

EARTHCHECK INSIGHTS UPDATE

## THE ALIGNMENT OF EARTHCHECK STANDARDS WITH THE PRINCIPLES OF GREEN, SOCIAL & SUSTAINABILITY LINKED LOANS



#### To the reader,

Sustainable finance is a growing industry driven by market expectations for more responsible business and investment decisions that meet the United Nations Sustainable Development Goals.

This paper provides an overview of EarthCheck's high level investigation into the Green Bond Principles and related frameworks developed by the International Capital Market Association. It presents our understanding of The Principles and explores EarthCheck's capability to support projects through critical adaptation of our existing assessment, reporting and certification products with alignment to a projects obligations under The Principles. The report also includes a brief exploration of sustainable finance taxonomies which will be subject to greater investigation in future reports.

At the time of writing EarthCheck's Design Certification Program, the Building Planning and Design Standard has been recognised by Sustainalytics (a company that rates the sustainability of listed companies) as an appropriate and credible sustainable design rating tool to underpin the reporting requirements for sustainable building investments.

As we continue to investigate and develop sustainable investment reporting and support tools we will provide a clear and concise understanding on how we can support owners, developers, communities, governments and financial institutions in delivering environmentally, economically and socially sustainable outcomes. We invite you to contact the EarthCheck team to discuss your needs for both sustainable development assessment and rating and sustainable investment reporting.

Thank you and best regards,

Christopher Fullon

Program Manager, EarthCheck Design

EarthCheck

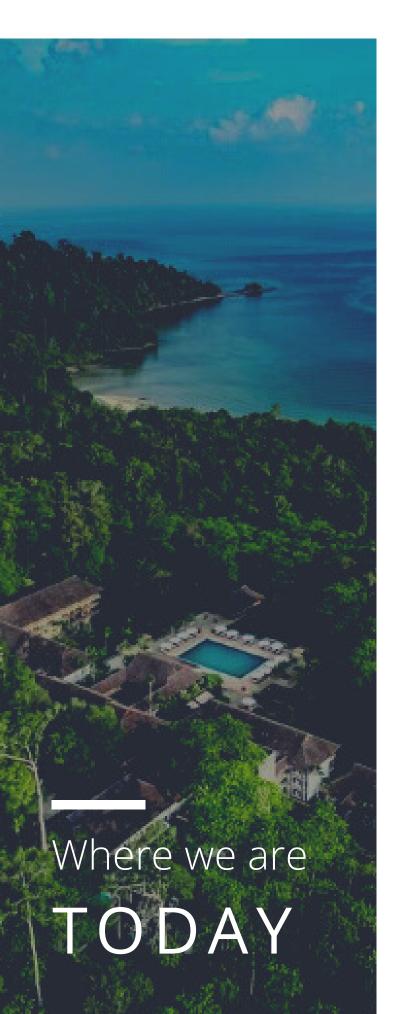
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## INTRODUCTION

Green bonds, social bonds, sustainability bonds, green loans and sustainability linked loans are financial instruments which signal the delivery of more responsible and sustainable investment. To ensure integrity and to prevent these instruments from being "open to liberal interpretation" and subject to "virtue-signalling" (Gilbert + Tobin, 2019) the International Capital Market Association formulated the voluntary Green, Social and Sustainability Bond Principles, the Green Loan Principles and the Sustainability Linked Loan Principles. A key requirement of The Principles is for the credible and evidence backed external review of projects against their intended and actual impact.

EarthCheck's longstanding experience in sustainability performance measurement and certification against our design and operational standards (including sustainability rating tools) allow us to provide frameworks against The Principles and relevant local and regional taxonomies to assess projects for sustainability. EarthCheck's science, targeted benchmark data and industry expertise can provide guidance, fair assessment and certification for projects and bond issuers.

This report explores the concepts of Green, Social and Sustainability bonds and loans, EarthCheck's products and the application of EarthCheck's products to support effective delivery of projects with these frameworks.

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## THE EARTHCHECK STANDARDS

EarthCheck is an international business advisory group which specialises in sustainable planning and design, destination management and sustainable tourism. We work in partnership with clients and independent expert assessors to plan for the future and help guide the design, construction and operation of smart buildings and the responsible management of tourism destinations. EarthCheck products and services are built on Agenda 21 Principles for Sustainable Development and align to the United Nations Sustainable Development Goals (see Appendix 1) where appropriate.

Our team have a wealth of practical experience in a variety of fields including strategic planning and destination management, sustainability certification, carbon reporting, environmental management, project feasibility, social and environmental planning, tourism, events, risk management and place-making.

EarthCheck offers sustainability services including the EarthCheck Standards and Certification. The EarthCheck Standards and Certification are a series of sustainability rating tools which are underpinned by world leading scientific benchmarking and assessment processes.

Regional averages (benchmarks) are established by using operational data from a global collection of EarthCheck Certified members. This data provides operators, designers and asset owners with an understanding of the development's performance in energy, CO2-e, water and waste against other properties within their sector country, climate zone and region, and drives teams to outperform EarthCheck's best-practice minimum benchmark criteria.

#### The EarthCheck Company Standard

The EarthCheck Company Standard can apply to all travel and tourism related organisations, and the systems and processes can be applied to any organisation. Organisations in more than 70 countries participate in EarthCheck Certification programs from Resorts and Hotels, to Convention Centres, Tour Operators, Destinations and new development projects. EarthCheck Certification programs focus on 16 Key Performance Areas (KPAs) over four main standards, Company, Destination and Design (Building & Precinct). The KPAs cover social, cultural and environmental sustainability. These KPAs have been mapped to the SDGs are summarised in the report. Every KPA fits within one or more SDG, showing that



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"EarthCheck's software platform has been specifically developed to meet the needs of the travel and tourism industry and is the best system in the world for reporting carbon emissions in tourism businesses and destinations." David Simmons, Professor of Tourism (Lincoln University, New

Zealand)

## THE EARTHCHECK STANDARDS

EarthCheck's holistic approach to certification helps achieve and also gives a mechanism to show progress against the UN's SDGs.

#### The EarthCheck Destination Standard

The Sustainable Destinations Program is designed to empower local communities to take ownership of sustainability goals and build on local initiatives. It recognises the benefits of a Destination working together to achieve sustainable outcomes and should be used to underpin a clear vision for a Destination, as well as focussing on sound policy and action plans to help achieve the vision

## The Building Planning & Design Standard (BPDS)

EarthCheck's Building Planning & Design Standard was developed, in 2007 by the Sustainable Tourism Cooperative Research Centre (STCRC) with support from the University of New South Wales, as a tool to facilitate environmentally, socially and economically sustainable design and construction management of individual buildings and associated infrastructure. It provides guidance on facilitating and assessing the triple bottom line performance of buildings under the EarthCheck Certified program.

## The Precinct Planning & Design Standard (PPDS)

The Precinct Planning and Design Standard was developed to implement design expertise for larger scale urban development. The PPDS incorporates regionally accurate destination benchmarks and necessitates developer and community commitment to upholding the developments sustainability goals. The PPDS can be applied across many sectors as a master planning approach and can benefit communities including cities, tourism precincts, and tourist attractions.







