

Category	Credit Number	Green Star Buildings Credit	Green Star Buildings NZ Draft v1.0 Credit Criteria	Related DAB Nzv1.1 Credits	GAP from DAB Nzv1.1 to GSB AUS v1.0	GAP from GSB AUS v1.0 to GSB NZ Draft v1.0 (Changes made based on industry consultation, ERP and Expert Feedback)	GAP from DAB Nzv1.1 to GSB NZ Draft v1.0	Expert Reference Panel (ERP)
Sustainability	1	Industry Development	<p><b>Credit Achievement</b></p> <ul style="list-style-type: none"> <li>The building owner or developer appoints a Green Star Accredited Professional.</li> <li>The building owner or developer discloses the cost of sustainable building practices to the NZGBC.</li> <li>The building owner or developer markets the building's sustainability achievements.</li> </ul>	<p>1.0 GSAP</p> <p>INN Challenge: Financial Transparency</p> <p>INN Challenge: Marketing Excellence</p>	<p>This is a combination of previous credits which include appointing a GSAP, Marketing Excellence and Financial Transparency. Instead of awarding 3 points, only 1 point is available in Green Star Buildings for project teams to achieve all of these sustainable initiatives.</p>	<p>1. This credit was deemed to be appropriate for a NZ context, and was streamlined from GSB AUS v1.0 to GSB NZ Draft v1.0 with minor changes.</p>	<p>1. This is a combination of previous credits which include appointing a GSAP, Marketing Excellence and Financial Transparency.</p> <p>2. Instead of awarding 3 points, only 1 point is available in Green Star Buildings for project teams to achieve all of these sustainable initiatives.</p>	ERP - Governance & Places
	2	Responsible Construction	<p><b>Minimum Expectation</b></p> <ul style="list-style-type: none"> <li>The builder or head contractor has an environmental management system in place to manage its environmental impacts on site.</li> <li>The builder or head contractor has an environmental management plan to cover the scope of construction activities.</li> <li>The builder diverts at least 40% of construction and demolition waste from landfill.</li> <li>The head contractor provides training on the sustainability targets of the building.</li> </ul> <p><b>Credit Achievement</b></p> <ul style="list-style-type: none"> <li>Waste contractors and facilities comply with the Green Star Construction and Demolition Waste Reporting Criteria.</li> <li>70% of construction and demolition waste is diverted from landfill, or less than 15kg/m<sup>2</sup>GFA of construction and demolition waste is generated and sent to landfill.</li> </ul>	<p>7.1 Environmental Management Plan</p> <p>7.2 Environmental Management System</p> <p>22.28 Percentage Benchmark - Construction and Demolition Waste</p> <p>22.1 Reporting Accuracy</p> <p>22.28 Percentage Benchmark - Construction and Demolition Waste</p>	<p>Environmental Management System (EMS), Environmental Management Plan (EMP), 80% waste diversion from landfill and head contractor sustainability training are Minimum Expectations GSB AUS v1.0. Altogether they can be awarded at least 2 points under DAB Nzv1.1.</p> <p>The compliance condition related to the certified EMS requirement has raised from a contract value of \$10 million to \$25 million.</p> <p>Under Design &amp; As Built Nzv1.1 the requirement for head contractor training is 80%. Now Green Star Buildings has raised the benchmark to 95%.</p> <p>The fixed benchmark available in DAB Nzv1.1 does not exist in the GSB AUS v1.0</p>	<p>1. From industry review and consultation, the Minimum Requirement for Construction and Demolition Waste Diversion was changed from 80% to 40%.</p> <p>2. In order to facilitate the market transformation, provisions were added to allow the Responsible Party (eg: Builders or Head Contractors) being certified part-way through the Project. Additional terms apply for this to be approved.</p> <p>1. NZGBC reviewed industry feedback through the consultation process, and consulted with experts to alter the Credit Achievement for Construction and Demolition Waste Diversion. It was changed from 80% to 70%.</p> <p>2. An alternative pathway to the credit achievement was added: i.e. less than 15kg/m<sup>2</sup>GFA of construction and demolition waste is generated and sent to landfill.</p> <p>3. References to New Zealand Green Star Construction and Demolition Waste Reporting Criteria and Enviro-Mark Certification scheme.</p>	<p>1. The DAB NZ v1.0 credits: 7.1 - Environmental Management Plan (EMP) and 7.2 - Environmental Management System (EMS); a 40% waste diversion from landfill requirement and a head contractor sustainability training requirement are now merged together and made into 1 Minimum Expectation under Green Star Buildings NZ Draft v1.0.</p> <p>2. Under Design &amp; As Built Nzv1.1 the requirement for head contractor training is 80%. Now Green Star Buildings NZ Draft v1.0 has raised the benchmark to 95%.</p> <p>The fixed benchmark (less than 15kg/m<sup>2</sup>GFA) of construction and demolition waste generated and sent to landfill was brought over from DAB NZ v1.1 to GSB Draft NZ v1.0.</p>	ERP - Waste & Construction
	3	Verification and Handover	<p><b>Minimum Expectation</b></p> <ul style="list-style-type: none"> <li>The building is set up for optimum ongoing management due to its appropriate metering and monitoring systems.</li> <li>The building has set environmental performance targets, designed and tested for air tightness, been commissioned, and will be tuned.</li> <li>The project team create and deliver operations and maintenance information to the facilities management team at the time of handover. Information is available to building users on how to best use the building.</li> </ul> <p><b>Credit Achievement</b></p> <ul style="list-style-type: none"> <li>An independent level of verification is provided to the design, planning, commissioning and tuning activities through the involvement of an independent commissioning agent.</li> <li>The project uses a soft landings approach that involves the future facilities management team.</li> <li>For large projects, both must occur.</li> </ul>	<p>2.1 Environmental Performance Targets, Commissioning and Tuning.</p> <p>2.2 Services and Maintainability Review</p> <p>4.1 Building Operations and Maintenance</p> <p>4.2 &amp; 4.3 Building Log book &amp; Building User Information</p> <p>INN - Exceeding Green Star Benchmarks - Air Permeability</p> <p>2.3 Independent Commissioning Agent</p> <p>INN: Market transformation - Soft Landings Approach</p>	<p>In addition to Commissioning and Tuning and Environmental Performance Targets which are already mandatory requirements under Design &amp; As Built Nzv1.1, Metering and Monitoring, Air Tightness Design and Testing and Building Information all become minimum expectations under Green Star Buildings in Australia.</p> <p>The air tightness criterion in Green Star Buildings requires project team to integrate air tightness into the commissioning process and conduct testing to learn as much about the process as possible. Instead of setting up a clear benchmark for air tightness testing goals, Green Star Buildings require project teams to set reasonable goals and verify that those goals have been met.</p> <p>Soft Landings is recognised as an innovation under Design &amp; As Built Nzv1.1. The soft landing approach is now an alternative pathway to Independent Commissioning Agent in Green Star Buildings for projects that comply. For buildings with a Total Building Services Value of over \$20m, both requirements must be met.</p>	<p>1. Refer metering requirements to New Zealand standards and guides such as NABERSNZ, Water New Zealand Good Practice Guide and NZS 5259:2015 etc.</p> <p>2. If applicable, process loads and PV systems are to be metered separately.</p> <p>3. The monitoring system must be commissioned to generate a minimum annual and monthly reporting of building and meter energy data.</p> <p>This criterion was deemed to be appropriate for a NZ context, and was streamlined from GSB AUS v1.0 to GSB NZ Draft v1.0 with other minor changes.</p>	<p>1. In addition to Commissioning and Tuning and Environmental Performance Targets which are already mandatory requirements under Design &amp; As Built Nzv1.1, Metering and Monitoring, Air Tightness Design and Testing and Building Information all combine together and become minimum expectations under Green Star Buildings.</p> <p>2. The air tightness criterion in Green Star Buildings requires project team to integrate air tightness into the commissioning process and conduct testing to learn as much about the process as possible. Instead of setting up a clear benchmark for air tightness testing goals, Green Star Buildings require project teams to set reasonable goals and verify that those goals have been met.</p> <p>1. Soft Landings is an innovation recognised under Design &amp; As Built Nzv1.1. It now becomes an alternative pathway to Independent Commissioning Agent in Green Star Buildings for projects that comply. For buildings with a Total Building Services Value of over \$20m, both requirements must be met.</p>	ERP - Energy & Carbon
	4	Responsible Resource Management	<p><b>Minimum Expectation</b></p> <p>There are two pathways available in this credit: a 'Performance Pathway' that relies on specialised waste management solutions, or a 'Prescriptive Pathway' that outlines specific best practice requirements.</p> <p>Prescriptive Pathway: Facilities</p> <ul style="list-style-type: none"> <li>The building is designed for the collection of separate waste and resource streams.</li> <li>The building provides a dedicated and adequately sized waste and resource storage area.</li> <li>The building ensures safe and efficient access to waste and resource storage areas for both occupants and waste and resource collection contractors.</li> </ul> <p>Performance Pathway: Specialist Plan</p> <ul style="list-style-type: none"> <li>A waste professional prepares and implements an Operational Waste Management Plan (OWMP) for the project in accordance with best practice approaches and this is reflected in the building's design.</li> </ul>	<p>8 Operational Waste</p>	<p>1. The Responsible Resource Management credit streamlines the Prescriptive Pathway from Operational Waste in Design &amp; As Built Nzv1.1. This Credit is also now a Minimum Expectation in Green Star Buildings which is Mandatory for every project to achieve.</p> <p>2. The Performance pathway requirement of an Operational Waste Management Plan in Design &amp; As Built Nzv1.1 is not available in Green Star Buildings AUS v1.0.</p>	<p>1. The Performance pathway requirement for an Operational Waste Management Plan is added back into the GSB Draft NZ v1.1, after industry consultation.</p> <p>2. The Operational Waste Management Plan must be prepared by a qualified waste auditor or waste specialist.</p>	<p>The Responsible Resource Management credit in GSB NZ Draft v1.0 mostly streamlines from the credit of Operational Waste in Design &amp; As Built Nzv1.1. However, this Credit becomes a Minimum Expectation in Green Star Buildings which is Mandatory for every project to achieve.</p>	ERP - Waste & Construction
