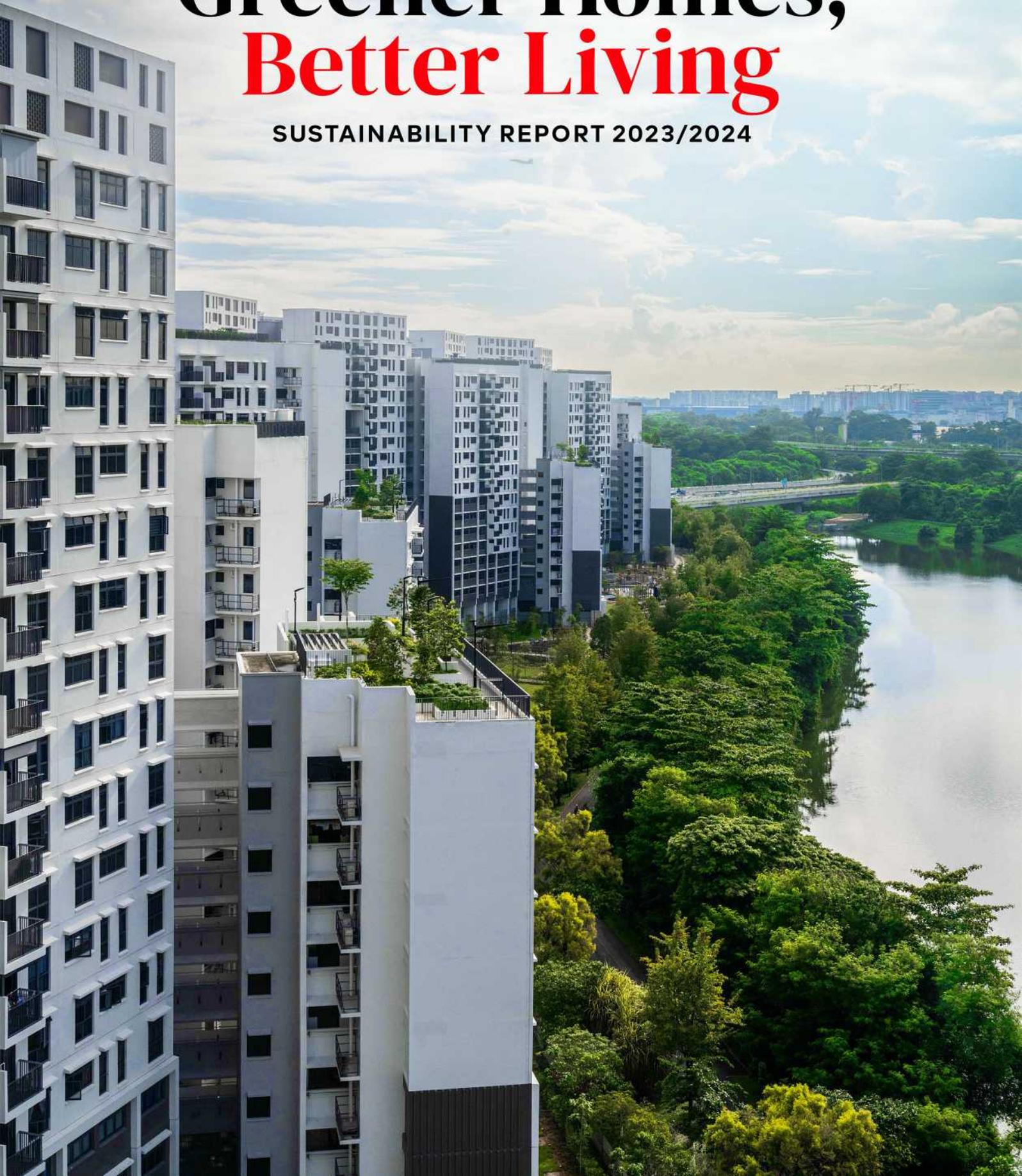


Greener Homes, Better Living

SUSTAINABILITY REPORT 2023/2024



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About HDB

GRI Disclosures 2-1, 2-6

The Housing & Development Board (HDB) is a statutory board under the Ministry of National Development (MND). As the master planner and largest housing developer in Singapore, HDB plays a key role in supporting Singapore's commitment to sustainable development. We continually strive to create a quality high-rise, high-density living environment that is liveable, sustainable and comfortable for residents. Since our founding, HDB has constructed over 1.25 million flats across 24 towns and 3 estates. These flats are now home to 80% of Singapore's resident population, with 90% of them owning the units they live in.