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# GREEN, SOCIAL AND SUSTAINABILITY BONDS AND LOANS

The Bond Principles are voluntary guidelines recommending transparency and disclosure in the interest of promoting integrity and preventing green-washing in the development of the Green, Social and Sustainability Bond Markets.

A clear process and disclosure are delivered through The Bond Principles four core components which are the:

- 1.Use of Proceeds;
- 2. Process for Project Evaluation and Selection;
- 3. Management of Proceeds; and
- 4. Reporting.

EarthCheck's Standards and Certification processes provide independent green, social and sustainability certification incorporating scientific based reporting. Working with EarthCheck, projects can ensure tailored and independent assessments are developed in alignment with their obligations against components 1, 2 and 4. EarthCheck can also provide External Review of projects in alignment with The Principles (see page 9 for more).

#### **Green Bond Principles (GBP)**

Green principles apply to the finance or re-finance of eligible Green Projects. The International Capital Market Association (ICMA) considers that green projects will provide clear environmental benefits that will be assessed and where feasible quantified by the issuer.

Green projects can contribute to environmental objectives such as climate change mitigation and adaptation, natural resource conservation, biodiversity conservation and pollution prevention and control.

**Green Project categories** can include renewable energy, energy efficiency, pollution prevention and control, environmentally sustainable management of living, natural resources and land use, clean transportation, sustainable water and wastewater management, and green building projects.

#### **Social Bond Principles (SBP)**

Social principles apply to the finance or re-finance of eligible Social Projects. Social Bond issuance should align to projects which provide clear social benefit which can be assessed and quantified by the issuer.

Social projects may have environmental cobenefits in which case social benefit should be the underlying motive for these projects. Where a project intentionally serves green and social purposes the Sustainability Bond Guidelines will apply.

**Social Project categories** can include affordable basic infrastructure, access to essential services, affordable housing, employment generation, food security and socioeconomic advancement and empowerment projects. The SBPs suggest target populations for social projects and recommend existing market knowledge as guidance.

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#### **Sustainability Bond Guidelines (SBG)**

The Sustainability Bonds Guidelines apply to bonds with an intentional mix of green and social benefit. Sustainability Bonds are aligned with the four core components and the respective types of bonds detailed in the Green and Social Bond Principles.

#### **Green Loan Principles (GLP)**

The GLP build on the GBP and aim to create a high-level framework for green loans. The GLP are underpinned by the four core components of the GBP. Likewise, EarthCheck can support application and evidence adherence to green loan requirements.

#### Sustainability-Linked Loan Principles (SLLP)

The SLLP promote the development and preserve the integrity of the sustainability linked loan product. They enable lenders to incentivise the sustainability performance of the borrower. Unlike the GBP, SBP, SBG and GLP the use of proceeds for the SLLP does not determine its categorisation, and loans can be used for general corporate purposes.

The SLLP are underpinned by four core components which are the:

- 1. Relationship to Borrowers Overall Corporate Social Responsibility (CSR) Strategy;
- 2. Target Setting- Measuring the Sustainability of the Borrower;
- 3. Reporting; and
- 4. Review.

EarthCheck's Standards and Certifications can speak to all four core components for Sustainability Linked Loans. PAGE | 09 EARTHCHECK |

### EXTERNAL REVIEW CAPABILITY

The Principles recommend that in connection with the issuance of a Green, Social or Sustainability Bond or programme, issuers appoint external review providers to assess the alignment of their bond or bond programme with the four core components of the Principles (ICMA Group, 2018).

#### **Second Party Opinion**

The EarthCheck Standards and Certification are sustainability assessment tools which support delivery of operational excellence for companies, destinations, buildings and precincts. EarthCheck can provide a Second Party Opinion underpinned by expert independent assessment which reviews the alignment of projects with the Principles. Reporting can evaluate the development, operation or community for its environmental and social features against the Projects' intended Use of Proceeds.

#### Verification

EarthCheck's performance driven approach provides the ability to deliver credible verification against key criteria including benchmarks for energy, greenhouse gases, water and waste. Through existing tools, tailored reporting and expert independent assessment, EarthCheck can verify alignment of Projects to environmental, social and sustainable criteria required by their bonds or loans and can do so in alignment with The EarthCheck Standards.

## Green, Social and Sustainability Scoring/Rating

The EarthCheck Standards and their Certification are a set of industry focused Environmental, Social and Governance rating tools. The Standards are

underpinned by scientific benchmark criteria which are built on data gathered across different sectors and regions globally. The Standards are also embedded with qualitative and quantitative assessment criteria and certification is subject to meeting mandatory criteria. Minimum scoring is subject to independent third-party assessment.

EarthCheck processes, tools and reporting will direct, support and measure adherence for projects as required as part of their green, social and sustainable commitments. Reporting an evaluation will be built on existing EarthCheck tools and will be tailored in alignment with The Principles and for the specific project and finance requirements.

#### **Ethical and Professional Standards**

EarthCheck Standards, tools and procedures align to the Intergovernmental Panel for Climate Change (IPCC) Guidelines for Greenhouse Gas Inventories, the World Business Council for Sustainable Development (WBCSD) Greenhouse Gas Protocol, and the International Standard Organisation (ISO) range of standards including ISO 9001, 14000, 50001 and 26000. The EarthCheck Emissions calculator is Carbon Disclosure Project (CDP) approved. This alignment provides organisations with a framework to implement and achieve sustainability excellence.

The above, along with a longstanding history in green, social and sustainability rating and activity demonstrates EarthCheck's alignment to the five fundamental ethical and professional principles which are:

- 1. Integrity
- 2. Objectivity
- 3. Professional Competence and Due Care
- 4. Confidentiality and
- 5. Professional Behaviour.

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## Organisation and Content of External Reviews

EarthCheck provides clear and appropriate organisational and reporting structures for our role as external reviewers of The Principles. As requirements vary across different bond and project categories it is best to speak with EarthCheck early to determine the best approach for your bond or loan.

## ALIGNMENT FOR IMPACT REPORTING

The EarthCheck Standards, Certification and reporting are underpinned by qualitative and quantitative criteria, with certification endorsed by expert industry assessment from an independent third-party assessor.

The embedded mandatory best-practice minimum benchmark criteria are evidence based and regionally and typologically targeted. They include measures for energy consumption, greenhouse gas emissions, water consumption, waste water reuse and recycling and hard waste generation.

The benchmarks support a holistic assessment for the green, social and sustainability potential and activity of companies, destinations, buildings and precincts. With EarthCheck's experience, tools and reporting a project can be accurately and independently assessed for Green, Social and Sustainability purposes.

EarthCheck can work with you, the client, to explain the external review work to be undertaken and to establish clear, accurate and scientific reporting to support and uphold the Principles.



\*An external review may be partial, covering only certain aspects of the bond/loan or associated framework; one reviewer may assess the bond/loan framework while another provides green, social and sustainability scoring/rating.