	5	Responsible Procurement	<p><b>Credit Achievement</b></p> <p><u>Organizations with annual revenue over \$ 20 million:</u></p> <ul style="list-style-type: none"> <li>The building's design and construction procurement processes follow ISO 20400 Sustainable Procurement – Guidance by undertaking a risk and opportunities assessment.</li> <li>A responsible procurement plan is developed to mitigate risks and implement opportunities identified in the assessment.</li> </ul> <p>OR</p> <p><u>Organizations with annual revenue less than \$ 20 million:</u></p> <ul style="list-style-type: none"> <li>The building's design and construction procurement processes follow ISO 20400 Sustainable Procurement – Guidance by undertaking a risk and opportunities assessment for the top 5 trade packages by spend that include assessments in: <ul style="list-style-type: none"> <li>Human rights</li> <li>The environment</li> </ul> </li> <li>Risk controls of clauses in tenders, contracts and supplier management should be identified in the assessment</li> </ul>	<p>19.1 Uplifted Carbon Reduction - Absolute and Reference pathway</p> <p>19.2 Comparative Life Cycle Assessment.</p>	<p>1. Responsible Procurement is a relatively new credit in Green Star Buildings, it sets requirements for risk and opportunity assessments as well as a responsible procurement plan to mitigate risks and opportunities identified.</p> <p>2. The project must comply with both of the following criteria:</p> <p>a. Risk and Opportunity Assessment</p> <p>b. Responsible Procurement Plan.</p> <p>a. Risk and Opportunity Assessment</p> <ul style="list-style-type: none"> <li>Prior to appointment of head contractor, the project team must undertake a risk and opportunities assessment of 10 or more key items in the projects supply chain, to identify environmental, social and human health risks and opportunities following ISO 20400 Sustainable Procurement. The risk assessment must consider risks and opportunities further down the supply chain. One of each of the following three areas must be represented in the 10 items.</li> <ul style="list-style-type: none"> <li>Building Services</li> <li>Plant &amp; Equipment</li> <li>Materials</li> </ul> </ul> <p>b. Responsible Procurement Plan</p> <p>Project team must develop a plan for how the project will responsibly procure 10 or more key items mitigating risks and implementing opportunities identified in the Assessment following ISO 20400 Sustainable Procurement.</p> <p>This plan should be embedded in tender documentation for the head contractor or relevant trades. Must be implemented in partnership with relevant contractors and trades throughout construction, demonstrating data collection, monitoring and reporting has been carried out.</p>	<p>1. Standards updated to the relevant standards used in NZ.</p> <p>2. A simplified pathway added for projects valued at less than \$ 25 million with the intention to encourage updates of this credit and help the market to reform.</p>	<p>This is a new credit in GSB NZ Draft v1.0. It deals with similar issues that are also targeted by the proposed (at the time of publication) Modern Slavery Act. Care is given to bring about alignment between GSB NZ Draft v1.0 and the Act.</p>	ERP - Products, Materials and Uplifted Carbon
		<p><b>Credit Achievement</b></p> <ul style="list-style-type: none"> <li>50% of all structural components (by cost) meet a Responsible Products Value of at least 10.</li> </ul>		<p>1. This Credit is Part of the Responsible Products Framework, as developed by GBCA. Please refer to their website for detail on the Framework and an up-to-date list of rating schemes and associated products that can be targeted (<a href="https://new.gbca.org.au/green-star/rating-system/responsible-products-framework/">https://new.gbca.org.au/green-star/rating-system/responsible-products-framework/</a>)</p> <p>2. The method of recognising products and materials under Green Star Buildings is very different to Design &amp;</p>	<p>1. The Responsible Products Framework (RPF) developed by the GBCA will be directly adopted into GSB NZ Draft v1.0. NZ adaptations have been incorporated in this framework where applicable for NZ based projects.</p> <p>2. NZ based schemes and manufacturers can have their products verified through the RPF. Please refer to GBCA's website for further direction.</p>	<p>1. This Credit is Part of the Responsible Products Framework, as developed by GBCA. Please refer to their website for detail on the Framework and an up-to-date list of rating schemes and associated products that can be targeted (<a href="https://new.gbca.org.au/green-star/rating-system/responsible-products-framework/">https://new.gbca.org.au/green-star/rating-system/responsible-products-framework/</a>)</p>		

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6	6	Responsible Structure	<b>Exceptional Performance</b> In conjunction with the Credit Achievement: • 10% of all products in the structure (by cost) meet a Responsible Products Value of at least 15 OR • 80% of all products in the structure (by cost) meet a Responsible Products Value of at least 10.	19.1 Comparative Life Cycle Assessment 20 Responsible Building Materials 21 Sustainable Products	As Built NZv1.1. However, the credit intention remains the same.  3. GSB Aus and GSB NZ Draft v1.0 use the 'Responsible Products Value' (RPV) as a means to determine compliance with the credit criteria. More sustainability initiatives can now be recognised and taken into account to calculate each product's RPV.  4. Products and materials have been classified into Best practice and Good practice products, which is based on the RPV to help project teams to demonstrate their compliance.  5. A total of 13 Points across the 4 credits are available to target under this Framework: - 5 Points for Structure - 4 Points for Envelope - 2 Points for Systems - 2 Points for Finishes.	GAP from GSB AUS v1.0 to GSB NZ Draft v1.0 (Changes made based on Industry consultation, ERP and Expert Feedback)	2. The method of recognising products and materials under Green Star Buildings is very different to Design & As Built NZv1.1. However, the credit intention remains the same.  3. GSB Aus and GSB NZ Draft v1.0 use the 'Responsible Products Value' (RPV) as a means to determine compliance with the credit criteria. More sustainability initiatives can now be recognised and taken into account to calculate each product's RPV.  4. Products and materials have been classified into Best practice and Good practice products, which is based on the RPV to help project teams to demonstrate their compliance.  5. A total of 13 Points across the 4 credits are available to target under this Framework: - 5 Points for Structure - 4 Points for Envelope - 2 Points for Systems - 2 Points for Finishes.	ERP - Products, Materials and Upfront Carbon
			<b>Credit Achievement</b> 30% of all building envelope components (by cost) meet a Responsible Products Value score of at least 10.					
			<b>Exceptional Performance</b> In addition to the Credit Achievement, one of the following is met: • 10% of all products in building envelope (by cost) meet a Responsible Products Value score of at least 15. OR • 60% of all products in building envelope (by cost) meet a Responsible Products Value score of at least 10.					
			<b>Credit Achievement</b> 20% of all active building systems (by cost) meet a Responsible Products Value of at least 6.					
7	7	Responsible Envelope	<b>Exceptional Performance</b> In addition to the Credit Achievement, one of the following is met: • 10% of all products in building envelope (by cost) meet a Responsible Products Value score of at least 15. OR • 60% of all products in building envelope (by cost) meet a Responsible Products Value score of at least 10.	19.1 Comparative Life Cycle Assessment 20 Responsible Building Materials 21 Sustainable Products	As Built NZv1.1. However, the credit intention remains the same.  3. GSB Aus and GSB NZ Draft v1.0 use the 'Responsible Products Value' (RPV) as a means to determine compliance with the credit criteria. More sustainability initiatives can now be recognised and taken into account to calculate each product's RPV.  4. Products and materials have been classified into Best practice and Good practice products, which is based on the RPV to help project teams to demonstrate their compliance.  5. A total of 13 Points across the 4 credits are available to target under this Framework: - 5 Points for Structure - 4 Points for Envelope - 2 Points for Systems - 2 Points for Finishes.	GAP from GSB AUS v1.0 to GSB NZ Draft v1.0 (Changes made based on Industry consultation, ERP and Expert Feedback)	2. The method of recognising products and materials under Green Star Buildings is very different to Design & As Built NZv1.1. However, the credit intention remains the same.  3. GSB Aus and GSB NZ Draft v1.0 use the 'Responsible Products Value' (RPV) as a means to determine compliance with the credit criteria. More sustainability initiatives can now be recognised and taken into account to calculate each product's RPV.  4. Products and materials have been classified into Best practice and Good practice products, which is based on the RPV to help project teams to demonstrate their compliance.  5. A total of 13 Points across the 4 credits are available to target under this Framework: - 5 Points for Structure - 4 Points for Envelope - 2 Points for Systems - 2 Points for Finishes.	ERP - Products, Materials and Upfront Carbon
			<b>Credit Achievement</b> 20% of all active building systems (by cost) meet a Responsible Products Value of at least 6.					
8	8	Responsible Systems	<b>Exceptional Performance</b> In addition to the Credit Achievement, one of the following is met: • 5% of all active building systems (by cost) meet a Responsible Products Value of at least 11. OR • 35% of all active building systems (by cost) have an average Responsible Products Value of at least 6.	19.1 Comparative Life Cycle Assessment 20 Responsible Building Materials 21 Sustainable Products	As Built NZv1.1. However, the credit intention remains the same.  3. GSB Aus and GSB NZ Draft v1.0 use the 'Responsible Products Value' (RPV) as a means to determine compliance with the credit criteria. More sustainability initiatives can now be recognised and taken into account to calculate each product's RPV.  4. Products and materials have been classified into Best practice and Good practice products, which is based on the RPV to help project teams to demonstrate their compliance.  5. A total of 13 Points across the 4 credits are available to target under this Framework: - 5 Points for Structure - 4 Points for Envelope - 2 Points for Systems - 2 Points for Finishes.	GAP from GSB AUS v1.0 to GSB NZ Draft v1.0 (Changes made based on Industry consultation, ERP and Expert Feedback)	2. The method of recognising products and materials under Green Star Buildings is very different to Design & As Built NZv1.1. However, the credit intention remains the same.  3. GSB Aus and GSB NZ Draft v1.0 use the 'Responsible Products Value' (RPV) as a means to determine compliance with the credit criteria. More sustainability initiatives can now be recognised and taken into account to calculate each product's RPV.  4. Products and materials have been classified into Best practice and Good practice products, which is based on the RPV to help project teams to demonstrate their compliance.  5. A total of 13 Points across the 4 credits are available to target under this Framework: - 5 Points for Structure - 4 Points for Envelope - 2 Points for Systems - 2 Points for Finishes.	ERP - Products, Materials and Upfront Carbon
			<b>Credit Achievement</b> 40% of all internal building finishes (by cost) meet a Responsible Products Value of at least 7.					
