	Awarded Awarded INN-3: The GBCSA notes that this initiative addresses a valid environmental concern outside the current scope of this Green Star SA tool; the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT
Inn-3	<p>Employment Creation for Disadvantage Groups -SEC To reward projects which encourage and recognise employment creation for (disadvantaged) targeted groups, namely youth, women and disabled persons making up more than 10% of total labour to be employed. - Under SEC</p>	1	1	Awarded Awarded INN-3: The GBCSA notes that this initiative addresses a valid environmental concern outside the current scope of this Green Star SA tool; the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT
Inn-3	<p>Broad-Based Black Economic Empowerment (B-BBEE) Procurement Strategy - SEC To reward projects where procurement of project-specific goods and services during the construction phase (including sub-contracting) constitutes either of the following: SMME (Small- Medium & Micro Enterprises) which are black-owned or black women owned - minimum of 25% value of the total contract value.</p>	1	1	Awarded Awarded INN-3: The GBCSA notes that this initiative addresses a valid environmental concern outside the current scope of this Green Star SA tool; the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT
Stairs					
Inn-3	<p>Prominent Stairs Design To reward projects for providing prominent stairs at the entrance of the building to encourage building occupants to take the stairs and promote the well-being of occupants.</p>	1	1	Awarded Awarded INN-3: The GBCSA notes that this initiative addresses a valid environmental concern outside the current scope of this Green Star SA tool; the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT
Inn-3	<p>Prominent Stairs Design- Well being of occupants To reward projects which promote occupants well-being by making available to the building users and public stairs that are highly visible and located at close proximity to primary set of lifts or main entrance.</p>	1	1	Awarded Awarded INN-3: The GBCSA notes that this initiative addresses a valid environmental concern outside the current scope of this Green Star SA tool; the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT
Sustainable Features Knowledge Share & Tours					
Inn-3	<p>Sustainable Features' Display and Guided Tours To reward projects where a guided tour will be offered on a weekly basis and undertaken by an employee with a thorough understanding of the building's green building initiatives. Permanent displays and information signage highlighting the green features within the building will be installed to impart knowledge about the building to users and visitors.</p>	1	1	Awarded Awarded INN-3: The GBCSA notes that this initiative addresses a valid environmental concern outside the current scope of this Green Star SA tool; the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT
Inn-3	<p>Sustainable Features' Display and Guided Tours To reward projects designed with educational features highlighting the sustainability initiatives employed. A large number of persons will be exposed to the building via a guided tour, and large information boards and plaques are situated in the building to provide information on the green initiatives incorporated into the building's design.</p>	1	1	Awarded Awarded INN-3: The GBCSA notes that this initiative addresses a valid environmental concern outside the current scope of this Green Star SA tool; the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT

	Initiative	Points Available	Points awarded	Status and Ruling	Number of times awarded
Inn-3	<p>Sustainable Features' Display: ENERGY To reward projects for live metering displaying daily and weekly energy usage of the building is to be continuously presented within the building to the immediate users as well as to secondary public groups via a building website allowing for public educational benefits and creating an awareness of Green Star SA as well as daily consciousness of sufficient energy consumption and water usage.</p>	1	1	Awarded Awarded INN-3: The GBCSA notes that this initiative addresses a valid environmental concern outside the current scope of this Green Star SA tool; the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT
Inn-3	<p>Sustainable Features' Display: ENERGY & WATER To reward projects for live metering display of daily and weekly water and energy usage data to the building user. This is also available on the building website to educate building users and create an awareness of consumption patterns.</p>	1	1	Awarded Awarded INN-3: The GBCSA notes that this initiative addresses a valid environmental concern outside the current scope of this Green Star SA tool; the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT
Inn-3	<p>Learning Resources To reward projects designed to describe and display learning resources. These include continuous presentation of energy use, potable water saving and greenhouse gas emissions.</p>	1	1	Awarded Awarded INN-3: The GBCSA notes that this initiative addresses a valid environmental concern outside the current scope of this Green Star SA tool; the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT
Urban Consolidation					
Inn-3	<p>Urban consolidation To reward projects for which make use of compact development patterns to increase land utilisation efficiency. Note: This credit was awarded as an innovative point for Green Star SA - Multi Unit Residential (MUR) PILOT projects under INN-3 as it was only proposed for inclusion as a credit in MUR v1.</p>	1	1	Awarded Awarded INN-3: The GBCSA notes that this initiative addresses a valid environmental concern outside the current scope of this Green Star SA tool; the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT
Urban Heat Island Elimination initiatives					
Inn-3	<p>Vegetated roof and roofing materials To reward projects for the use of a vegetated roof and roofing materials with a solar reflectance index (SRI)< 78 to reduce urban heat islands resulting in a low energy consumption and substantial environmental reduction of CO₂ emissions.</p>	1	1	Awarded Awarded INN-3: The GBCSA notes that this initiative addresses a valid environmental concern outside the current scope of this Green Star SA tool; the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT
Inn-3	<p>Polymer Super White Roofing To reward projects for The building is designed to have more than 75% of the roof area finished with a product that has a Solar Reflectance Index (SRI) value of greater than 78%.</p>	1	1	Awarded Awarded INN-3: The GBCSA notes that this initiative addresses a valid environmental concern outside the current scope of this Green Star SA tool; the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT
Inn-3	<p>Paving materials To reward projects for paving materials with an SRI of ≥ 29 have been installed for more than 50% of the site hardscape to reduce 'urban' heat islands and minimize impacts on microclimates, humans and wildlife habitats.</p>	1	1	Awarded Awarded INN-3: The GBCSA notes that this initiative addresses a valid environmental concern outside the current scope of this Green Star SA tool; the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT

	Initiative	Points Available	Points awarded	Status and Ruling	Number of times awarded
Ventilation Initiatives					
Inn-3	Unoccupied spaces (PEB Ene 11) To reward projects where occupancy sensors, integrated with the HVAC systems, are provided for more than 90% of the occupied spaces. The control systems first reduces the space's supply air flow to the minimum setting when the space is unoccupied for a preset period of time, typically 15 minutes, the control system shuts down the supply air flow to the space completely.	1	1	Awarded Awarded INN-3: The GBCSA notes that this initiative addresses a valid environmental concern outside the current scope of this Green Star SA tool; the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT
Waste and Recycling Management Initiatives					
Inn-3	Waste and Recycling Management Plan beyond MAN-9 To reward projects with solid waste management at a level which is not covered by the GSSA – Office Design v1 tool. This innovation claim is in the format set out in the Man-9. Waste and Recycling Management Plan credit in the Green Star SA Retail Centre v1 tool.	1	1	Awarded Awarded INN-3: The GBCSA notes that this initiative addresses a valid environmental concern outside the current scope of this Green Star SA tool; the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT
Thermal Metering per PEB Requirements					
Inn-3	Thermal Metering To reward projects where thermal sub-metering is provided for: all substantive thermal energy uses within the building AND effective monitoring system is installed to monitor all sub-meters.	1	1	Awarded Awarded INN-3: The GBCSA notes that this initiative addresses a valid environmental concern outside the current scope of this Green Star SA tool; the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT
Community Facilities					
Inn-3	Community Facilities To reward projects for The project has recognised the need for integrated planning, and shared land use through the provision of on-site outdoor facilities for use by the local community.	1	1	Awarded Awarded INN-3: The GBCSA notes that this initiative addresses a valid environmental concern outside the current scope of this Green Star SA tool; the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT
Flooring					
Inn-3	Modular Flooring System To reward projects for pursuing the SM-5 Modular Flooring System from Estidama Rating Tool Pearl Credit.	1	1	Awarded Awarded INN-3: The GBCSA notes that this initiative addresses a valid environmental concern outside the current scope of this Green Star SA tool; the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT
Water saving/Use Reduction initiatives					
Inn-3	HVAC bleed-off for re-use To reward projects whereHVAC bleed-off for re-use is harvested and re-used for toilet and urinal flushing, resulting in only recycled water being used for toilet & urinal flushing. 100% of all water (waste water and Stormwater) is either re-used or infiltrated to groundwater (does not leave the site in any municipal infrastructure).	1	1	Awarded Awarded INN-3: The GBCSA notes that this initiative addresses a valid environmental concern outside the current scope of this Green Star SA tool; the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT

	Initiative	Points Available	Points awarded	Status and Ruling	Number of times awarded
INN-3	Subsoil Muncioal Water Leak Detection	1	1	Awarded	
	To reward projects for implementing an additional system on the site which provides an early warning alert of leakage of municipal services along frontage of the developement using sensors.			Awarded INN-3: The GBCSA notes that this initiative addresses a valid environmental concern outside the current scope of this Green Star SA tool; the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT
Indoor Environment Quality					
INN-3	Occupant Comfort Survey	1	1	Awarded	
	To reward projects which elect to implement an occupant comfort survey for all regular building occupants as defined under credit IEQ-4 of the EBP			Awarded INN-3: The GBCSA notes that this initiative addresses a valid environmental concern outside the current scope of this Green Star SA tool; the project has provided adequate documented evidence and demonstrated and quantified the environmental impact.	NO LIMIT