#### Alignment for Green Building Project Sector

The GBP Harmonized Framework for Impact Assessment (ICMA Group, 2020) provides guidance and definition for green building projects being a whole building system with potential social benefits. It delineates whole of building investment from individual system focused investment (e.g. energy efficiency, waste water treatment projects) and necessitates individual system focused investments be assessed under their respective project category.

The GBP necessitate impact assessment for green buildings for the core indicators for energy performance, carbon performance, water efficiency and savings, construction waste management and certification. It outlines other criteria which could be valuable to assessment.

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EarthCheck addresses all criteria for Green Building Projects. Figure 1 (right) shows mapping of the EarthCheck Standards to the GBP for Building Projects, demonstrating EarthCheck's applicability for Impact Assessment.

EarthCheck's Building Planning and Design Standard (BPDS) and Precinct Planning and Design Standard (PPDS) are our recommended Standard for new, retrofit and renovated building works. Using the BPDS and PPDS project teams deliver world-class and best-practice green, social and sustainable developments.

The GBP recognise standards with conformance similar to LEED, BREEAM and BEAM for their expertise in environmental sustainability. Mapping of the EarthCheck BPDS and PPDS against the LEED and BREEAM standards, evidences congruence for sustainability criteria and rating/scoring systems (see Appendix 2). EarthCheck recommends use of the BPDS and PPDS for embedded best-practice minimum benchmarks, global accessibility and relevance and industry expertise. Certification with these Standards aligns to the requirement of Impact Indicator E "Certification Standard" and reporting provided will evidence impact for all Core Indicators for Sustainable Building Projects.

#### **Alignment for other Project Sectors**

Using the EarthCheck Standards or components of the Standards, EarthCheck can provide impact reporting relevant to all project sectors for the GBP, SBP, SBG, GLP and SLLP. For alignment of individual system focused assessment please speak with EarthCheck.

#### **Example Green Building Project Sector Report**

Appendix 3 includes an example report tailored for a Green Building Project Sector project. All reporting will be reflective of issuers requirements and where possible will drive improvement greater than the issuers requirements.

**Figure 1** - Mapping alignment EarthCheck Standards against GBP: Core Indicators for Sustainable Building Projects

Core Indicators for Sustainable Building Projects	BPDS	PPDS	Company	Destination
A. Energy performance	<b>√</b>	<b>√</b>	<b>√</b>	✓
B. Carbon performance	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
C. Water efficiency and savings	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
D. Construction waste	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
E. Certification Standard	<b>√</b>	<b>√</b>		
2. Land use and biodiversity	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
3. Water efficiency	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
4. Waste management	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
5. Indoor air quality	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
6. Light quality/energy efficiency	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
7. Transport and its infrastructure	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>





## Sustainability Linked Loans

Green or sustainability loans provide a legitimate pathway to achieve lower borrowing costs. HSBC define sustainable finance as any form of financial service which integrates environmental, social and governance (ESG) criteria into business or investment decisions.

A key objective for HSBC is in providing sustainable financing options is to enable the transition to a low-carbon economy and to help clients manage transition risk. Sustainable financing includes providing credit and lending facilities, as well as advisory services or access to capital markets.

Companies are increasingly using the Sustainable Development Goals (SDGs) to help them map and set performance- based targets. As more companies embrace the SDGs sustainability performance reporting will need to evolve and become more advanced.

This includes the use of more robust evidencebased research to quantify operational performance and communicate business value to stakeholders.

HSBC recently announced that it had closed a sustainability-linked term loan and revolving credit facility amounting to HK\$7.5 billion with 11 banks. The syndicated loan consists of a 4-year HK\$6.8 billion term loan and a HK\$700 million revolving credit facility for a Hong Kong based asset manager.

The portfolio's current sustainability performance is assessed by EarthCheck and EarthCheck Certified's assessments will be used as the benchmark against which performance improvements will be scrutinised.

Under the terms of the sustainability-linked loan, they will be eligible for reductions on interest rates when certain sustainability objectives have been met.

One of the consequences of increased scrutiny on operational and social performance is the need for greater transparency in reporting and scientific validation of the environmental health of a company and its supply chain.

This includes the call for more robust performance and operational metrics that sit within the business plan rather than as stand-alone sustainability guidelines. In other words sustainability initiatives must become aligned to core business and embedded across all departments.

Companies should be prepared for climate related questions and resolutions at Annual General Meetings and duty of care questions concerning operational and investment management.



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## ALIGNMENT TO TAXONOMIES

Across the world, and in alignment with The Principles governments, regional bodies and business groups have developed Taxonomies appropriate to local interests and legal frameworks. For Green, Social and Sustainability projects the EarthCheck Standards, Certification and reporting will be delivered in alignment with The Principles and can be tailored to suit relevant taxonomies as projects require. The following outlines some taxonomies which EarthCheck have investigated. Further reporting will be generated for these investigations which will detail EarthCheck alignment, taxonomy reporting requirements, procedures and relevant tools and certifications for these taxonomies.

#### The ASEAN Green Bond Standard (ASEAN GBS)

EarthCheck will investigate our potential to align compliance and reporting when being used for assessment for the ASEAN Green Bond Standard. EarthCheck will investigate impact reporting in alignment with appropriate ASEAN GBS categories. EarthCheck can provide all types of external review under the ASEAN GBS and would do so in alignment with this GBS and The Principles.

#### The China Green Bond Catalogue

For this taxonomy EarthCheck will require that projects be identified against their categories which are:

- 1. Energy Saving
- 2. Pollution Prevention and Control
- 3. Resource Conservation and Recycling
- 4. Clean Transportation
- 5. Clean Energy
- 6. Ecological Protection and Climate Change Adaption.

EarthCheck will consider building projects to be applicable across several of these categories and can provide impact reporting appropriate to individual categories. An investigation will be completed with reporting detailing EarthCheck's alignment and reporting requirements under this taxonomy.

#### The EU Green Bond Standard (GBS)

For applicable GBS projects EarthCheck Standards and Certifications should align to the six environmental objectives of the EU Taxonomy Regulation which are:

- 1. Climate change mitigation;
- 2. Climate change adaptation;
- 3. Sustainable use and protection of water and marine resources;
- 4. Transition to a circular economy;
- 5. Pollution prevention and control; and
- 6. Protection and restoration of biodiversity and ecosystems.

Impact reporting will ensure that projects do not significantly harm these objectives, comply with EU minimum safeguards and comply with Technical Screening Criteria.

EarthCheck can support the development of Impact Reporting Templates and establish benchmarks for projects at early stages of development.

EarthCheck will require impact reporting be published in accordance with the GBS in order to attain Certification.

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## APPENDIX 1 – EARTHCHECK ALIGNMENT TO THE UN SUSTAINABLE DEVELOPMENT GOALS

#### EarthCheck Certification and the Sustainable Development Goals

The purpose of the EarthCheck Certification programs are to provide organisations with a framework for environmental and social sustainability. The EarthCheck Company Standard can apply to all travel and tourism related organisations, and the systems and processes can be applied to any organisation. The EarthCheck Company Standard is aligned to a number of international standards including ISO 9001, ISO 14001, ISO 50001, ISO 26000, ISO 13811, the Global Sustainable Tourism Criteria (GSTC), Global Reporting Initiative (GRI) and the CDP (formally the Carbon Disclosure Project) to maximise integrated certification and corporate reporting opportunities.