9	9	Responsible Finishes	<b>Exceptional Performance</b> In addition to the Credit Achievement, one of the following is met: • 10% of all internal building finishes (by cost) meet a Responsible Products Value of at least 12. OR • 60% of all internal building finishes (by cost) meet a Responsible Products Value of at least 7.	19.1 Comparative Life Cycle Assessment 20 Responsible Building Materials 21 Sustainable Products	As Built NZv1.1. However, the credit intention remains the same.  3. GSB Aus and GSB NZ Draft v1.0 use the 'Responsible Products Value' (RPV) as a means to determine compliance with the credit criteria. More sustainability initiatives can now be recognised and taken into account to calculate each product's RPV.  4. Products and materials have been classified into Best practice and Good practice products, which is based on the RPV to help project teams to demonstrate their compliance.  5. A total of 13 Points across the 4 credits are available to target under this Framework: - 5 Points for Structure - 4 Points for Envelope - 2 Points for Systems - 2 Points for Finishes.	GAP from GSB AUS v1.0 to GSB NZ Draft v1.0 (Changes made based on Industry consultation, ERP and Expert Feedback)	2. The method of recognising products and materials under Green Star Buildings is very different to Design & As Built NZv1.1. However, the credit intention remains the same.  3. GSB Aus and GSB NZ Draft v1.0 use the 'Responsible Products Value' (RPV) as a means to determine compliance with the credit criteria. More sustainability initiatives can now be recognised and taken into account to calculate each product's RPV.  4. Products and materials have been classified into Best practice and Good practice products, which is based on the RPV to help project teams to demonstrate their compliance.  5. A total of 13 Points across the 4 credits are available to target under this Framework: - 5 Points for Structure - 4 Points for Envelope - 2 Points for Systems - 2 Points for Finishes.	ERP - Products, Materials and Upfront Carbon
			<b>Credit Achievement</b> 40% of all internal building finishes (by cost) meet a Responsible Products Value of at least 7.					
10	10	Clean Air	<b>Minimum Expectation</b> • Levels of indoor pollutants are maintained at acceptable levels. • A high level of outdoor air is provided. • Pollutants entering the building are minimised.	9.1 Ventilation System Attributes 9.2 Provision of Outdoor Air 9.3 Exhaust or Elimination of Pollutants	This credit is derived from the original Indoor Air Quality credit in Design & As Built NZv1.1. The following requirements are set as Minimum Expectations in GSB AUS v1.0: - Levels of indoor pollutants are maintained at acceptable levels. - A high level of outdoor air is provided i.e. 50% improvement over recognised standard. - Pollutants entering the building are minimised.	1. Under the Provision of Outdoor Air's minimum requirements, the pathway allowing 'Comparison to Industry Standards (for- Class 2 and Class 3 Buildings)' was removed to avoid potential misinterpretation.  2. The minimum expectation for 'Exhaust or Elimination of Pollutants' now requires compliance with section 2.5 of AS 1668.2:2012, for minimum levels of filtration.  3. GSB AUS v1.0 requires default occupancy period to be used for compliance. But GSB NZ v1.0 calls for the use of design occupancy period.  4. Under the Provision of Outdoor Air's minimum requirements, the pathway for Comparison to Industry standards makes an additional reference to the NZS 4303:1990 along with the AS 1668.2:2012.	This credit is derived from the original Indoor Air Quality credit in Design & As Built NZv1.1. The following requirements are set as Minimum Expectations in GSB NZ Draft v1.0: - Levels of indoor pollutants are maintained at acceptable levels. - A high level of outdoor air is provided i.e. 50% improvement over recognised standard. - Pollutants entering the building are minimised.	ERP - Health & Wellbeing
			<b>Credit Achievement</b> In addition to the Minimum Expectation: • The building's ventilation systems allow for easy maintenance, and high levels of outdoor air provided i.e. 100% improvement over recognised standard. In contrast, projects that meet all the requirements can achieve a total of 4 points under Design & As Built NZv1.1.					
11	11	Light Quality	<b>Minimum Expectation</b> • Lighting within the building meets minimum comfort requirements. • Good lighting levels suitable for the typical tasks in each space are available. • The building provides adequate levels of daylight. <b>Credit Achievement</b> In addition to the Minimum Expectation: • The building provides best practice artificial lighting, or • The building provides best practice access to daylight.	11.1 Minimum Lighting Comfort 11.2 General Illuminance and Glare 11.3 Surface Illuminance 12.1 Glare Reduction 12.2 Daylight 12.3 Views	This credit combines the requirements for Lighting Comfort and Daylight from Design & As Built NZv1.1. Requirements for lighting design have gone through major changes in GSB AUS v1.0. For example, there is an increased minimum requirement for CR and all light sources must have a minimum of 3 MacAdam Eclipse, amongst further changes.  The daylight requirement and glare reduction requirement from light sources remain the same as Design & As Built NZv1.1.  The following criteria become minimum expectations in GSB NZ Draft v1.0 that every project needs to achieve: - Lighting Comfort - Glare from Light Sources - Daylight	The Minimum Expectation under Glare from Light Sources was amended. A requirement was added under Prescriptive Method 1 requiring that the "lighting density should be controlled to avoid sudden brightness and contrasts from normal viewing angles of occupants".	This credit combines the requirements for Lighting Comfort and Daylight from Design & As Built NZv1.1. Requirements for lighting design have gone through major changes from DAB NZ v1.0 to GSB NZ Draft v1.0. For example, there is an increased minimum requirement for CR and all light sources must have a minimum of 3 MacAdam Eclipse, amongst further changes.  The daylight requirement and glare reduction requirement from light sources remain the same as Design & As Built NZv1.1.  The following criteria become minimum expectations in GSB NZ Draft v1.0 that every project needs to achieve: - Lighting Comfort - Glare from Light Sources - Daylight	ERP - Health & Wellbeing
			<b>Exceptional Performance</b> In conjunction with the Credit Achievement: • The building provides best practice artificial lighting. • The building provides best practice access to daylight.					
			<b>Minimum Expectation</b> • An Acoustic Comfort Strategy is prepared to describe how the building and acoustic design aims to deliver acoustic comfort to the building occupants.	New criterion	A new requirement for Acoustic Comfort Strategy is added in GSB AUS v1.0 and GSB NZ Draft v1.0 as a minimum expectation.	The Minimum Expectation is largely streamlined from GSB AUS v1.0 to GSB NZ Draft v1.0.	A new requirement for Acoustic Comfort Strategy is added in GSB AUS v1.0 and GSB NZ Draft v1.0 as a minimum expectation.	

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Health	12	Acoustic Comfort	<p><b>Credit Achievement</b> In addition to the Minimum Expectation, a combination of the following subject to building type:</p> <ul style="list-style-type: none"> <li>• The building achieves maximum internal noise levels.</li> <li>and/or</li> <li>• The building achieves minimum internal noise levels.</li> <li>and/or</li> <li>• The building provides acoustic separation.</li> <li>and/or</li> <li>• The building minimises impact noise transfer.</li> <li>and/or</li> <li>• The building is designed with reverberation control.</li> </ul>	<p>10.1 Internal Noise Levels 10.2 Reverberation 10.3 Acoustic Separation</p>	<p>Requirements for internal noise levels reverberation and acoustic separation remain the same as Design &amp; As Built NZv1.1.</p> <p>Only 2 points are available to achieve all of these requirements in GSB AUS v1.0. The Credit Achievement is dependent upon the project type. This credit in Green Star Buildings brings more focus on a systematic acoustic comfort solution. Points cannot be achieved separately for partial compliance.</p>	<p>1. Building classifications in GSB AUS v1.0 are updated for NZ relevance in the GSB NZ Draft v1.0.</p> <p>2. The internal noise level criteria for naturally ventilated buildings are updated for NZ relevance.</p> <p>3. Concerns surrounding "sleeping areas" under the Acoustic Separation portion of the credit were addressed. In GSB NZ Draft v1.0, requirements for Privacy in buildings contain sleeping areas were simplified under the Acoustic Separation sub-section, as the original requirements in GSB AUS v1.0 would make it highly onerous for such projects, and would far exceed the current acoustic provisions in DAB NZv1.1.</p> <p>4. The requirement for partitions with doors is updated to address that doors should achieve at least a weighted sound reduction index (Rw) of 30.</p> <p>5. The impact insulation class requirement for 'all other spaces' is reduced from 60 in GSB AUS v1.0 to 50 in GSB NZ Draft v1.0.</p>	<p>Requirements for internal noise levels reverberation and acoustic separation remain the same as Design &amp; As Built NZv1.1.</p> <p>Only 2 points are available to achieve all of these requirements in GSB NZ Draft v1.0, instead of 3 as in DAB NZv1.1. The Credit Achievement is dependent upon the project type. This credit in Green Star Buildings brings more focus on a systematic acoustic comfort solution. Points cannot be achieved separately for partial compliance.</p>	ERP - Health & Wellbeing
	13	Exposure to Toxins	<p><b>Minimum Expectation</b></p> <ul style="list-style-type: none"> <li>• The building's paints adhesives, sealants, and carpets are low in TVOC or non-toxic; and,</li> <li>• The building's engineered wood products are low in TVOC or non-toxic; and,</li> <li>• Occupants are not exposed to banned or highly toxic materials in the building.</li> </ul>	<p>Indoor Pollutants 13.1 Plants, Adhesives, Sealants and Carpets. 13.2 Engineered Wood Products. 24.3 Hazardous Materials</p>	<p>The credit requirements from Indoor Pollutants (TVOC and Formaldehyde) and Hazardous Materials in Design &amp; As Built NZv1.1 are now Minimum Expectations in GSB NZ Draft v1.0, that projects must comply with.</p> <p>The requirements surrounding the building's paints, adhesives, sealants and engineered wood products remain the same in GSB AUS v1.0 (and GSB NZ Draft v1.0) as in DAB NZv1.1.</p> <p>Requirements for Hazardous Material remains the same as in DAB NZv1.1, but has been renamed to Banned or highly toxic materials in GSB NZ Draft v1.0.</p>	<p>An alternative pathway to compliance to the minimum expectations was added to GSB NZ Draft v1.0. Compliance with this criterion is considered to be met if the TVOC limits in the Credit Achievement are demonstrated through on site testing, which must take place after practical completion and prior to occupants moving into the building.</p> <p>It must be noted that this is relatively risky: The testing can only be done after practical completion and if the project fails the onsite testing for the Minimum Expectation, then the project will not be eligible for a GSB rating.</p>	<p>The credit requirements from Indoor Pollutants (TVOC and Formaldehyde) and Hazardous Materials in Design &amp; As Built NZv1.1 are now Minimum Expectations in GSB NZ Draft v1.0, that projects must comply with.</p> <p>The requirements surrounding the building's paints, adhesives, sealants and engineered wood products remain the same in GSB AUS v1.0 (and GSB NZ Draft v1.0) as in DAB NZv1.1.</p> <p>Requirements for Hazardous Material remains the same as in DAB NZv1.1, but has been renamed to Banned or highly toxic materials in GSB NZ Draft v1.0.</p> <p>An alternative pathway to compliance to the minimum expectations was added to GSB NZ Draft v1.0. Compliance with this criterion is considered to be met if the TVOC limits in the Credit Achievement are demonstrated through on site testing, which must take place after practical completion and prior to occupants moving into the building. It must be noted that this however is relatively risky: if the project fails the onsite testing for the Minimum Expectation, then the project will not be eligible for a GSB rating.</p>	ERP - Products, Materials and Upfront Carbon