Over the past 60 years, HDB has focused on enhancing public housing in Singapore. Our core activities include selling and renting residential flats, upgrading and redeveloping older estates, and providing mortgage loans to eligible buyers under various public housing schemes. Additionally, we manage ancillary facilities such as commercial complexes, car parks, and amenities in our housing estates. Our work involves public sector collaborations and partnerships in construction, estate maintenance, IT, software, and other professional services.

In our ongoing commitment to progress, HDB collaborates with partners on research and development to find innovative materials, technologies and processes for building new-generation housing and smart, sustainable towns. We maintain strong relationships with consultants, suppliers and builders involved in all stages of HDB projects, from planning and design to construction, operation, maintenance, demolition and waste management.

As we look to the future, our focus remains on building homes within vibrant heartland spaces, fostering living environments where our residents can thrive.

Our Vision

An outstanding organisation creating endearing homes all are proud of.

Our Mission

We provide affordable, quality housing and a great living environment where communities thrive.

Our Shared Values

In everything we do, we embrace and display integrity, learning, teamwork, excellence, and care.

■ INTEGRITY

We perform our duties with honesty, fairness and courage, so as to uphold the public's trust in us.

■ LEARNING

We practise life-long learning, share our knowledge, and constantly seek ways to do our work better.

■ TEAMWORK

We share and respect different views and build on each other's strengths to achieve our vision and goals.

■ EXCELLENCE

We take pride in what we do and deliver quality work for our organisation and customers.

■ CARE

We care for our colleagues, the community, and the environment.

About this Report

GRI Disclosures 2-1, 2-2, 2-3, 2-4, 2-5

In HDB's inaugural Sustainability Report, we outline our commitment to sustainability through key initiatives, measures and achievements in ESG.

This report covers our sustainability-related performance from 1 April 2023 to 31 March 2024 (FY2023), aligned with our financial reporting period. All data presented reflects the assets and premises under HDB's operational control in Singapore, which are 36 commercial complexes, 1 industrial building and 2 recreational chalets. These data derived from internal stakeholders as well as third party partners, have been reviewed and verified to HDB's best effort and knowledge. Some figures may be estimates or approximations, and forward-looking sustainability targets or initiatives are based on current expectations and assumptions, which are subject to uncertainties that could cause actual results to differ materially. As this is the first iteration of our Sustainability Report, no restatements have been made. External assurance has not been sought for this report. Our subsidiary, EM

Services, has been excluded from this year's report. We are working towards including their data and performance in future reports. Prepared under the GRI Sustainability Reporting Standards, the GRI Content Index can be found on pages 56-61.

For a more comprehensive view of HDB's business and performance, we recommend that this report be read together with HDB's Annual Report 2023/2024.

For any questions or feedback on this report, please contact us via our [e-feedback form](#).



Foreword

GRI Disclosures 2-6, 2-22

Mr Benny Lim
Chairperson



Mr Tan Meng Dui
Chief Executive Officer



HDB was set up in 1960 with the task of providing a roof over Singaporeans' heads, offering sanitary living conditions in place of unhygienic slums and crowded squatters for a young nation. Through the years, while the housing landscape has evolved alongside changing demographics, we remain steadfast in our mission to fulfil Singaporeans' housing aspirations by providing quality homes. Today, HDB flats are home to close to 80% of Singapore's resident population, and HDB towns are vibrant spaces where the community come together to live, work, and play.