The EarthCheck Destination Standard is designed to empower local communities to take ownership of sustainability goals, built on local initiatives. The Standard provides a centralised and consistent platform for compliance and reporting to a number of sector based international standards including Global Sustainable Tourism Council (GSTC) criteria.

The purpose of the EarthCheck Design Standards is to facilitate environmentally, socially and economically sustainable design and construction management of individual buildings and associated infrastructure. The Standards set out the requirements to undertake an integrated assessment of the expected environmental, social and economic performance of a project. The Design Standards are also aligned to ISO 9001, ISO 14001, ISO 50001, ISO 26000, including the Intergovernmental Panel for Climate Change guidelines for National Greenhouse Gas Inventories and the World Business Council for Sustainable Development Greenhouse Gas Protocol.

The United Nations (UNs) Sustainable Development Goals (SDGs) aim to encourage all countries to mobilise efforts to end all forms of poverty, fight inequalities and tackle climate change, while ensuring that no one is left behind.

Hundreds of organisations in more than 70 countries participate in EarthCheck Certification programs from Resorts and Hotels, to Convention Centres, Tour Operators, Destinations and new development projects. We have now mapped the EarthCheck Certification programs to the 17 SDGs to encourage environmental, social and cultural best practices and allow our members to understand what they are doing to contribute to achieving the UN's goals.

EarthCheck Certification programs address the SDG's with qualitative criteria and also assess the quantitative progress towards achieving the SDG's with benchmarking indicators, which speak directly to the certified standard's criteria.

EarthCheck Certification programs focus on 16 Key Performance Areas (KPAs) over three main standards, Company, Destination and Design. The KPAs cover social, cultural and environmental sustainability. These KPAs have been mapped to the SDGs and are summarised below. Every KPA fits within one or more SDG, showing that EarthCheck's holistic approach to certification helps achieve the UN's SDGs.

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## SUSTAINABLE GEALS DEVELOPMENT GEALS

































**EARTHCHECK KEY PERFORMANCE AREAS** 





	Economic Management	GHG Emissions	Air Quality Protection	Wastewater Management	Ecosystem Conservation & Management	Environmentally Harmful Substances	Energy Efficiency, Conservation & Management	Management of Freshwater Resources	Social & Cultural Management	Land Use Planning & Management	Solid Waste Management	Transport	Sustainability Approach	Sustainable Materials & Resource Consumption	Indoor Environmental Health & Pollution Control	Innovation
1. No Poverty	✓								✓				✓			
2. Zero Hunger	✓				<b>√</b>			<b>√</b>	<b>√</b>	<b>√</b>						
3. Good Health & Wellbeing		<b>√</b>	✓	<b>√</b>	<b>√</b>	✓		<b>√</b>	✓	✓	<b>√</b>					
4. Quality Education									<b>√</b>							<b>✓</b>
5. Gender Equality									✓							
6. Clean Water & Sanitation				✓		✓		✓	✓	✓	<b>✓</b>			✓		<b>✓</b>
7.Affordable & Clean Energy	✓	✓					✓			✓			✓	✓		✓
8. Decent Work & Economic Growth	✓								✓							
9. Industry, Innovation & Infrastructure	✓	✓			✓		✓		✓	✓		✓	✓			✓
10. Reduced Inequalities	✓								✓							
11. Sustainable Cities & Communities		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	<b>✓</b>
12. Responsible Consumption & Productio		✓		✓	✓	✓	✓	✓	✓	✓	✓			✓		✓
13. Climate Action		✓	✓		✓	✓	✓		✓	✓				✓		✓
14. Life Below Water				✓	✓	✓	✓	✓								
15. Life On Land		✓	✓	✓	✓	✓	✓			✓	✓	✓		✓	✓	✓
16. Peace, Justice & Strong Institutions	✓								✓	✓						✓
17. Partnerships For The Goals									✓	✓						✓
	COMPANY STANDARD COMPANY STANDARD															
EARTHCHECK CERTIFICAITON STANDARDS			D	EST	INA.	101T	N ST	AN[	DARI	D						
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#### **END POVERTY IN ALL FORMS EVERYWHERE**

EarthCheck Certification programs promote Social, Cultural and Economic Management. They do this by requiring an organisation or destination to address land use planning and management and ensuring environmental impacts do not inhibit access to public goods such as water. The Standards require that the organisation have a policy to hire local employees, purchase local goods and services, sell local products through their operations, promote social mobility through training and capacity building and to provide all employees a living wage.

#### EARTHCHECK QUANTITATIVE INDICATORS:

- 1. Local employment opportunities
- 2. Local goods and services
- 3. Minimum wage & retirement fund
- 4. Land Use Planning & Habitat Protection
- 5. Ecological & Biodiversity Values
- 6. Capacity building for staff and the community



## END HUNGER, ACHIEVE FOOD SECURITY AND IMPROVED NUTRITION AND PROMOTE SUSTAINABLE AGRICULTURE

Water conservation and sustainable sourcing, land use planning and management and ecosystems conservation management is encouraged in the EarthCheck Certification programs, to minimise the impact on local agriculture and improve productive practices and natural systems' health. Policies to hire local employees, purchase local goods and services and to label locally sourced food on menus are encouraged, improving food security of those in the surrounding areas. Waste reduction strategies are mandatory and food donation schemes are encouraged. All reductions in waste are measured through the MyEarthCheck software and audited annually to ensure verified, quantitative savings are reported. This multi faceted approach helps to benefit local economies, support agriculture and help provide food security.

- 1. Local employment opportunities
- 2. Local perishable goods
- 3. Minimum wage & retirement fund
- 4. Water conservation
- 5. Avoid waste sent to landfill



#### ENSURE HEALTHY LIVES AND PROMOTE WELL-BEING FOR ALL AT ALL AGES

All companies certified under the EarthCheck Standards have a commitment to ethical and non-exploitative arrangements with staff, suppliers and clients and oblige that there is no sexual commercial exploitation of minors. Sustainably sourced fresh local produce is encouraged to be purchased and used on the menu where applicable. Reducing emissions, pollution and encouraging the use of eco-labelled and biodegradable products through the MyEarthCheck software, ensures measurable improvements and the promotion of health and well-being for stakeholders of all ages. Indoor environmental health and enhancement of local community infrastructure is a required under the Design Standard. Communication is key to promoting successes and initiatives and is a requirement of the EarthCheck Company Standard, audited annually to ensure compliance.

