



**HOUSING &
DEVELOPMENT
BOARD**

Green Finance Framework

13 Jan 2022



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1 Introduction

The Housing & Development Board (HDB), a statutory board of the Ministry of National Development (MND), was established on 1 Feb 1960. HDB's mission is to provide quality and affordable public housing for Singaporeans, create vibrant and sustainable towns, and promote the building of active and cohesive communities.

HDB has built more than 1 million flats built across 24 towns and 3 estates, housing about 80% of Singapore's resident population, of which about 90% own their home. HDB strives to continuously build new-generation housing in smart and sustainable towns, to provide affordable, quality homes and living environments.

2 Environmental Policy

HDB, the leading property developer and owner in Singapore, is committed to be the leader in environmental management. In line with our shared value to care for the environment, we shall:

- i. Comply with all applicable environmental laws, regulations and other relevant requirements
- ii. Contribute to environmental sustainability by:
 - Promoting conservation of energy and efficient use of resources in policy formulation, planning, development, management and maintenance of public housing and commercial buildings;
 - Considering environmental requirements in land use and procurement of goods and services; and
 - Practising 3Rs (reduce, re-use and recycle) in resource and waste management
- iii. Continually improve our environmental performance by setting and reviewing environmental objectives and targets
- iv. Communicate with and educate all persons working for or on behalf of HDB, business partners, customers and the public to achieve our environmental goals

3 Commitment to Sustainability

As the largest master planner and housing developer in Singapore, HDB continually seeks to improve the way it plans its towns and designs its flats, to keep pace with the changing demographics and lifestyle trends of its residents. Today, an HDB home is much more than just a physical shelter. Beyond the flat, it is also about creating a total living environment so that HDB towns remain good homes to live in.

In 2011, HDB formulated the Roadmap to Better Living in HDB Towns, to guide the development of well-designed, sustainable and smart, and community-centric towns. Over the past decade, a new generation of public housing has been progressively completed, including in new housing areas such as Bidadari, Tampines North and Punggol Northshore.

As society evolves and new challenges emerge, the roadmap has been refreshed to address key trends and challenges that will impact the future of HDB living, such as an ageing population, climate change, evolving social aspirations, and Singaporeans' desire to be more involved in shaping their living environment. The 'Designing for Life' roadmap will guide HDB's work over the next 10 to 15 years. Supported by three pillars – 'Live Well', 'Live Green' and 'Live Connected', the roadmap marks a concerted shift in focus towards the holistic well-being of residents, focusing on planning and designing around residents' physical, mental, and social needs. Some of the initiatives under the roadmap include [Biophilic Town Framework](#), [Smart HDB Town Framework](#), and the [Green Towns Programme](#).

HDB also actively carries out research & development to create and test new designs, as well as digital and construction technologies. This ensures that HDB achieves better environment quality, as well as a more productive and efficient construction process. HDB's innovations are wide-ranging, including state-of-the-art environmental modelling techniques, renewable energy, water and waste management, high-quality precast construction, floating wetlands system, new methods of reclamation and smart applications.

Where required, as part of HDB's planning and development process, we conduct in-depth environmental studies to assess the expected impact of development on the natural and built environment. They guide our development plans for the areas and inform mitigating measures to minimise the impact of development works on the environment.

In recognition of our efforts to deliver quality and excellence in public housing with a focus on sustainability, HDB has received numerous international and local awards, including the 2010 Habitat Scroll of Honour Award, one of the most prestigious global human settlements awards.

HDB was also conferred the Built Environment Leadership Platinum Star and the BCA Green Mark Platinum Champion at the Building and Construction Authority (BCA) Awards ceremony on 22 May 2018. The awards recognise efforts to champion a sustainable and quality-built environment. This was the first time a public agency was awarded these prestigious accolades.

HDB received the prestigious Singapore Quality Award (with Special Commendation) 2018, and the Transformative Agency of the Year Award in 2020, in recognition of the high standards achieved in delivering products and services. These accolades are a testament to HDB's commitment to developing well-designed and sustainable towns in Singapore and providing homes that all Singaporeans can be proud of.

4 Green Finance Framework

As part of our commitment towards the development of green and sustainable homes, HDB has developed this Green Finance Framework (the "Framework") with an intention to enter into multiple Green Finance Transactions (GFTs) in the future, including but not exclusively Green Bonds and Green Loans.

The Framework is developed in accordance with the:

- i. Green Bond Principles (GBP) (2021) by the International Capital Market Association (ICMA);
- ii. Green Bond Standards (2018) by the ASEAN Capital Markets Forum; and
- iii. Green Loan Principles (2021) by the Loan Market Association, Asia Pacific Loan Market Association and Loan Syndications & Trading Association.

The Framework is structured to address the following four core components in compliance with the above Principles and Standards:

- i. Use of Proceeds
- ii. Process for Project Evaluation and Selection
- iii. Management of Proceeds
- iv. Reporting

HDB's Debt and Assets Committee, a Board Committee, approves the Framework. The Debt and Assets Committee endorses HDB's strategies to meet its borrowing requirements.

4.1 Use of Proceeds

The net proceeds from the GFTs will be used exclusively to finance or re-finance Eligible Green Projects under the Project Category of Green Buildings.

This includes the development of new residential and non-residential HDB projects which are planned to achieve the BCA Green Mark certification¹ of Gold ^{Plus} or above, and which commences:

- i. during the 24 months prior to the relevant issue date of a green bond / loan; or
- ii. after the issue date of a green bond / loan

HDB will, to the best of its ability, allocate at least 50% of the net proceeds to current and future expenditures.