In HDB's inaugural Sustainability Report, we outline HDB's efforts in sustainable development across the areas of Environment, Social, and Governance (ESG). As Singapore's largest housing developer, we support the national sustainability agenda and align our goals with the Singapore Green Plan 2030 and GreenGov.SG initiative.

ENVIRONMENTAL SUSTAINABILITY

The built environment sector accounts for over 20% of Singapore's emissions. As Singapore's largest housing developer, we recognise the impact we have on the environment and are committed to building sustainable homes and towns.

In 2020, HDB launched the Designing for Life roadmap to guide the way we plan, design, and maintain our towns and estates over the next decade. Anchored on 3 key pillars – 'Live Well', 'Live Green' and 'Live Connected' – the roadmap focuses on meeting our residents' physical, mental, and social needs at every stage of their lives. The Designing for Life roadmap encapsulates our vision and ideas in designing a better living environment, building homes and towns with smart and sustainable features, and the forging of closer communities for our residents.

In the same year, we also announced the Green Towns Programme (GTP), a 10-year plan to make HDB towns more sustainable and liveable by 2030. The programme centres on reducing energy consumption, recycling rainwater, cooling HDB towns, promoting green commute, and reducing waste to improve residents' quality of life. An integral part of GTP is our solar initiatives. Under the SolarNova Programme, HDB aggregates public sector demand for the installation of solar panels across HDB blocks and government sites. Including efforts prior to the SolarNova programme, we have since committed to a total solar capacity of 455 megawatt-peak (MWp) across HDB estates, which is equivalent to powering approximately 114,000 4-room flats.

Beyond the green initiatives currently implemented in our towns, we also play a part in Singapore's overall Research, Innovation and Enterprise Plan. For example, HDB runs the Greater Sustainability vertical of the Cities of Tomorrow Research and Development (R&D) programme, an initiative by MND which focuses on sustainability in the built environment. Under this pillar, HDB manages the funding allocated to relevant R&D projects undertaken by Institutes of Higher Learning (IHL), research institutes and industry partners.

SOCIAL SUSTAINABILITY

As we continue to develop green and future-ready homes, we remain steadfast in our mission of providing affordable housing to Singaporeans.

2024 marks 60 years of our Home Ownership for the People Scheme. Under the scheme, HDB sells flats to citizens and encourages home ownership by providing generous housing subsidies and loans. This promotes rootedness and a sense of belonging in a nation, and familial ties forged at home contribute to Singapore's economic and social stability. Over the years, we have refined our housing policies to meet the increasingly diverse housing needs of Singaporeans at different stages of their lives. Besides families, other target groups that have benefitted from the scheme include singles, seniors, an expanded group of vulnerable families, as well as families in transitional housing. Today, Singapore boasts one of the world's highest home ownership rates, with 9 in 10 HDB dwellers owning their homes.

As we continue to build homes for Singaporeans, the health, well-being, and safety of our residents remain key priorities. We refresh homes, neighbourhoods, and towns through upgrading programmes to keep the heartlands vibrant and liveable. Our Home Improvement Programme (HIP) addresses common maintenance problems in ageing flats, while the Neighbourhood Renewal Programme (NRP) and Remaking Our Heartland (ROH) programme rejuvenate the spaces around HDB flats.

Given Singapore's ageing population, we have introduced initiatives to ensure HDB homes and towns are senior-friendly, in line with the national Age Well SG programme. Our Enhancement for Active Seniors (EASE) programme offers heavily subsidised senior-friendly items to support safer mobility at home. At the town level, we will roll out senior-centric upgrading works in precincts with a larger elderly population, such as barrier-free access along routes frequented by seniors, prominent signage and wayfinding features, as well as fitness trails and therapeutic gardens.

GOVERNANCE

To facilitate our role as Singapore's public housing authority, we implement robust governance policies and practices. We uphold a zero-tolerance policy for breaches relating to unethical conduct, which includes corruption, bribery, and other unlawful actions. At the same time, we enforce high standards of data privacy policies and regulations, and holistically manage our data risks to ensure the success of our operations. The high standards we set also extend to our suppliers, ensuring that our commitment to social and environmental responsibility permeates through our entire value chain.