#### EARTHCHECK QUANTITATIVE INDICATORS:

- 1. Local employment opportunities
- 2. Local goods and services
- 3. Minimum wage & retirement fund
- 4. Dental & medical benefits for staff
- 5. Paid leave for staff
- 6. Local perishable goods
- 7. Income spent on sustainability programs
- 8. Sustainability & vocation training for staff
- 9. Eco-labelled paper, cleaning & pesticide products



## ENSURE INCLUSIVE AND EQUITABLE QUALITY EDUCATION AND PROMOTE LIFELONG LEARNING OPPORTUNITIES FOR ALL

The EarthCheck Training Academy provides mandatory training and webinars to all coordinators, 'Green Teams' and participants in EarthCheck Certification and other products. This knowledge is encouraged to be passed on to staff within the organisation. The Company Standard requires education programs for staff, and stakeholder and community consultation. Education programs with guests are also encouraged which promote environmental and ecological improvements and potential impacts and social and cultural awareness. These programs and initiatives can be entered and measured through the MyEarthCheck software to ensure continuous improvement.

- 1. Local employment opportunities
- 2. Sustainability & vocation training for staff
- 3. Income spent on sustainability programs



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#### ACHIEVE GENDER EQUALITY AND EMPOWER ALL WOMEN AND GIRLS

The EarthCheck Company standard encourages organisations to have equitable hiring of women and all Certification Programs can report their Corporate Social Responsibility initiatives through the MyEarthCheck software, which includes hiring ratios, ratio of salaries, training programs and anti-discrimination reporting. All companies certified have an understanding of the rights and needs of all employees regardless of minority status or vulnerability, including women. By providing equal opportunities and salaries for women, EarthCheck Certified organisations empower women and girls in an economically and socially sustainable way.

#### EARTHCHECK QUANTITATIVE INDICATORS:

- 1. Minimum wage for male and female staff
- 2. Male VS. Female staff percentage
- 3. Percentage of female managers
- 4. Demonstrated commitment in gender equity & equality



## ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL

EarthCheck's Certification programs require potable water consumption and water saving data is accurately recorded through the MyEarthCheck software and annually audited. This encourages participating organisations in making continuous improvements to ensure sustainable water usage and consumption. Potable water sources are required to be from a sustainable source. Management of freshwater resources area required which covers conservation, maintenance, collection and recycling of water and stormwater management. Waste water management is required to treat wastewater and manage discharge effluents in accordance with recognised international standards, in a manner which will cause no ecological harm or impacts to human health. During audits, best practices are encouraged to be recorded and shared within the EarthCheck community.

- 1. Potable Water Consumption
- 2. Check for leaks
- 3. Recycled / Captured Water Sources
- 4. Water efficient fixtures and fittings
- 5. Water sprinklers used after dark
- 6. Plants requiring minimal irrigation
- 7. Wastewater Treatment



#### ENSURE ACCESS TO AFFORDABLE, RELIABLE, SUSTAINABLE AND MODERN ENERGY FOR ALL

Data collection on energy consumption is required to be entered into the MyEarthCheck software and comprehensive records are required to accurately calculate. Scope 1, 2 and 3 Greenhouse Gas Emissions. The data and records are audited annually to ensure verified accurate data to base future sustainability decisions on. All companies certified under the EarthCheck Certification programs must have a sustainable energy supply and commitment to the reduction of Greenhouse Gas Emissions. Energy efficiency and carbon offset programs are encouraged along with the purchase of 'green' electricity. Ozone depleting substances such as refrigerants gases are discouraged. Best practices for energy efficiency, conservation and management are recorded and shared during audits.

#### EARTHCHECK QUANTITATIVE INDICATORS:

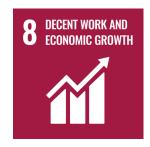
- 1. Energy Consumption
- 2. Greenhouse Gas Emissions
- 3. Green Power Agreement
- 4. Renewable Energy Generation



## PROMOTE SUSTAINED INCLUSIVE AND SUSTAINABLE ECONOMIC GROWTH, FULL AND PRODUCTIVE EMPLOYMENT AND DECENT WORK FOR ALL

All organisations certified under the EarthCheck Standards must implement a policy to ensure labour arrangements, employment terms and conditions and business practices are ethical and not exploitative, particularly of children, adolescents, women and local minorities including commercial and sexual exploitation. Employment of locals must be prioritised for all positions including management, which is recorded through the MyEarthCheck software. Organisations are encouraged to promote and sell local artisan crafts and other goods and services. These policies are audited annually to ensure organisations are upholding their agreements.

- 1. Local employment opportunities
- 2. Local goods and services
- 3. Minimum wage for male and female staff
- 4. Sustainability & vocation training for staff



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## BUILD RESILIENT INFRASTRUCTURE, PROMOTE INCLUSIVE AND SUSTAINABLE INDUSTRIALISATION AND FOSTER INNOVATION

The EarthCheck Design Standards promote the development of innovative and resilient infrastructure by adopting best practice measures in risk management with a focus on climate change adaptation. Sustainable building design, building materials use and inclusive infrastructure that supports community needs are encouraged through the EarthCheck Sustainable Building Planning and Design Standard. Innovation is encouraged throughout all Key Performance Areas of the EarthCheck Standards. Members have the opportunity to record personalised indicators through the MyEarthCheck software if they have implemented an innovative practice that EarthCheck does not yet measure. Auditors are trained and encouraged to record all innovative best practices and share knowledge from other experiences in their field.

#### EARTHCHECK QUANTITATIVE INDICATORS:

- 1. Climate Smart Resilient Development
- 2. Sustainable Materials & Resource Use
- 3. Sustainable Design Innovation
- 4. Regenerative Design
- 5. Lifecycle Analysis
- 6. Inclusive Community Infrastructure



#### **REDUCE INEQUALITY WITHIN AND AMONG COUNTRIES**

EarthCheck Certification promotes sustainable Management of Social and Cultural Issues.

Organisations must manage the social and cultural impacts of its operations as well as actively support initiatives for social and community development including, among others, education, health and sanitation. The EarthCheck Certification Standards require equitable hiring of women and local minorities and legal protection of employees is respected and all employees are paid a living wage.

Management are required to encourage staff input to approaches and directions for the organisation and communities and other key stakeholders should be consulted.

- 1. Local employment opportunities
- 2. Local goods and services
- 3. Minimum wage & retirement fund for all staff
- 4. Male VS. Female staff percentage
- 5. Percentage of female managers
- 6. Sustainability & vocation training for staff
- 7. Income spent on sustainability programs



#### MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE

Companies and Destinations certified by EarthCheck help create cities and human settlements that are inclusive safe, resilient and sustainable by focusing on environmental, social and cultural elements. Stakeholder engagement and communications are encouraged. Community initiatives are encouraged including cultural engagement and awareness. All audits focus on health and safety and emergency planning and response procedures, including risk assessments, storage and handling of dangerous chemicals and training programs. A Sustainability Approach, by way of mandatory Risk Assessments and Environmental Action Plans, ensures that all Key Performance Areas of the organisation are met for the benefit of the environment and the surrounding communities. The EarthCheck Design standard requires projects must demonstrate stakeholder inclusion, consideration of community needs and enhancement of community infrastructure to strengthen community social fibre.