			<p><b>Credit Achievement</b></p> <ul style="list-style-type: none"> <li>• On-site tests verify the building has low Volatile Organic Compounds (VOC) and formaldehyde levels.</li> </ul>	New Criterion	<p>The On-site VOC Testing credit is new in GSB AUS v1.0. In DAB NZv1.1, this was an innovation and a number of New Zealand projects, at the time of publication, have already started to target this credit.</p>	<p>This credit was deemed to be appropriate for a NZ context, and was streamlined from GSB AUS v1.0 to GSB NZ Draft v1.0 with minor changes.</p>	<p>The On-site VOC Testing credit is new in GSB AUS v1.0. In DAB NZv1.1, this was an innovation and the methodology has been adopted into GSB NZ Draft v1.0.</p>	
	14	Thermal Comfort and Amenity Spaces	<p><b>Minimum Expectation</b></p> <ul style="list-style-type: none"> <li>• A high degree of thermal comfort is provided to occupants in the space, equivalent to 80% of all occupants being satisfied in the space.</li> </ul> <p><b>Credit Achievement</b> The building has dedicated amenity rooms to act as a parent room, relaxation room, or an exercise room. Or A high degree of thermal comfort is provided to occupants in the space, equivalent to 90% of all occupants being satisfied in the space.</p> <p><b>Exceptional Performance</b></p> <ul style="list-style-type: none"> <li>• Where both items in the credit achievement have been met.</li> </ul>	14 Thermal Comfort	<p>The requirement for Thermal Comfort is not present in GSB AUS v1.0, due to an update to Australia's Building Code covering the requirements for it. The credit name is "Amenity and Comfort" in GSB AUS v1.0.</p> <p>Requirements for amenity spaces are not present in DAB NZv1.1. Points can be achieved under the GSB AUS v1.0 (and GSB NZ Draft v1.0) if the building has dedicated amenity rooms to act as parent room, a relaxation room, or an exercise room.</p> <p>The Amenity rooms must meet the following criteria:</p> <ul style="list-style-type: none"> <li>- Credit Achievement for the Light Quality Credit.</li> <li>- Credit Achievement for the Acoustic Comfort Credit.</li> <li>- The Inclusive Design' criterion of the Design for Inclusion credit.</li> </ul>	<p>The requirement for Thermal Comfort is not present in GSB AUS v1.0, due to an update to Australia's Building Code covering the requirements for it. However, NZ's Building Code does not adequately cover the requirements for thermal comfort, hence this minimum expectation is streamlined from DAB NZ v1.1 into GSB NZ Draft v1.0. The original credit name is "Amenity and Comfort" in GSB AUS v1.0.</p> <p>The Credit Criteria for 14.2 Advanced Thermal Comfort was streamlined from DAB NZv1.1 to GSB NZ Draft v1.0. The 2 points available in the GSB AUS v1.0 for amenity spaces are split in the GSB NZ Draft v1.0 with one point for amenity spaces and another one point for advanced thermal comfort.</p>	<p>This minimum expectation is streamlined from DAB NZ v1.1 (the first 1 point in the thermal comfort credit) into GSB NZ Draft v1.0, however, with no point.</p> <p>Requirements for amenity spaces are not present in DAB NZv1.1. 1 point can be achieved under the GSB NZ Draft v1.0 if the building either has advanced thermal comfort or meets requirements for amenity spaces. If a project can achieve both criteria, 2 points can be achieved under this credit.</p>	ERP - Health & Wellbeing
15	Connection to Nature	<p><b>Credit Achievement</b></p> <ul style="list-style-type: none"> <li>• The building provides views.</li> <li>• The building includes indoor plants and incorporates nature-inspired design.</li> <li>or</li> <li>• 5% of the building's regularly occupied areas / or site area (whichever is greater) is allocated to nature in which occupants can directly engage with.</li> </ul> <p><b>Exceptional Performance</b> In conjunction with the Credit Achievement:</p> <ul style="list-style-type: none"> <li>• The building provides views.</li> <li>• The building includes indoor plants and incorporates nature-inspired design.</li> <li>• 5% of the building's regularly occupied areas / or site area (whichever is greater) is allocated to nature in which occupants can directly engage with.</li> </ul>	12.3 Views	<p>This credit covers the requirements for Views from DAB NZv1.1.</p> <p>Indoor Plants has been a requirement in the Interiors tool and brought into Green Star Buildings.</p> <p>In order to achieve 1 point, the project needs to provide views and meet one of the following requirements:</p> <ul style="list-style-type: none"> <li>- Plants and Nature inspired Design or;</li> <li>- Interaction with Nature</li> </ul> <p>For 2 points to be achieved, project team needs to comply with all of the following:</p> <ul style="list-style-type: none"> <li>- Views</li> <li>- Plants and Nature inspired Design or;</li> <li>- Interaction with Nature</li> </ul>	<p>This credit was deemed to be appropriate for a NZ context, and was streamlined from GSB AUS v1.0 to GSB NZ Draft v1.0 with minor changes.</p>	<p>This credit covers the requirements for Views from DAB NZv1.1.</p> <p>Indoor Plants has been a requirement in the Interiors tool and has been brought into GSB NZ Draft v1.0</p> <p>In order to achieve 1 point, the project needs to provide views and meet one of the following requirements:</p> <ul style="list-style-type: none"> <li>- Plants and Nature inspired Design or;</li> <li>- Interaction with Nature</li> </ul> <p>For 2 points to be achieved, project team needs to comply with all of the following:</p> <ul style="list-style-type: none"> <li>- Views</li> <li>- Plants and Nature inspired Design or;</li> <li>- Interaction with Nature</li> </ul>	ERP - Ecology & Emissions	
16	Climate Change Resilience	<p><b>Minimum Expectation</b></p> <ul style="list-style-type: none"> <li>• The project team completes the climate change pre-screening checklist. The project team must communicate the building's exposure to climate change hazards, and any identified risks to the client/building owner.</li> </ul> <p><b>Credit Achievement</b> In addition to the Minimum Expectation:</p> <ul style="list-style-type: none"> <li>• A project-specific Climate Change Risk Assessment has been developed and implemented in accordance with a recognised standard.</li> <li>• A Climate Adaptation Plan has been developed and implemented, including solutions for the building design and construction that specifically address key risks identified in the Climate Change Risk Assessment.</li> </ul>	<p>3.1 Climate Change Pre-Screening checklist. 3.2 Climate Change Risk Assessment and Adaptation Plan</p>	<p>The Adaptation and Resilience credit under DAB NZv1.1 was reviewed and updated for NZ relevance based on this credit in GSB AUS v1.0. The earthquake resilience requirements in DAB NZv1.1 is addressed in the Operation Resilience credit under the GSB AUS v1.0</p>	<p>The minimum expectation in GSB NZ Draft v1.0 is largely streamlined from the DAB NZv1.1, however, with further consideration of maladaptation and requiring the pre-screening checklist to be completed prior to detailed design instead of developed design.</p> <p>The requirements for the Climate Change Risk Assessment and Adaptation Plan are streamlined from the DAB NZv1.1.</p> <p>The definition for a Suitable Qualified Professional was altered to remove the tertiary qualification requirement and expanded to include individuals that have been supervised by suitably qualified practitioners.</p>	<p>The minimum expectation in GSB NZ Draft v1.0 is largely streamlined from the DAB NZv1.1, however, with further consideration of maladaptation and requiring the pre-screening checklist to be completed prior to detailed design instead of developed design. The earthquake resilience requirements in DAB NZv1.1 is addressed in the Operation Resilience credit for GSB NZ Draft v1.0.</p> <p>The requirements for the Climate Change Risk Assessment and Adaptation Plan are streamlined from the DAB NZv1.1.</p> <p>The definition for a Suitable Qualified Professional was altered to remove the tertiary qualification requirement and expanded to include individuals that have been supervised by suitably qualified practitioners.</p>	ERP - Governance & Places	

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Sustainability	17	Operations Resilience	<p><b>Credit Achievement</b></p> <ul style="list-style-type: none"> <li>The project team undertakes a comprehensive review of the acute shocks and chronic stresses likely to influence future building operations.</li> <li>The building's design and future operational plan addresses any high or extreme system-level interdependency risks.</li> <li>The building's design maintains a level of survivability and design purpose in a blackout.</li> </ul>	3.2 Climate Change Risk Assessment and Adaptation Plan 3.3 Earthquake Resilience	<p>This is a new credit in Green Star Buildings, addressing the acute shocks and chronic stresses as listed below:</p> <p><b>Shocks</b></p> <ul style="list-style-type: none"> <li>Failure of critical infrastructure (power, water and digital)</li> <li>Health pandemic</li> <li>Water security</li> <li>Geological hazards (landslides, earthquakes, tsunamis)</li> <li>Direct attack (cyber and physical)</li> </ul> <p><b>Stresses</b></p> <ul style="list-style-type: none"> <li>Aging infrastructure</li> <li>Rising cyber dependency</li> <li>Increasing energy costs</li> <li>Lack of transport accessibility and availability</li> </ul> <p>The Australian version of this credit does not include requirements of LDD Analysis.</p>	<p>All risks rated as 'Extreme' must be addressed through specific design responses. Now in GSB NZ Draft v1.0, this includes where Low Damage Design is incorporated to address Geological risks.</p> <p>The definition for a Suitable Qualified Professional was altered to remove the tertiary qualification requirement.</p>	<p>This is a new credit in Green Star Buildings (not present in the DAB NZv1.1), addressing the acute shocks and chronic stresses as listed below:</p> <p><b>Shocks</b></p> <ul style="list-style-type: none"> <li>Failure of critical infrastructure (power, water and digital)</li> <li>Health pandemic</li> <li>Water security</li> <li>Geological hazards (landslides, earthquakes, tsunamis)</li> <li>Direct attack (cyber and physical)</li> </ul> <p><b>Stresses</b></p> <ul style="list-style-type: none"> <li>Aging infrastructure</li> <li>Rising cyber dependency</li> <li>Increasing energy costs</li> <li>Lack of transport accessibility and availability</li> </ul> <p>The Australian version of this credit does not include requirements of LDD Analysis. Now in GSB NZ Draft v1.0, Low Damage Design is incorporated to address Geological risks if addressed as 'Extreme'.</p>	ERP - Governance & Places