Recognising the importance of sustainable development, we have integrated sustainability into our governance structure. In 2022, we appointed a Chief Sustainability Officer (CSO). Our CSO leads the Sustainability Working Group which drives, discusses, and implements HDB's sustainability strategy and initiatives, with the support of HDB's Board and senior leadership and management team.

LOOKING FORWARD

To reaffirm our commitment to sustainability, HDB has developed our first Sustainability Report. We detail our commitment to environmental sustainability in the way we build homes and plan towns, our engagement efforts with our diverse stakeholders, and our governance practices.

While the sustainability landscape is dynamic and constantly evolving, HDB's commitment to sustainability remains resolute. Integrating ESG considerations across our operations has never been more crucial, and we are proud to highlight our progress through this report. We will continue to take steps to develop our towns sensitively to mitigate climate change, to build a better and more sustainable future for Singaporeans.

Sustainability Governance

GOVERNANCE STRUCTURE AND MANAGEMENT OF SUSTAINABILITY

GRI Disclosures 2-9, 2-11, 2-12, 2-13, 2-14, 2-17

HDB's Board, appointed by MND under the Housing and Development Act 1959, plays a crucial role in guiding our sustainability efforts. Functioning as advisers to the senior leadership and management team, the Board provides strategic direction on sustainability matters. They meet to review and approve proposals, plans and projects, including those that relate to sustainability. The Board offers valuable insights and guidance on the Sustainability Report, material topics, and other initiatives.

HDB's senior leadership and management team, helmed by our Chief Executive Officer (CEO), includes Deputy CEOs for the Building and Estate clusters, the Assistant CEO for the Corporate cluster, the CSO and the respective Group Directors. This team provides overall leadership, oversight, and direction on all HDB matters, including sustainability-related issues.

To advance the collective knowledge of our Board and Sustainability Governance, we conduct workshops and facilitate knowledge sharing by leading sustainability consultants and experts, on topics such as (i) Sustainability Practices in Built Environment Sector, and (ii) fundamentals of greenhouse gases (GHG) reporting.

HDB's Sustainability Working Group, led by the CSO, drives, discusses, tracks, and implements HDB's sustainability strategy and initiatives. This group comprises the sustainability office and representatives from each HDB cluster: Corporate, Building, and Estate.



GOVERNANCE STRUCTURE

BOARD OF DIRECTORS

Chaired by
Chairman

Consists of
Board Members

Objective
Provide strategic direction and guidance on sustainability matters. To be an advisory role to the senior leadership and management team.

SENIOR LEADERSHIP AND MANAGEMENT TEAM

Led by
CEO

Consists of
DCEO(B), DCEO(E), ACEO(C),
CSO, Group Directors

Objective
Provide overall leadership, oversight and direction.

SUSTAINABILITY WORKING GROUP (SWG)

Chaired by
CSO

Consists of
Sustainability Office, representative from each group (Corporate, Building and Estate)

Objective
To drive, discuss, track and implement sustainability strategy and initiatives.

For more details on our Corporate Governance structure, please refer to our [Annual Report 2023/2024](#).

NOMINATION AND EVALUATION OF BOARD MEMBERS

GRI Disclosures 2-10, 2-11, 2-18, 2-19, 2-20, 2-21

Our Board members are nominated to ensure diverse and complementary backgrounds within the Board to manage and provide insights into the complex and evolving landscape. The appointment of HDB's Board members is in alignment with the processes set out under the Public Sector (Governance) Act, Housing & Development Act and the Constitution of Singapore.

The Board's remuneration, which follows the Singapore's Public Service Division's (PSD) recommendations and guidelines, is regularly reviewed to ensure the remuneration rates are kept abreast with the market rates and changes in economic climate.

RISK MANAGEMENT

Our Enterprise Risk Management (ERM), annually updated to the Board, includes methods and processes to manage our risks and seize opportunities. It provides a framework for risk management, which typically involves

identifying particular events or circumstances relevant to the organisation's objectives.