#### EARTHCHECK QUANTITATIVE INDICATORS:

- 1. Local employment opportunities
- 2. Income spent on sustainability programs
- 3. Local goods and services
- 4. Inclusive Community Infrastructure



#### **ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS**

Under all EarthCheck Certification programs; organisations must implement an energy efficiency, conservation and management, freshwater management, wastewater management, waste management plan in order to minimise the consumption and production of excess energy, water and resources (waste), to avoid an adverse environmental impact. Companies are encouraged to use alternative or biodegradable packaging on any products provided. By monitoring and measuring consumption and production trends through the MyEarthCheck software, an organisation is able to identify areas in which improvements should be made. Reduction in consumption has benefits for the environment and provides economic returns. Each EarthCheck Certified member is provided an annual Performance Report which shows annual comparisons in performance of all indicators measured. These performance reports also show how the member is performing when compared with the same type of organisations in the same climate zone to ensure any decisions made to change behaviours are informed with accurate data. Organisations certified through EarthCheck programs must consider responsible procurement of goods and services, promoting good practices through their supply chain.

- 1. Greenhouse gas emissions
- 2. Eco-labelled paper, cleaning & pesticide products
- 3. Potable water consumption
- 4. Waste sent to landfill
- 5. Energy consumption



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#### TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS

The EarthCheck Company and Destination Standard requires that companies monitor and measure their energy consumption and their Scope 1, 2 and 3 Greenhouse Gas Emissions through the MyEarthCheck Software. The EarthCheck Design standard allows projects to predict their energy consumption and Greenhouse Gas Emissions for monitoring and measurement. Organisations are also encouraged to consider natural and environmental disasters to their Risk Management Plans which are audited annually. Organisations who prepare themselves for an adverse external impacts, provide a more resilient approach to climate change and its impacts, which supports local economies and provides security to its key stakeholders. Participating in the EarthCheck Certificated programs demonstrates organisations who have decided to take urgent action to combat climate change and its impacts. All members are provided with an annual Performance Report to demonstrate how many resources a member has saved through participating, such as energy, water, waste and carbon emissions. Projects certified under the EarthCheck Design Standards must demonstrate implementation of regenerative design principles which enhance local ecosystem health, minimise consumption and adopt renewable energy technology where viable.

#### EARTHCHECK QUANTITATIVE INDICATORS:

- 1. Energy consumption
- 2. Scope 1 & Scope 2 GHG emissions from energy use
- 3. Scope 3 Transport Emissions
- 4. Scope 3 Waste disposal emissions



## CONSERVE AND SUSTAINABLY USE THE OCEANS, SEAS AND MARINE RESOURCES FOR SUSTAINABLE DEVELOPMENT

Companies must establish the efficient use of the freshwater supply and minimise the consumption of fresh water resources. Stormwater management is mandatory to avoid contamination, erosion and siltation and maintain catchment integrity. Solid waste management and waste water management should be implemented to avoid adverse environmental impacts, the pollution of the marine environment. Usage of freshwater resources and solid waste disposal is all required to be recorded in the MyEarthCheck software to ensure the member can monitor their improvements through participating in the EarthCheck program. All foods are encouraged to be sourced sustainably, with a particular focus on avoidance of vulnerable species and procurement of sustainably certified seafood.

- 1. Onsite wastewater treatment
- 2. Potable water consumption
- 3. Recycled / Captured Water Sources
- 4. Avoid waste sent to landfill



## PROTECT, RESTORE AND PROMOTE SUSTAINABLE USE OF TERRESTRIAL ECOSYSTEMS, SUSTAINABLY MANAGE FORESTS, COMBAT DESERTIFICATION, AND HALT AND RESERVE LAND DEGREDATION AND HALT BIODIVERSITY LOSS

A commitment to and support for habitat conservation through a Land use planning and management plan, which includes design and construction of buildings and infrastructure is required. Organisations must comply with all lands rights, property acquisition, local zoning and protected or heritage area requirements and have a regard for cultural and heritage considerations. All designs and construction of building and infrastructure must have respect for the surrounding environment and appropriate principles of sustainable conservation are applied. Projects certified under the EarthCheck Design Standards must demonstrate implementation of regenerative design principles, ensuring there is no net biodiversity loss and that natural habitats, ecosystem health and biodiversity values are enhanced.

#### EARTHCHECK QUANTITATIVE INDICATORS:

- 1. Ecological & Biodiversity Values
- 2. Land Use Planning & Habitat Protection
- 3. Eco-labelled paper, cleaning & pesticide products



## PROMOTE PEACEFUL AND INCLUSIVE SOCIETIES FOR SUSTAINABLE DEVELOPMENT, PROVIDE ACCESS TO JUSTICE FOR ALL AND BUILD EFFECTIVE, ACCOUNTABLE AND INCLUSIVE INSTITUTIONS AT ALL LEVELS

Companies that are EarthCheck Certified are encouraged to communicate with all key stakeholders, including local communities, suppliers and guests in regards to their efforts in Sustainable Development. This communication promotes inclusiveness and holds organisations accountable for their intentions and actions at all levels. By requesting that organisations have policies on equitable hiring, fair work conditions, upholding human rights, providing legal protection and living wages to all employees at all levels, this provides access to justice for all and builds effective institutions where the benefits are felt throughout the community.

- 1. Local employment opportunities
- 2. Paid leave for staff
- 3. Minimum wage & retirement fund
- 4. Dental & medical benefits for staff
- 5. Male VS. Female staff percentage
- 6. Income spent on sustainability programs
- 7. Sustainability & vocation training for staff
- 8. Percentage of female managers



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## STRENGTHEN THE MEANS OF IMPLEMENTATION AND REVITALISE THE GLOBAL PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT

EarthCheck operates in over 70 countries around the world and encourages strengthened partnerships with our members. Best practices and case studies are shared regularly between members and learnings are encouraged to be shared throughout all levels of each organisation. Communication of efforts towards Sustainable Development are required which covers all key stakeholders such as guests, staff, suppliers, contractors and the surrounding communities. All organisations certified under any of the EarthCheck Certification products clearly demonstrate their environmental, social and cultural performance and provide confidence to consumers they are building strong partnerships towards sustainability and the Sustainable Development Goals.

The Global Sustainable Tourism Dashboard was designed to complement the efforts to promote sustainable development and is underpinned by the third party verified data collected from the EarthCheck Certification programs.



