	18	Community Resilience	<p><b>Credit Achievement</b></p> <ul style="list-style-type: none"> <li>The project team undertakes a needs analysis of the community, identifies shocks and stresses that impact the building's ability to service the community, and develops responses to manage these.</li> </ul>	25.4 Community Benefits (INN)	<p>Community Resilience is a new credit in Green Star Buildings (not present in the DAB NZ). It requires project teams to undertake a needs analysis of the community, identify shocks and stresses that impact the building's ability to service the community, and develop responses to manage these.</p>	<p>This credit was mainly streamlined from GSB AUS v1.0 to GSB NZ Draft v1.0 with the following changes: 1. Requiring alignment with local civil defence CDEM plans for the vicinity. 2. The definition for a Suitable Qualified Professional was altered to remove the tertiary qualification requirement.</p>	<p>Community Resilience is a new credit in Green Star Buildings. It requires project teams to undertake a needs analysis of the community, identify shocks and stresses that impact the building's ability to service the community, and develop responses to manage these.</p>	ERP - Governance & Places
	19	Heat Resilience	<p><b>Credit Achievement</b></p> <p>At least 75% of the whole site area comprises of one or a combination of strategies that reduce the heat island effect.</p>	New Credit	<p>Heat Resilience is new to the New Zealand market as it was not included in DAB NZ. It requires projects to address the Heat Island Effect.</p>	<p>This credit was deemed to be appropriate for a NZ context, and was streamlined from GSB AUS v1.0 to GSB NZ Draft v1.0 with minor changes.</p>	<p>Heat Resilience is new to the New Zealand market as it was not included in DAB NZ. It requires projects to address the Heat Island Effect.</p>	ERP - Governance & Places
	20	Grid Resilience	<p><b>Credit Achievement</b></p> <ul style="list-style-type: none"> <li>Climate Positive Pathway –</li> <li>The building provides active generation and storage systems.</li> </ul> <p>and/or</p> <ul style="list-style-type: none"> <li>The building has the infrastructure to deliver an appropriate demand response strategy.</li> </ul> <p>and/or</p> <ul style="list-style-type: none"> <li>The building has reduced its electricity consumption through passive design.</li> </ul>	16 Peak Electricity Demand Reduction	<p>The credit Grid Resilience credit in GSB AUS v1.0 and GSB NZ Draft v1.0 is derived from the Peak Electricity Demand Reduction credit in Design &amp; As Built NZv1.1 with additional avenues to fulfil the credit and 3 points available to target instead of 2.</p> <p>In order to get 3 points the building must comply with one of the following criteria:</p> <ul style="list-style-type: none"> <li>Active Generation and Storage Systems</li> <li>Demand Response</li> <li>Passive Design Solutions</li> </ul>	<p>In GSB AUS v1.0, project teams may provide a solution where the strategies for Active Generation and Storage Systems and Demand Response are used together. In GSB NZ Draft v1.0, this was amended to include Passive Design Solutions, and the minimum reduction threshold for each strategy was increased to 20%. Specific wording has been added that the peak reduction must align with the grids maximum demand.</p> <p>The NZGBC is intending to add an alternative compliance pathway based absolute value targets, which will be available in the future.</p>	<p>The credit Grid Resilience credit in GSB AUS v1.0 and GSB NZ Draft v1.0 is derived from the Peak Electricity Demand Reduction credit in Design &amp; As Built NZv1.1 with additional avenues to fulfil the credit and 3 points available to target instead of 2.</p> <p>In order to get 3 points the building must comply with one of the following criteria, or provide a solution where a combination of the three pathways is used:</p> <ul style="list-style-type: none"> <li>Active Generation and Storage Systems</li> <li>Demand Response</li> <li>Passive Design Solutions</li> </ul> <p>The peak demand reduction must align with the grids maximum demand.</p> <p>In GSB NZ Draft v1.0 the building's components must demonstrate a 20% improvement of the peak electricity demand over a reference building, compared to the 15% reduction for the prescriptive pathway in DAB NZv1.1.</p>	ERP - Governance & Places
Sustainability	21	Upfront Carbon Emissions	<p><b>Minimum Expectation</b></p> <ul style="list-style-type: none"> <li>A minimum upfront carbon reduction compared to a reference building has been demonstrated.</li> </ul> <p><b>Credit Achievement</b></p> <ul style="list-style-type: none"> <li>Climate Positive Pathway –</li> <li>In conjunction with the Minimum Expectation:</li> <li>The building's upfront carbon emissions are at least 20% less than those of a reference building.</li> <li>Demolition works are offset.</li> </ul> <p><b>Exceptional Performance</b></p> <p>In conjunction with the Credit Achievement:</p> <ul style="list-style-type: none"> <li>The building's upfront carbon emissions are at least 40% less than those of a reference building.</li> </ul> <p><b>Credit Achievement Long-term Carbon Storage</b></p> <ul style="list-style-type: none"> <li>The building demonstrates between 50 and 100 kg CO<sub>2</sub>/m<sup>2</sup> of atmospheric carbon storage</li> </ul> <p><b>Exceptional Performance Long-term Carbon Storage</b></p> <p>In conjunction with the Credit Achievement:</p> <ul style="list-style-type: none"> <li>The building demonstrates at least 100 kg CO<sub>2</sub>/m<sup>2</sup> of atmospheric carbon storage</li> </ul>	19.1 Upfront Carbon Emissions	<p>The Upfront Carbon Emissions credit in Design &amp; As Built NZv1.1 (and the subsequently adapted version in v1.1.1) was created based on this credit in Green Star Buildings with care for a New Zealand context and references to New Zealand specific guidance and calculator.</p> <p>GSB AUS v1.0 does not have specific requirements for Long Term Carbon Storage which is part of the Life Cycle Impacts in DAB NZv1.1</p>	<p>In GSB NZ Draft v1.0, 2 additional points are added for Long-term Carbon Storage.</p> <p>The credit has been streamlined from Design &amp; As Built NZv1.1 to GSB NZ Draft v1.0 with minor threshold and point allocation changes. GSB NZ Draft v1.0 uses the NZGBC Upfront Carbon Calculator and Methodology.</p>	<p>The Upfront Carbon Emissions credit in Design &amp; As Built NZv1.1 (and the subsequently adapted version in v1.1.1) was created based on this credit in Green Star Buildings with care for a New Zealand context. Hence the credit has been streamlined from Design &amp; As Built NZv1.1 to GSB NZ Draft v1.0 with minor threshold and point allocation changes.</p>	ERP - Products, Materials and Upfront Carbon
	22	Energy Use	<p><b>Minimum Expectation</b></p> <p>(Note: the below reduction targets are in the process of being reviewed for the suitability for the Aotearoa context and our national climate targets and will likely be adjusted upon completion of further studies.)</p> <p>The building's energy use is at least 10% less than a reference building.</p> <p><b>Credit Achievement</b></p> <ul style="list-style-type: none"> <li>Climate positive pathway –</li> <li>In conjunction with the Minimum Expectation:</li> <li>The building's energy use is at least 30% less than a reference building.</li> </ul> <p><b>Exceptional Performance</b></p> <p>In conjunction with the Credit Achievement:</p> <ul style="list-style-type: none"> <li>The building's energy use is at least 50% less than a reference building.</li> </ul>	15 Greenhouse Gas Emissions	<p>This credit is linked to the Greenhouse Gas Emissions credit in Design &amp; As Built NZv1.1, however with alternative pathways provided to the reference pathway.</p> <p>In the Australian version of Green Star Buildings, there are three pathways available:</p> <ul style="list-style-type: none"> <li>Reference Pathway</li> <li>Energy Use - NABERS Commitment Agreement Pathway</li> <li>Energy Use - Residential Pathway</li> </ul>	<p>To be New Zealand specific, the pathways available in GSB NZ Draft v1.0 have been altered from GSB AUS v1.0. The NABERS commitment agreement pathway and the Residential pathway were replaced with the: Absolute Value Pathway (This will only be available to project teams once benchmark data is available).</p> <p>The Reference Pathway has been streamlined from Design &amp; As Built NZv1.1 - Greenhouse Gas Emissions Credit with minor changes.</p> <p>The energy reduction targets are likely to be different from the Australian as each version uses it's own countries respective building code as a reference case.</p>	<p>This credit is linked to the Greenhouse Gas Emissions credit in DAB NZv1.1, but with altered thresholds and staging of the credit.</p> <p>In the New Zealand version of Green Star Buildings, there are two pathways available: &gt; Reference building pathway &gt; Absolute Value Pathway (This will only be available once benchmark data is available)</p> <p>The Reference Pathway has been streamlined from Design &amp; As Built NZv1.1 - Greenhouse Gas Emissions Credit with minor changes.</p>	ERP - Energy & Carbon

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Energy	23	Energy Source	<p><b>Minimum Expectation</b></p> <ul style="list-style-type: none"> <li>Direct use of fossil fuels on site is limited.</li> <li>The building provides a Zero Carbon Action Plan.</li> </ul> <p><b>Credit Achievement</b></p> <p>– Climate Positive Pathway –</p> <p>In conjunction with the Minimum Expectation:</p> <ul style="list-style-type: none"> <li>100% of the building's energy is supplied from electricity or other sources of renewable energy.</li> </ul> <p><b>Exceptional Performance</b></p> <p>In conjunction with the Credit Achievement:</p> <ul style="list-style-type: none"> <li>100% of the building's electricity is generated from renewables on-site.</li> </ul>	New Credit, Related to: 15 Greenhouse Gas Emissions	<p>This is a new credit in Green Star Buildings. It requires buildings to fulfil a Minimum Expectation with a zero carbon action plan and limiting of the direct use of fossil fuels on site. Limits to the proportion of fossil fuel energy used had already been introduced to DAB v1.1. A total of 6 points are available where a project's energy comes from renewables.</p> <p>We note that this credit is made for a grid that is very coal or fossil fuel dependent. New Zealand, however, has a very different electric grid. Therefore, NZGBC expects a significant review/change of this credit for the New Zealand Market.</p>	<p>Due to higher proportion of fossil fuels in the grid, Australia has an established Power Purchase Agreement (PPA) market which allows for the purchase of off-site generated renewable electricity. This is not available in the NZ market and has therefore been removed from the credit.</p> <p>For the Minimum Expectation, under GSB NZ Draft v1.0, proposed buildings demonstrate the proportion of its annual energy consumption from direct fossil fuel use on site are below the listed thresholds.</p> <p>The Zero Carbon Action Plan Minimum Requirement is now considered to be met for fully electric buildings.</p> <p>The points available for this credit achievement have been reduced from 3 to 2 in GSB NZ Draft v1.0</p>	<p>This is a new credit in Green Star Buildings. It requires buildings to fulfil a Minimum Expectation with a zero carbon action plan and limiting of the direct use of fossil fuels on site. Limits to the proportion of fossil fuel energy used had already been introduced to DAB v1.1. A total of 5 points are available where a project's energy comes from renewables.</p>	ERP - Energy & Carbon	