We have adopted a 4-step methodology for managing our enterprise-wide risks. These 4 steps include:

- 1. Risk identification:** The identification and prioritisation of key risks based on the strategic objectives which the organisation desires to achieve.
- 2. Risk analysis:** The identification and assessment of causes, likelihood of events, consequences, controls, and gaps.
- 3. Risk control:** The development of risk treatment action plans to further manage risk to an acceptable level.
- 4. Risk monitoring:** The development of Key Risk Indicators (or 'early warning signals') for monitoring risks.

Everyone at HDB plays a critical and important role in managing risks and seizing our opportunities. We strive to anticipate risks and implement preventive measures to prevent them from occurring.

Table 1: GRI 2-9: Governance structure and composition

HDB Board (1 October 2022 – 30 September 2024)	Executive/ Non-executive	Independence	Industry
Mr Benny Lim (Chairperson)	Non-executive	Independent	Government
Mr Tan Meng Dui (CEO)	Executive	Non-independent	Government
Ms Jacqueline Loh	Non-executive	Independent	Finance
Mr Stephen Lim	Non-executive	Independent	Information Technology
Mr Patrick Tay	Non-executive	Independent	Union (NTUC), MP
Ms Rita Soh	Non-executive	Independent	Architecture
Mr Tan Wah Yeow	Non-executive	Independent	Accounting
BG Chan Ching Hao	Non-executive	Independent	Government (Military)
Ms Chia Yong Yong	Non-executive	Independent	Social Sector
Mr Ong Tze-Ch'in	Non-executive	Independent	Government (Sustainability / Environment)
Ms Pearlyn Phau	Non-executive	Independent	Finance
Mr Wendell Wong	Non-executive	Independent	Law
Dr Wong Sweet Fun	Non-executive	Independent	Healthcare
Mr Zakir Hussain	Non-executive	Independent	Media