APPENDIX 2 – EARTHCHECK MAPPING TO LEED AND BREEAM SUSTAINABILITY CRITERIA AND RATING

#### EarthCheck Design BPDS & BREEAM I.N.C. Comparison Matrix

**BREEAM (2016) International New Construction** 

EarthCheck BPDS (v4.3)

\* Mandatory Criteria

	Tatal Baista Ausilahla (TRA)	100%		121
	Total Points Available (TPA)	100%	Fourth Charalt BBBC Court	131
	BREEAM Certification Level	. 050/	EarthCheck BPDS Cert	
	Outstanding	>85%	Platinum	91+
	Excellent	>70%	Gold	71-90
	Very Good	>55%	Silver	50-70
	Good	>45%		
	Pass	>30%		
WT	Key Performance Areas (KPA)	Points *	BPDS KPA Equivalenc	y Points *
	Management	21	,	
v.	Project brief and design	4	1, 2	*
10.57%	Lifecycle cost and service life planning	4	√ 26	1
10.	Responsible construction practices	6	✓ 4	2
	Commissioning and handover	4	1	*
	Aftercare	3	Option: EarthChe	eck Operations
	Health and Wellbeing	25		
	Visual comfort	6	×	
	Indoor air quality	5	✓ 27	4
	Safe containment in laboratories	2	×	
21.49%	Thermal comfort	3	√ 13	5
21.4	Acoustic performance	4	√ 28	4
	Accessibility	2	√ 34	4
	Hazards	1	√ 4	2
	Private space	1	×	
	Water quality	1	✓ 17	1
	Energy	37		
	Reduction of energy use and carbon emissions	15	√ 8	4 *
	Energy monitoring	4	√ 9	2 *
	External lighting	1	√ 12	1
%/	Low carbon design	3	√ 10	4 *
19.97%	Energy efficient cold storage	3	√ 12	1
1	Energy efficient transport systems	3	√ 12	1
	Energy efficient laboratory systems	5	x	-
	Energy efficient equipment	2	√ 12	1
	Drying space	1	x	•
	Transport	13		
	Public transport accessibility	5	<b>✓</b>	
	Proximity to amenities		<sub>_</sub> 30	2
6.41%	•	2		
6.4	Alternative modes of transport		31, 32	5
	Maximim car parking capacity	2	√ 31 ×	1
	Travel Plan	1	×	
	Home office	1	*	
	Water	10	/	10 *
3%	Water consumption	5	14	10
6.73%	Water monitoring	1	15	1 *
	Water leak detection and prevention	3	15	1
	Water efficient equipment	1	√ 16	4

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#### **EarthCheck Design BPDS & BREEAM I.N.C. Comparison Matrix CONT...**

	Materials		12	П		
٠,	Life cycle impacts		6	1	26	3
12.50%		f construction products	4	1	24	4
12.	Designing for durability	of construction products		1	24	
		y and resilience	1	· /		2
	Material efficiency		1	×	25	4
	Waste		10	✓		
	Construction waste ma	inagement	3		4	2
%	Recycled aggregates		1	✓	24	4
5.77%	Operational waste		3		19, 20	2 *
	Speculative finishes		1	×		
	Adaption to climate ch		1	<b>Y</b>	6	1
	Functional adaptability	•	1	×		
	Land use and Ecology		10			
v <sub>o</sub>	Site selection		3	<b>~</b>	21	3
7.69%	Ecological value of site	and protection of	2	✓	22	*
7	ecological features Enhancing site ecology		2	1		4
			3	/	23	2
	Long term impact on b	logiversity	2	×	23	1
	Pollution		13	✓	27	*
<b>%</b>	Impact of refrigerants		4	\ \	27	*
8.87%	Nox emissions		2	\ \	27	
∞	Surface water run-off		5		17	2 *
	Reduction of night time		1	Ľ	29	1
	Reduction of noise pol	lution	1	<b>~</b>	28	1
%	Innovation					
+10%		ns not included within the		✓		
	standard.				33, 34, 35, 36, 37, 38, 39, 40	8
	Management		8.56%			
<sub>U</sub>	Health and Wellbeing		12.89%			
/ WEIGHTING	Energy		17.81%			
<u> </u>	Transport		4.44%			
WE	Water		6.73%			
s /	Materials		12.50%			
POINTS,	Waste		3.46%			
PO	Land use and ecology		7.69%			
	Pollution		7.51%			
	Innovation		10.00%			
	Outstanding BREE	AM rating	91.59%		Platinum BPDS rating	91
		Ranking BPI	OS, BREEAN	/I &		
	hCheck	BREEAM			LEED	
Platin	num	Outstanding			Platinum	
Gold		Excellent				
					Gold	
Silver		Very Good			Silver	
		Good			Certified	
		Pass				

### EarthCheck Design BPDS & LEED BD&C Comparison Matrix

LEED BD&C (v4.1) FOR NEW CONSTRUCTION

EarthCheck BPDS (v4.3)

\* Mandatory Criteria

***	Total Points Available	110		Total Dei	ints Available	131	
	LEED Certification Level	110			eck BPDS Certificat		
	Platinum	80+	1	Platinum		91+	
	Gold	60-79		Gold		71-90	
	Silver	50-59		Silver		50-70	
	Certified	40-49		Silver		30 70	
	Continue	40 45					
	Key Perforamce Areas (KPA)	Points *	k	BPDS KP	A Equivalency	Points	*
	Integrative Process			⊠			
	Integrative Process	1		✓	1, 2, 3, 4	1	*
	Location and Transportation			⋈			
	LEED for Neighborhood Development Location	16		×			
	Sensitive Land Protection	1		✓	21	1	
	High-Priority Site and Equitable Development	2	П	✓	4, 36, 37	5	
	Surrounding Density and Diverse Uses	5	П	✓	21	1	
	Access to Quality Transit	5	П	✓	30	2	
	Bicycle Facilities	1	П	✓	31	3	
	Reduced Parking Footprint	1	П	✓	31	1	
	Electric Vehicles	1		✓	32	2	
	Sustainable Sites			⋈			
	Construction Activity Pollution Prevention	*	k	✓	4	2	
	Site Assessment	1		✓	21	1	
	Protect or Restore Habitat	2	П	✓	22	4	*
	Open Space	1		✓	23, 33, 34	9	
	Rainwater Management	3	П	✓	17	5	*
	Heat Island Reduction	2	П	✓	23	1	
	Light Pollution Reduction	1		✓	29	1	
	Water Efficiency			⊠			
	Outdoor Water Use Reduction	2 *	*	<b>√</b>	14	10	*
	Indoor Water Use Reduction	6 *	k		1	10	
	Building-Level Water Metering	1 *	k	✓	15	2	*
	Cooling Tower Water Use	2		✓	16	4	
	Energy and Atmosphere			⊠			
	Fundamental Commissioning and Verification	*	*	✓	1		*
	Minimum Energy Performance	*	k	✓	8	4	*
	Building -Level Energy Metering	k		<b>√</b>	9		*
	Fundamental Refrigerant Management	*	k	✓	27	1	*
	Enhanced Commissioning	6		×			
	Optimize Energy Performance	18		<b>√</b>	10, 12, 13	13	*
	Advanced Energy Metering	1		✓	9	1	
	Grid Harmonization	2		✓	9	1	
	Renewable Energy	5		✓	11	11	*
	Enhanced Refrigerant Management	1		✓	27	4	, .