			<p><b>Credit Achievement</b></p> <p>– Climate Positive Pathway –</p> <ul style="list-style-type: none"> <li>The building owner eliminates emissions from refrigerants, or</li> <li>The building owner minimises the impact of refrigerant leakage and offsets remaining emissions from refrigerants.</li> </ul> <p><b>Exceptional Performance</b></p> <p>In addition to the Credit Achievement:</p> <ul style="list-style-type: none"> <li>All remaining emissions are eliminated or offset.</li> </ul>		28 Refrigerant Impacts	<p>This credit is derived from the Refrigerant Impacts credit in Design &amp; As Built NZv1.1, however, it also offers points for offsetting.</p> <p>4 points can be awarded in this credit if the building owner eliminates or offsets emissions from refrigerants, upfront carbon and remaining carbon sources.</p>	<p>Guidelines are added in GSB NZ Draft v1.0 for the 'Offsetting Refrigerants' criteria, requiring the project team to demonstrate that environmental impacts from refrigerants leaking into the atmosphere are minimised, and thereby reducing the reliance on offsetting emissions.</p> <p>The points available for this exceptional performance have been reduced from 2 to 1 in GSB NZ Draft v1.0</p> <p>Under GSB NZ Draft v1.0, now all operational emissions from energy or electricity use must be offset for 5 years using current grid emission factors for exceptional performance.</p>	<p>This credit is derived from the Refrigerant Impacts credit in Design &amp; As Built NZv1.1, however, it also offers points for offsetting.</p> <p>3 points can be awarded in this credit if the building owner eliminates or offsets emissions from refrigerants, upfront carbon and remaining carbon sources.</p>	ERP - Energy & Carbon
			<p><b>Minimum Expectation</b></p> <ul style="list-style-type: none"> <li>The building installs efficient water fixtures.</li> </ul> <p>or</p> <ul style="list-style-type: none"> <li>The building uses 15% (10% for buildings where the sleeping area &gt;=50% of the NLA) less potable water compared to a reference building.</li> </ul> <p><b>Credit Achievement</b></p> <p>1 Point - In conjunction with the Minimum Expectation:</p> <ul style="list-style-type: none"> <li>The building uses 25% (20% for buildings where the sleeping area &gt;=50% of the NLA) less potable water compared to a reference building.</li> </ul> <p>2 Points - In conjunction with the Minimum Expectation:</p> <ul style="list-style-type: none"> <li>The building uses 35% (30% for buildings where the sleeping area &gt;=50% of the NLA) less potable water compared to a reference building.</li> </ul> <p><b>Exceptional Performance</b></p> <p>In conjunction with the Credit Achievement:</p> <ul style="list-style-type: none"> <li>The building uses 60% (55% for buildings where the sleeping area &gt;=50% of the NLA) less potable water compared to a reference building.</li> </ul>		18 Potable Water	<p>This credit is derived from the Potable Water Credit in Design &amp; As Built NZv1.1 with slightly raised benchmarks in Green Star Buildings.</p> <p>The project must comply with one of the following criteria as a Minimum Expectation:</p> <ul style="list-style-type: none"> <li>Sanitary fixture and appliance efficiency</li> <li>-15% reduction in water use</li> </ul>	<p>The following is made a minimum requirement in GSB NZ Draft v1.0 is: for all multi story buildings, fire protection systems must be provided with individual isolation valves for each floor to reduce water use during draindown.</p> <p>The percentage thresholds for the reduction in potable water for this criteria were reduced when developing GSB NZ Draft v1.0. This reflects the reduced water scarcity in NZ as well as the lack of available recycled water infrastructure.</p> <p>The credit achievement requirement are split in GSB NZ v1.0, to allow a stepped approach to compliance. Project teams can target 1, or 3 points. This sub-credit did not have a established approach under GSB AUS v1.0 where project teams had to target 3 points for the credit.</p>	<p>This credit is derived from the Potable Water Credit in Design &amp; As Built NZv1.1 with slightly raised benchmarks in Green Star Buildings.</p> <p>The project must comply with one of the following criteria as a Minimum Expectation:</p> <ul style="list-style-type: none"> <li>Sanitary fixture and appliance efficiency</li> <li>-15% reduction in water use</li> </ul> <p>The following was previously part of Credit 188.5 in DAB NZ v1.1 but is now a minimum requirement in GSB NZ Draft v1.0: for all multi story buildings, fire protection systems must be provided with individual isolation valves for each floor to reduce water use during draindown.</p>	ERP - Ecology & Emissions
	26	Life Cycle Impacts	<p><b>Credit Achievement</b></p> <p>In conjunction with the Credit Achievement:</p> <p>The project demonstrates a 15% reduction in life cycle impacts when compared to standard practice.</p> <p><b>Exceptional Performance</b></p> <p>The project demonstrates a 30% reduction in life cycle impacts when compared to standard practice.</p>	19.2 Comparative Life Cycle Assessment	<p>In developing the requirements for this credit in DAB NZ v1.1, the requirements under GBCA's GSB had been reviewed and the two were aligned.</p>	<p>In developing the requirements for this credit in DAB NZ v1.1, the requirements under GBCA's GSB had been reviewed and the two were aligned. This is streamlined from GSB AUS and DAB NZ v1.1 to GSB NZ Draft v1.0</p>	<p>In developing the requirements for this credit in DAB NZ v1.1, the requirements under GBCA's GSB had been reviewed and the two were aligned.</p>	ERP - Energy & Carbon ERP - Products, Materials and Upfront Carbon	
	27	Movement and Place	<p><b>Minimum Expectation</b></p> <ul style="list-style-type: none"> <li>The building includes showers and changing facilities for building occupants.</li> <li>The facilities are accessible, inclusive, and located in a safe and protected space.</li> </ul>	178.4 Active Transport Facilities	<p>The general scope of this sub-credit in GSB is covered by Credit 178.4 in DAB NZ v1.1. In GSB AUS v1.0 and GSB NZ v1.1, it has become a Minimum Expectation that the building includes showers and changing facilities for building occupants that are accessible, inclusive and located in a safe and protected space.</p>	<p>This credit was deemed to be appropriate for a NZ context, and was streamlined from GSB AUS v1.0 to GSB NZ Draft v1.0 with minor changes and clarifications.</p>	<p>The general scope of this sub-credit in GSB is covered by Credit 178.4 in DAB NZ v1.1. In GSB AUS v1.0 and GSB NZ v1.0, it has become a Minimum Expectation that the building includes showers and changing facilities for building occupants that are accessible, inclusive and located in a safe and protected space.</p>	ERP - Governance & Places	
			<p><b>Credit Achievement</b></p> <p>In addition to the Minimum Expectation:</p> <ul style="list-style-type: none"> <li>The building's access prioritises cycling and includes bicycle parking facilities.</li> <li>A Sustainable Transport Plan has been prepared and implemented.</li> <li>The building has EV charging capabilities.</li> <li>Transport options that reduce the need for private fossil fuel powered vehicles are prioritised.</li> <li>The building's design and location prioritise walking.</li> </ul>	<p>176 Sustainable Transport Performance Pathway</p> <p>178.3 Low Emission Vehicle Infrastructure</p> <p>178.4 Active Transport Facilities</p> <p>178.5 Walkable Neighbourhoods</p>	<p>3 Points can be achieved if the project fulfils all 4 of the following criteria.</p> <ul style="list-style-type: none"> <li>X Bicycle Parking Facilities</li> <li>X Sustainable Transport</li> <li>X Reducing Private Vehicle use</li> <li>X Encouraging Walkability</li> </ul> <p>For reducing private vehicle use instead of requiring a reduced number of Private carparks. This credit assesses the compliance based on Emissions Reduction, Active mode encouragement and Vehicle Kilometres Travelled reduction</p> <p>The Encouraging Walkability Criterion is derived from the walkable Neighbourhoods credit in Design &amp; As Built NZv1.1. Instead of requiring a decent number of amenities within 400m of the building, Green Star Building sets the following requirements to encourage walkability:</p> <ul style="list-style-type: none"> <li>X Designing roads within site boundary to prioritise pedestrians</li> <li>X Providing at least 10 amenities across 5 categories within 400m of the building.</li> </ul>	<p>Further clarification was added to the Sustainable Transport Plan in GSB NZ Draft v1.0. Amongst others, this includes clarifying, if possible, that the project has considered the site location in the context of safe cycling, and has taken reasonable steps to ensure safety of visitors who cycle.</p>	<p>3 Points can be achieved if the project fulfils all 4 of the following criteria.</p> <ul style="list-style-type: none"> <li>X Bicycle Parking Facilities</li> <li>X Sustainable Transport</li> <li>X Reducing Private Vehicle use</li> <li>X Encouraging Walkability</li> </ul> <p>For reducing private vehicle use instead of requiring a reduced number of Private carparks. This credit assesses the compliance based on Emissions Reduction, Active mode encouragement and Vehicle Kilometres Travelled reduction</p> <p>The Encouraging Walkability Criterion is derived from the walkable Neighbourhoods credit in Design &amp; As Built NZv1.1. Instead of requiring a decent number of amenities within 400m of the building, Green Star Building sets the following requirements to encourage walkability:</p> <ul style="list-style-type: none"> <li>X Designing roads within site boundary to prioritise pedestrians</li> <li>X Providing at least 10 amenities across 5 categories within 400m of the building.</li> </ul>		
			<p><b>Credit Achievement</b></p> <p>The building delivers memorable, beautiful, vibrant communal or public places where people want to gather and participate in the community.</p> <ul style="list-style-type: none"> <li>The spaces are inclusive, safe, flexible, and enjoyable.</li> </ul>	New Credit	<p>The Enjoyable Places credit is a new credit in Green Star Buildings (not present in DAB NZv1.1). It requires the building to deliver memorable, beautiful, vibrant communal or public places where people can gather and participate in the community. The Compliance requirement consists of a Activation Strategy to ensure placemaking continues after practical completion.</p>	<p>The 'Activation Strategy' in GSB AUS v1.0 has been recontextualised to reflect the local NZ context in GSB NZ Draft v1.0. Placemaking in a NZ context is more appropriate, so changes have been made to the guidance of this strategy including an addition for the consideration of Mana Whenua design values) and it has appropriately been renamed to 'Place Activation Strategy'.</p>	<p>The Enjoyable Places credit is a new credit in Green Star Buildings (not present in DAB NZv1.1). It requires the building to deliver memorable, beautiful, vibrant communal or public places where people can gather and participate in the community. The Compliance requirement consists of a Activation Strategy to ensure placemaking continues after practical completion.</p>		