Project Category	HDB's Initiatives	Expected Environmental Benefits	Contribution to
Green buildings	<p>For new public housing developments:</p> <p>Obtain BCA Green Mark Gold ^{Plus} or higher</p> <p>Provide Smart lighting for indoor and outdoor common areas</p> <p>Provide Re-generative lifts for all residential blocks</p> <p>Provide solar-ready roofs</p>	<ul style="list-style-type: none"> Reduction in energy use Reduction of carbon emissions 	<p>UN Sustainable Development Goals</p>  <p>Singapore Green Plan 2030² Pillar Energy Reset</p> 

¹BCA's [Green Mark certification scheme](#) is a green building rating system designed to evaluate a building's environmental impact and performance. It provides a comprehensive framework for assessing the overall environmental performance of new and existing buildings to promote sustainable design, and best practices in construction and operations in buildings.

² The Singapore Green Plan 2030, or the Green Plan, is a whole-of-nation movement to advance Singapore's national agenda on sustainable development. The Green Plan charts ambitious and concrete targets over the next 10 years, strengthening Singapore's commitments under the UN's 2030 Sustainable Development Agenda and Paris Agreement, and positioning Singapore to achieve its long-term net zero emissions aspiration as soon as viable. More information on the Singapore Green Plan 2030 can be found at www.greenplan.gov.sg.

4.2 Process for Project Evaluation and Selection

The project evaluation and selection process play a key role in ensuring that the proceeds from the GFTs are used to finance or re-finance Eligible Green Projects that meet the criteria specified under the Use of Proceeds section in the Framework.

Project Identification and Selection	The Development & Procurement Group will identify the Eligible Green Projects and seek the Deputy Chief Executive Officer (Building)'s endorsement on the projects to be included in the Green Project Register.
Green Projects Register	<p>Annually, the Finance Group will present the Green Projects Register that could be financed with GFT proceeds to the Chief Executive Officer for review and approval.</p> <p>The Finance Group will keep track of the Green Project Register and will ensure that the allocation of the GFT proceeds is in line with the Framework.</p>

4.3 Management of Proceeds

The net proceeds from the GFTs, or an amount equal to the net proceeds, will be allocated exclusively to the Eligible Green Projects on a portfolio basis. As long as there are outstanding GFTs, the Finance Group will manage the Green Project Register through its internal system and periodically monitor the balance of the tracked proceeds.

HDB will track the proceeds of the green bonds / loans and periodically adjust the balance of the tracked proceeds to match allocations to the Eligible Green Projects on a portfolio basis.

Where the allocation of the proceeds is pending, such amounts will be managed as part of HDB's cash management process which includes short-term balances which may be held by the Accountant-General's Department (AGD) under the Government's Centralised Liquidity Management Framework for Statutory Boards. Any unallocated proceeds will be disclosed as part of HDB's post-issuance reporting.

HDB will ensure, to the best of its ability, the allocation of proceeds to Eligible Green Projects on a portfolio basis no later than 2 years from the date of issuance, subject to market conditions and unforeseen circumstances (e.g. construction delays).

4.4 Reporting

HDB is committed to transparent reporting of our sustainability performance.

- i. For Green Bonds, HDB shall publish an annual green finance report by financial year, or as and when there are any material developments. Each green bond will be reported until full allocation of proceeds. The annual green finance report will be audited by an independent assurance provider and will be available on the HDB website.
- ii. For Green Loans, HDB shall provide a green loan report to the lender(s) upon request, or as and when there are any material developments. Each green loan will be reported until full allocation of proceeds. HDB shall be deemed to have provided the information if it is available in the annual report or on the HDB website.
- iii. For the above reports, HDB will provide information on the allocation of proceeds towards the Eligible Green Projects and environmental impact of those projects on a portfolio basis. This may include the following information:

Allocation report

- Allocated and unallocated amount
- Share of financing or re-financing of projects
- List of Eligible Green Projects

HDB may choose to present the information in generic terms in the event that confidentiality limits the amount of detail that can be made available.

Impact report

- Where relevant and feasible, HDB may provide information regarding the environmental impact of the Eligible Green Projects financed by the GFT proceeds as well as key underlying methodology and/ or assumptions used in determining quantitative performance.
- The annual green finance report may contain the following indicators for each Eligible Green Category:

Project Category	Sustainability Indicators
Green buildings	<ul style="list-style-type: none"> • Number of new residential and non-residential HDB projects which are planned to achieve the BCA Green Mark certification of Gold ^{Plus} or above • Estimated energy generated from Solar Panels (kWh generated per year) • Estimated energy saved at common areas from Smart Lighting, with reference to lighting power budget in SS 530, and Regenerative Lifts, as compared to lifts without regenerative function (kWh saved per year) • Estimated avoided carbon emissions (Kg CO₂ saved per year)

The annual green finance report will be reviewed and approved by the Chief Executive Officer.

5 External Review

HDB has obtained a limited assurance report from Ernst & Young LLP to confirm the alignment of the Green Finance Framework with the relevant Principles and standards.

The Framework and the limited assurance report will be made available on the HDB website (<https://www.hdb.gov.sg>).

6 Amendments to Framework

HDB will review this Framework on a regular basis, including its alignment to updated versions of the green bond principles as and when they are released, with the aim of adhering to market best practices. Such review may result in this Framework being updated and amended. The updates, if not minor in nature, will be subject to the prior approval of HDB's Debt and Assets Committee. Any future updated version of this Framework that may exist will either keep or improve the current levels of transparency and reporting disclosures, including the corresponding review by an external reviewer. The updated Framework, if any, will be published on the HDB website and will replace this Framework.

*Fulfilling **Dreams**, Building **Homes**, Creating **Communities***

HDB Hub 480 Lorong 6 Toa Payoh,
Singapore 310480
Tel: 6490-1111
HDB InfoWEB: www.hdb.gov.sg

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