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#### **EarthCheck Design BPDS & LEED BD&C Comparison Matrix CONT...**

Materials and Resources		×		
Storage and Collection of Recyclables	*	✓	19, 20	1 *
Construction and Demolition Waste Management	*	×		
Planning				
Building Life -Cycle Impact Reduction	5	<b>V</b>	26	4
Building Product Disclosure and Optimization – EPD	2	<b>√</b>	4	
Building Product Disclosure and Optimization –		✓		
Sourcing of Raw Materials  Building Product Disclosure and Optimization –	2		37	1
Material Ingredients	2	✓	37	1
Construction and Demolition Waste Management	2	×		-
Indoor Environmental Quality		×		
Minimum Indoor Air Quality Performance	*	✓	27	1
Environmental Tobacco Smoke Control	*	×		
Enhanced Indoor Air Quality Strategies	2	✓	38	1
Low -Emitting Materials	3	✓	27	3
Construction Indoor Air Quality Management Plan	1	×		
Indoor Air Quality Assessment	2	×		
Thermal Comfort	1	×		
Interior Lighting	2	×		
Daylight	3	×		
Quality Views	1	×		
Acoustic Performance	1	✓	28	1
Innovation		⊠		
Innovation	5	✓	35, 39, 40	3
LEED Accredited Professional	1	✓	BONUS CREDIT	1
Regional Priority		⊠		
Regional Priority	4	×		
LEED Point	s 88		BPDS Credits	107
	Platinum			Platinum

## EarthCheck BPDS, LEED & BREEAM Comparison Matrix EarthCheck BPDS (v4.3) LEED BD&C (v4.1) BREEAM I.N.C. (2016)

\* Mandatory criteria
Total Available Credits

		131	
Eart	hCheck Design Certification		
	Platinum	91+	
	Gold	71-90	
	Silver	50-70	
Key	Performance Areas	Credits	*
Sust	tainability Approach	11	
1	Sustainability Policy		*
2	Project Brief		*
3	Multidisciplinary Team		*
4	Sustainable Construction	4	
5	Compliance	Р	
6	Risk Management	5	
7	Consultation	2	
Ene	rgy	30	
8	<b>Energy Consumption</b>	4	*
	Energy Metering &	2	
9	Management	_	*
10	Greenhouse Gas Emissions	4	*
11		11	*
12	Renewable Energy	4	
13	Energy Efficiency Passive & Active Design	5	
Wat		24	
14	Water Consumption	10	*
14	Water Metering &		
15	Management	2	*
16	Water Efficiency	4	
	Water Recycling and	5	
17	Reuse	3	
18	Waste Water Management	3	*
_	d Waste	2	
19	Waste Generation	_	*
	Waste Management	2	
	d Use Planning and		
	ersity	10	
21	Siting	3	
22	Biodiversity	4	*
23	Landscaping	3	
	tainable Materials &	14	
-	ource Conservation		
24	Resource Conservation	6	
25	Sustainable Materials	4	

26 Lifecycle Analysis

LEED BD&C	(V4.1)	
Total Points Availa	ıble	
	110	П
LEED Certification		
Platinum	80+	
Gold	60-79	
Silver	50-59	
Certified	40-49	
Fauivalonav	Points	*
Equivalency	Points	
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✓	5	
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✓	1	
✓	2	
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Total Credits Available  150  BREEAM Rating % of ^ Outstanding >85 Excellent >70 Very Good >55 Good ?45 Pass >30  Equivalency Points *	
BREEAM Rating % of ^ Outstanding >85 Excellent >70 Very Good >55 Good ?45 Pass >30  Equivalency Points *	
Outstanding       >85         Excellent       >70         Very Good       >55         Good       ?45         Pass       >30         Equivalency       Points       *         X       ✓       4         X       ✓       6         X       ✓       4         X	
Excellent >70  Very Good >55  Good ?45  Pass >30   Equivalency Points *	
Very Good       >55         Good       ?45         Pass       >30         Equivalency       Points       *         X       4         ✓       4         X       4         ✓       4         X       4         ✓       15         ✓       4         ✓       3	
Good ?45 Pass >30  Equivalency Points *	
Pass >30    Equivalency   Points   *	
Equivalency Points *	
x √ 4 x √ 6 x √ 4 x ✓ 4 x ✓ 3	
x √ 4 x √ 6 x √ 4 x ✓ 4 x ✓ 3	
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#### EarthCheck BPDS, LEED & BREEAM Comparison Matrix CONT...

	oor Environmental Health & ution Control	7
27	Air	5
28	Noise	1
29	Light	1
Trar	nsport	8
30	Transport Availability	2
31	Transport Support Facilities	4
32	Sustainable Transport	2
	al Cultural and Economic I-being	16
33	Heritage & Culture	5
34	Accessibility & Inclusion	4
35	Training & Education	3
36	Employment	2
37	Economic Development	2
Inno	ovation	8
38	Sustainable Construction	1
39	Energy	1
40	Water	1
41	Solid Waste & Material Recycling	1
42	Sustainable Materials	1
43	Indoor Environmental Health	1
44	Transport	1
45	Social, Cultural & Economic Wellbeing	1
Bon	us	1
46	EarthCheck Design AP	1

✓ ✓ ✓	9 1	*
✓	6	
√ √	5 2	
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✓ ✓		
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<b>√</b>	-	
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✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓		
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✓	1	

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#### APPENDIX 3 - EXAMPLE GREEN BUILDING SECTOR PROJECT REPORT

#### EarthCheck Building Planning and Design Standard (BPDS) v4.3

#### **Sustainable Investment Support Tool | Assessment Report** Alignment: Green Bond Principles (GBP), "Green Building Sector Project"

**Development Name:** Example Development Name

**Development Type:** Business Hotel Location: Brisbane, Australia

Prepared for: Example Green Bond Name

#### Green Building Sector Project Criteria Outcomes

xx of kWh/m<sup>2</sup>; -25% Energy Performance: Carbon Performance: xx of  $kgCO_2/m^2$ ; -20%

Water Efficiency: -25% -33% Waste Management:

Certification Standard: Silver Certification (BPDS)

Green Building Sector Project Criteria

#### Building Planning and Design Standard Criteria

Key Performance Area	Credits	
	Available	Achieved
Sustainability Approach	11	5
Energy	30	12
Water	24	12
Material & Resource	2	1
Solid Waste	10	5
Land Use & Biodiversity	14	7
Health & Pollution	7	2
Transport	8	2
Sustainable Wellbeing	16	4
Innovation	8	1
Possible	130	51

#### **BPDS Achievement: Silver Certification**

GBP Reporting Metrics	BPDS Alignment	
	Available	Achieved
Energy Performance	1	1
Carbon Performance	1	1
Water Efficiency and Savings	1	1
Waste Management	2	2
Certification Standard	1	1
Use of Materials	4	4
Land Use and Biodiversity	10	7
Water Efficiency (2)	8	8
Waste Management (2)	2	2
Indoor Air Quality	5	4
Light Quality	1	1
Transport	4	2
Possible	40	34



Figure 3 Building Planning and Design Standard Criteria and Achievement



Figure 2 - Green Building Project Sector Criteria and Achievement

The above is a snapshot of the "as-designed" performance of the Example Development Name development against the EarthCheck Building Planning and Design Standard and the Green Building Sector Project Criteria required by Example Bond Name. Upon completion of construction and through the assets life the development is required to continue with a credible evidence-based sustainability assessment and certification program such as the EarthCheck Company Standard. More information explaining this report and further requirements of this program are detailed on following pages.

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