	29	Contribution to Place	<p><b>Credit Achievement</b></p> <ul style="list-style-type: none"> <li>The building's design contributes towards creating well-functioning urban environments and enhances the public realm.</li> </ul> <p>or</p> <ul style="list-style-type: none"> <li>Independent reviews are held during the development of the design.</li> </ul>	New Credit	<p>The Contribution to Place credit is new in Green Star Buildings (not present in DAB NZv1.1). It requires projects to comply with one of the following criteria</p> <ul style="list-style-type: none"> <li>Urban Context Report</li> <li>Independent Design Review</li> </ul>	<p>Changes were made to the content of the Urban Design Assessment (which was renamed in GSB NZ Draft v1.0, from Green Star Buildings Australia's Urban Context Report due to the changes model). This includes additional criteria and guidance to the criteria that was adapted from GSB AUS v1.0 to GSB NZ Draft v1.0. Please refer to the credit for further detail.</p> <p>The composition of the Design Review Panel has been expanded in GSB NZ Draft v1.0 to include professionals of a range of diverse relevant expertise, and a Māori built environment practitioner who is affiliated with Ngā Aho (amongst other changes).</p>	<p>The Contribution to Place credit is new in Green Star Buildings(not present in DAB NZv1.1). It requires projects to comply with one of the following criteria</p> <ul style="list-style-type: none"> <li>Urban Context Report</li> <li>Independent Design Review</li> </ul>	ERP - Governance & Places	

Category	Credit Number	Green Star Buildings Credit	Green Star Buildings NZ Draft v1.0 Credit Criteria	Related DAB NZv1.1 Credits	GAP from DAB NZv1.1 to GSB AUS v1.0	GAP from GSB AUS v1.0 to GSB NZ Draft v1.0 (Changes made based on Industry consultation, ERP and Export Feedback)	GAP from DAB NZv1.1 to GSB NZ Draft v1.0	Expert Reference Panel (ERP)
a/b/b/a/	30	Culture, Heritage and Identity	<b>Credit Achievement</b> - The building's design reflects and celebrates local demographics and identities, the history of the place, and any hidden or minority entities. or - The outcome was arrived through meaningful engagement with community groups early in the design process.	NN Challenge: Culture, Heritage and Identity	The Culture Heritage and Identity credit is new in GSB AUS v1.0 (not present in DAB NZv1.1). It requires projects to comply with one of the following criteria - Community Led Design Response - Independent Design review	Note: This credit has not been fully modified for the New Zealand market. It is undergoing further review by the Māori Technical Working Group. Further changes may be made to this credit with the help of the Māori Technical Working Group to make it fit for purpose for Aotearoa. If you have any suggestions on how to do this please do provide your comments in the consultation survey.  Note: This credit has not been fully modified for the New Zealand market. It is undergoing further review by the Māori Technical Working Group. Further changes may be made to this credit with the help of the Māori Technical Working Group to make it fit for purpose for Aotearoa. If you have any suggestions on how to do this please do provide your comments in the consultation survey.	Note: This credit has not been fully modified for the New Zealand market. It is undergoing further review by the Māori Technical Working Group. Further changes may be made to this credit with the help of the Māori Technical Working Group to make it fit for purpose for Aotearoa. If you have any suggestions on how to do this please do provide your comments in the consultation survey.	ERP - Governance & Places
	31	Inclusive Construction Practices	<b>Minimum Expectation</b> • During the building's construction, the head contractor provides inclusive facilities and protective equipment. The head contractor also installs policies on-site to increase awareness and reduces instances of discrimination, racism, and bullying.  <b>Credit Achievement</b> In addition to the Minimum Expectation: • Policies and/or programs implemented are relevant to construction workers on site. • The head contractor provides high quality staff support on-site to reduce at least five key physical and mental health impacts. • The effectiveness of the interventions is evaluated.	7.3 High Quality Staff Support	This credit is derived from the Credit Responsible Construction Practices in Design & As Built NZv1.1, with added Minimum Expectation for the Head contractor to provide the following: - Separate Gender inclusive bathrooms, facilities and changing amenities. - Diverse gender specific fit-for-purpose personal protective PPE for diverse body sizes and types. - Implement policies to address racism, bullying and discrimination. - On-site redress procedures for any relevant breaches and corrective measures for incidents to be identified. - Provide training to 95% of contractors/sub-contractors on site on policies such as 1) information on drugs, alcohol, mental health awareness and 2) policies on discrimination, racism and onsite bullying for at least 3 days.  For credit achievement projects are required to meet all of the following requirements along with the above: X Needs Analysis X Physical and Mental Health Programs X Evaluating the Program's Effectiveness	Under GSB AUS v1.0, on-site training must be provided to 95% of all contractors and sub-contractors present on-site for at least 3 days, on the issued of discrimination, racism and bullying. Under GSB NZ Draft v1.0, this must be done for 95% of contractors and sub-contractors inducted onto the site. (Excludes visitors in both cases)  Credit Achievement: In GSB AUS v1.0, the responsible party must conduct a needs analysis for all contract values. However in GSB NZ Draft v1.0, for contracts valued at less than \$25 million, a company or organizational wide analysis may be acceptable.  The definition of "Inclusion" is expanded to address discrimination against race, sexual orientation or religion.	This credit is derived from the Credit Responsible Construction Practices in Design & As Built NZv1.1, with added Minimum Expectation for the Head contractor to provide the following: - Separate Gender inclusive bathrooms, facilities and changing amenities. - Diverse gender specific fit-for-purpose personal protective PPE for diverse body sizes and types. - Implement policies to address racism, bullying and discrimination. - On-site redress procedures for any relevant breaches and corrective measures for incidents to be identified. - Provide training to 95% of contractors/sub-contractors on site on policies such as 1) information on drugs, alcohol, mental health awareness and 2) policies on discrimination, racism and onsite bullying for at least 3 days.  For credit achievement, the following were added to GSB NZ Draft v1.0: X Needs Analysis X Evaluating the Program's Effectiveness	ERP - Waste & Construction
	32	Indigenous Inclusion	<b>Credit Achievement</b> The building's design and construction celebrates Aboriginal and Torres Strait Islander people, culture and heritage by undertaking one or both of the following: • Playing an active role in the Organisational Reconciliation Action Plan; and • Incorporating design elements using the Indigenous Design and Planning strategies and principles.	NN Challenge: Te Aranga Design	This is a new credit in Green Star Buildings and the NZGBC intends to incorporate the Te Aranga Design Innovation Challenge from Design & As Built into this credit with relevant NZ Specific guidance.  Note: This credit has not been modified for the New Zealand market. It is undergoing further review by the Māori Technical Working Group. It is NZGBC and the Māori Technical Working Group intention to completely overhaul this credit to make it fit for purpose for Aotearoa.	Note: This credit has not been modified for the New Zealand market. It is undergoing further review by the Māori Technical Working Group. It is NZGBC and the Māori Technical Working Group intention to completely overhaul this credit to make it fit for purpose for Aotearoa.	This is a new credit in Green Star Buildings. This credit has not yet been modified for the New Zealand market. It is undergoing further review by the Māori Technical Working Group. It is the NZGBC and the Māori Technical Working Group's intention to completely overhaul this credit to make it fit for purpose for Aotearoa.	ERP - Governance & Places
	33	Procurement and Workforce Inclusion	<b>Credit Achievement</b> • The project implements a social procurement plan. • At least 1% of the building's total contract value has been directed to generate employment opportunities for disadvantaged and under-represented groups.  <b>Exceptional Performance</b> In conjunction with the Credit Achievement: • The project implements a social procurement plan. • At least 2% of the building's total contract value has been directed to generate employment opportunities for disadvantaged and under-represented groups.	New Credit	This is a New credit in Green Star Buildings (not present in DAB NZ), which requires projects to implement a social procurement Plan and also generate employment opportunities for disadvantaged and under-represented groups.  When developing GSB NZ Draft v1.0, Australian-specific terminology within under-represented groups, social procurement partners and other definitions were replaced with NZ and Pacific specific terminology.  Under GSB NZ Draft v1.0, to target this Exceptional Performance, at least 2% of the building's total contract should be directed to generate employment opportunities for disadvantaged and under-represented groups. Under GSB AUS v1.0 this threshold is higher at 4% of the building's total contract value, for the Exceptional Performance.	Under GSB NZ Draft v1.0, to target this Credit Achievement, at least 1% of the building's total contract should be directed to generate employment opportunities for disadvantaged and under-represented groups. Under GSB AUS v1.0 this threshold is higher at 2% of the building's total contract value.  When developing GSB NZ Draft v1.0, Australian-specific terminology within under-represented groups, social procurement partners and other definitions were replaced with NZ and Pacific specific terminology.	This is a New credit in Green Star Buildings (not present in DAB NZ), which requires projects to implement a social procurement Plan and also generate employment opportunities for disadvantaged and under-represented groups.	ERP - Governance & Places
	34	Design for Inclusion	<b>Credit Achievement</b> • The building is designed and constructed to be inclusive to a diverse range of people with different needs. • A needs analysis is conducted as a result of an engagement with target groups.  <b>Exceptional Performance</b> In addition to the Credit Achievement: • The building delivers three or more inclusive design actions that are beyond the Credit Achievement checklist.	NN Challenge: Universal Design	This is a new credit in GSB AUS v1.0. DAB NZv1.1 has an innovation challenge of Universal Design which is relevant to this credit.	This credit has been restructured for NZ due to the requirement gap between the NZ Building Code and the Australian Building Code. A prescriptive list of inclusive design principles are added and required as part of the credit achievement. A needs analysis being an exceptional performance requirement in GSB AUS v1.0 was moved to the credit achievement through the GSB NZ Draft v1.0 review. 2 points can be achieved under GSB NZ Draft v1.0 for projects meet both of the above items set in the Credit Achievement. The exceptional performance requirements are completely different between these tools. GSB NZ Draft v1.0 requires that the building delivers three or more inclusive design actions that are beyond the Credit Achievement checklist while GSB AUS v1.0 requires the needs analysis.	This is a new credit in GSB NZ Draft v1.0 and the Universal Design Innovation Challenge from DAB NZv1.1 was taken into consideration when incorporating this credit into Green Star Buildings.	ERP - Health & Wellbeing
	35	Impacts to Nature	<b>Minimum Expectation</b> • The building was not built on, or significantly impacted, a site with a high ecological value. • The building's light pollution has been minimised. • There is ongoing monitoring, reporting, and management of sensitive ecosystems within the site.  <b>Credit Achievement</b> In addition to the Minimum Expectation: • The building's design and construction conserves existing natural soil, hydrological flows, and native vegetation elements. • If deemed necessary by an Ecologist, at least 50% of existing site with high biodiversity value is retained.	23 Ecological Value of Land 24.1 Conditional Requirement: Ecological Protection 26.1 Light Pollution to Neighbouring Bodies. 26.2 Light Pollution to Night Sky  24.2 Reuse of Land 24.3 Contamination and Hazardous Materials	The Minimum Expectation in Green Star Buildings is a combination of credits streamlined from Design & As Built NZv1.1 as follows: - Sustainable Sites - Light Pollution  Although streamlined, the credit requires additional ongoing monitoring reporting, and management of the site's wetland ecosystem (if adjacent to the site) to show compliance.  The credit Achievement for Impacts to Nature sets requirements for the following criteria X Protecting Ecological Value X Retaining High Biodiversity Values  Compliance can be demonstrated with a Context report, Ecological Value protection strategy, and Biodiversity value assessment and retaining plan. Consideration must be given to impacts of site works during demolition, site works, construction or future occupation.	This minimum expectation from GSB AUS v1.0 was adapted for NZ with DAB NZ v1.1 taken into account. NZ specific guidance and clarifications are added, including: 1. Allowing UWLR an alternative pathway. 2. Addressing digital signs and screens in the credit 3. Allowing lighting for safety to be excluded.	The Minimum Expectation in Green Star Buildings NZ is a combination of credits streamlined from Design & As Built NZv1.1 as follows: - Sustainable Sites - Light Pollution  Although streamlined, the credit requires additional ongoing monitoring reporting, and management of the site's wetland ecosystem (if adjacent to the site) to show compliance.  The credit Achievement for Impacts to Nature in GSB NZ Draft v1.0, sets expanded requirements for the following criteria when compared to DAB NZv1.1: X Protecting Ecological Value X Retaining High Biodiversity Values  In GSB NZ Draft v1.0, where the area has been deemed an area of high biodiversity value by an assessment undertaken by an ecologist, the project must retain at least 50% of this area contiguously - this was not a requirement in DAB NZv1.1.  Compliance can be demonstrated with a Context report, Ecological Value protection strategy, and Biodiversity value assessment and retaining plan. Consideration must be given to impacts of site works during demolition, site works, construction or future occupation.	ERP - Ecology & Emissions
36	Biodiversity Enhancement	<b>Credit Achievement</b> • The building's site includes an appropriate landscape area. • The landscaping includes a diversity of species and prioritises the use of climate resilient and indigenous plants. • The landscape design includes refuge and/or food for native fauna including birds, reptiles, amphibians, insects and other invertebrates as appropriate to the ecological context. • The project team develops a site-specific Biodiversity Management Plan and provides it to the building owner or building owner representative.	New Credit	The Biodiversity enhancement credit is new in Green Star Buildings. It requires project teams to include an appropriate landscape area, diverse species and develop a site specific Biodiversity Management Plan.	The scope of the biodiversity management plan was expanded to include how the design contributes to "Te Mana o te Taiao - Aotearoa New Zealand Biodiversity Strategy" and other current indigenous and biodiversity strategies and policies.  The credit under GSB AUS v1.0 focus more on vegetation provisions not other form of encouraging biodiversity. This credit has been reworded under the GSB NZ Draft v1.0 to address plants and other systems that provide refuge for biodiversity.  The credit was adapted through the GSB NZ Draft v1.0 review with references to NZ specific information.	The Biodiversity enhancement credit is new in Green Star Buildings. It requires project teams to include an appropriate landscape area, diverse species and develop a site specific Biodiversity Management Plan.	ERP - Ecology & Emissions	

Category	Credit Number	Green Star Buildings Credit	Green Star Buildings NZ Draft v1.0 Credit Criteria	Related DAB NZv1.1 Credits	GAP from DAB NZv1.1 to GSB AUS v1.0	GAP from GSB AUS v1.0 to GSB NZ Draft v1.0 (Changes made based on industry consultation, ERP and Expert Feedback)	GAP from DAB NZv1.1 to GSB NZ Draft v1.0	Expert Reference Panel (ERP)
Buildings			<p><b>Exceptional Performance</b> In addition to the Credit Achievement:  <ul style="list-style-type: none"> <li>A greater area of landscaping is provided.</li> <li>The landscaping includes critically endangered and/or endangered plant species native to the ecological district, or planting which provides foraging or habitat for critically endangered fauna species as appropriate to the ecological district.</li> </ul> </p>					
	37	Nature Connectivity	<p><b>Credit Achievement</b> The site must be built to encourage species connectivity through the site, and to adjacent sites. If there is a wider nature strategy as relevant to the project, the project should contribute to it.</p>	New Credit	This is a new credit in Green Star Buildings it requires the site to encourage species connectivity through the site, and to adjacent sites. If the project sits within a blue or green grid strategy it must contribute to the goals of the strategy.	This credit was deemed to be appropriate for a NZ context, and was streamlined from GSB AUS v1.0 to GSB NZ Draft v1.0 with minor changes.	This is a new credit in Green Star Buildings it requires the site to encourage species connectivity through the site, and to adjacent sites. If the project sits within a blue or green grid strategy it must contribute to the goals of the strategy.	ERP - Ecology & Emissions
	38	Nature Stewardship	<p><b>Credit Achievement</b>  <ul style="list-style-type: none"> <li>Areas of restoration or protection are provided.</li> <li>Restoration or protection activities are beyond the development's boundary.</li> <li>The building owner, as part of the project's development, undertakes activities that protects or restores biodiversity at scale.</li> <li>These actions occur beyond legislated requirements.</li> </ul> </p>	New Credit	<p>The Nature Stewardship credit is new in Green Star Buildings. In GSB AUS v1.0, it requires projects to show compliance with all of the following criteria for 2 Points:  - Areas of restoration or protection are provided.  - Restoration or protection activities are beyond the development's boundary.  - The building owner, as part of the project's development, undertakes activities that protects or restores biodiversity at scale.  - These actions occur beyond legislated requirements.</p> <p>Unlike the other Nature credits proposed in Green Star Buildings, Nature Stewardship requires Biodiversity to be restored beyond the Building site.</p>	<p>The scope of the Restoration or Protection Management Plan (Plan) was expanded to include how the design contributes to "Te Mana o te Taiao – Aotearoa New Zealand Biodiversity Strategy" and other current indigenous and biodiversity strategies and policies.</p> <p>If the project owner chooses to support an organisation that restores an area on their behalf, under GSB NZ Draft v1.0 the criteria was adapted to require an improvement that constitutes an improvement in ecological value to that of a natural or functioning ecosystem, instead of only leaving the site better than the pre-development condition.</p>	The Nature Stewardship credit is new in Green Star Buildings. Unlike the other Nature credits proposed in Green Star Buildings, Nature Stewardship requires Biodiversity to be restored beyond the Building site.	ERP - Ecology & Emissions
39	Waterway Protection	<p><b>Credit Achievement</b>  <ul style="list-style-type: none"> <li>The project demonstrates that the post-development peak Average Recurrence Interval (ARI) event (2, 5, and 10 year) discharge from the site does not exceed 80% of the pre-development peak ARI event (2, 5, and 10 year) discharge.</li> <li>Specified pollution reduction targets are met</li> </ul> </p>	25.1 Stormwater Peak Discharge 25.2 Stormwater Pollution Targets 27 Microbial Control	This credit in GSB AUS v1.0 is linked with the Stormwater Management credit in Design & As Built NZv1.1 with raised benchmarks. The stormwater reduction target in GSB AUS v1.0 is raised to 40% (2 Points) & 80% (additional 2 Points) instead of just not exceeding the pre-development discharge.	<p>After consulting experts in the industry, the GSB AUS v1.0 methodology was adapted to set New Zealand specific benchmarks for the stormwater volume targets. GSB NZ Draft v1.0 references (2, 5 and 10 yr.) Average Recurrence Intervals to set the discharge reduction targets, similar to DAB NZv1.1.</p> <p>The pollution reduction targets have largely been streamlined from the Stormwater credit in Design &amp; As Built NZv1.1 (instead of the targets in GSB AUS v1.0) over to GSB NZ Draft v1.0, as it has previously been adapted for the New Zealand market.</p>	In DAB NZv1.1, projects were able to target Stormwater Peak Discharge sub-credit without targeting the Stormwater Pollution Targets sub-credit. In GSB NZ Draft v1.0 however, projects must comply with both of the criteria for both Credit Achievement and Exceptional Performance.	<p>The requirement in GSB NZ Draft v1.0 for post-development peak ARI event discharge is leveraged from the Stormwater credit in DAB NZv1.1. The requirement has been changed from "not exceed the pre-development peak ARI event discharge" to "not exceed 80% of the pre-development peak ARI event discharge" (2 points in GSB NZ Draft v1.0) and "not exceed the peak ARI event discharge that would be generated by a greenfield site" (additional 2 points in GSB NZ Draft v1.0). Compliance of 10-year ARI is added and required in GSB NZ Draft v1.0.</p> <p>The pollution reduction targets have largely been streamlined from the Stormwater credit in Design &amp; As Built NZv1.1 over to GSB NZ Draft v1.0 with an additional requirement of minimising the risk of chemical pollutants and other toxicants entering the stormwater system.</p>	
		<p><b>Exceptional Performance</b> In conjunction with the Credit Achievement:  <ul style="list-style-type: none"> <li>The project demonstrates that the post-development peak Average Recurrence Interval (ARI) event (2, 5, and 10 year) discharge from the site does not exceed the peak ARI event (2, 5, and 10 year) discharge that would be generated by a greenfield site (assuming grassed or forested site coverage).</li> <li>Specified additional pollution reduction targets are met.</li> </ul> </p>						
Leadership	40	Market Transformation	<p><b>Credit Achievement - Up to 5 points</b>  - The project implements a building solution or process that is considered leading in their targeted sector, nationally or globally.</p>	29 Innovation	Market Transformation and Leadership challenges in Green Star Buildings is a combination of the Innovation category. Under the Design & As Built NZv1.1, 10 points are available to target under the Innovation category. Whereas under Green Star Buildings NZ and AUS v1.0, 5 points are available for Market Transformation and unlimited points can be targeted through Leadership Challenge.			
		Leadership Challenges	<p><b>Credit Achievement</b> The project meets the requirements of a Leadership Challenge developed by the GBCA</p>					