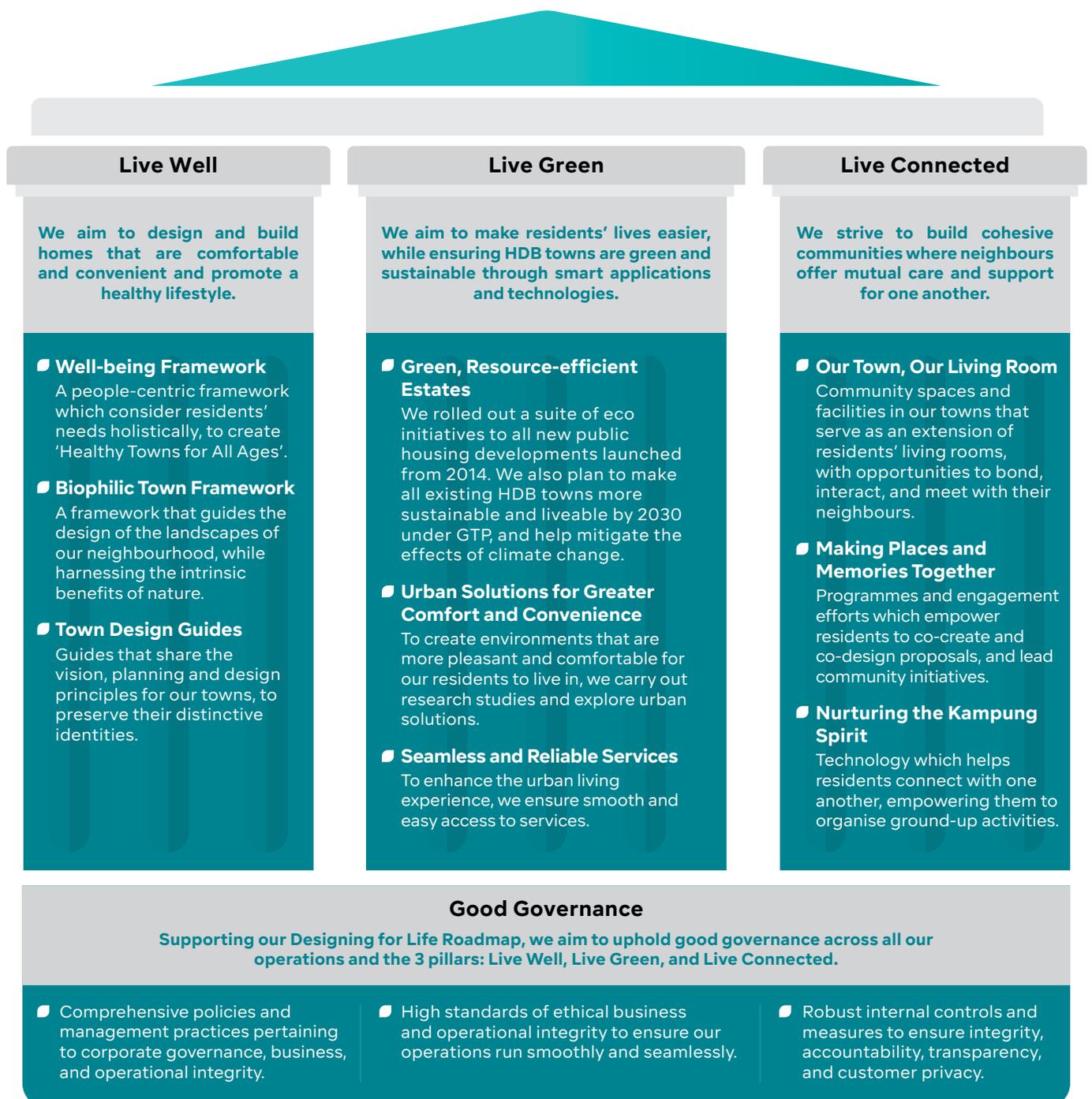
Our Sustainability Approach

GRI Disclosures 2-23, 2-24

At HDB, we are committed to building sustainable homes and towns that keep pace with Singaporeans’ needs. Our Designing for Life roadmap places residents’ holistic well-being at the centre of our work, to address key trends impacting the future of HDB living, which include climate change, an ageing population, and evolving social aspirations. Its 3 pillars – Live Well, Live Green, and Live Connected – capture our holistic vision to designing a

better living environment, building homes with smart and sustainable features, and fostering closer communities for our residents.

Supporting the Designing for Life roadmap is HDB’s commitment to uphold good governance through comprehensive policies and robust internal controls and measures, which ensure smooth and seamless operations.



Materiality Assessment and HDB's Material Topics

GRI Disclosures 3-1, 3-2

We conducted an impact materiality assessment to help us identify the impacts of our business activities on people, the environment and the economy, as well as enhance our sustainability approach. This assessment, aligned with GRI 2021 standards, helped us prioritise relevant key material topics. The process included, per benchmarking findings, a prioritisation exercise and a validation workshop with HDB's CEO, senior leadership and management team and group functions to ensure thorough evaluation and alignment.

Environment

Energy

We track the energy consumed at the buildings and offices we own and manage, and are committed to ensuring these premises are energy-efficient.

We have also rolled out initiatives to reduce energy consumption in HDB estates.

Emissions

We currently track direct emissions from sources owned by HDB, as well as indirect emissions associated with the purchase of electricity to power HDB-managed facilities.

We have been working to reduce GHG emissions from our construction activities and HDB estates, partnering our stakeholders to implement effective solutions.

Waste Management

We actively manage operational waste from construction activities, as well as the waste generated by our residents, business activities, and supply chain, to minimise negative impacts on the community and environment.

Water Management

To reduce water consumption, we implement water conservation strategies in all our core and supporting business activities, and encourage our contractors to do the same.

We also roll out water conservation initiatives such as rainwater harvesting, to further reduce water consumption within HDB estates.

Biodiversity

Across our planning and design as well as construction stages, we conduct environmental studies for sensitive areas where required and take steps to minimise our impact on the local flora and fauna.

Additionally, we work closely with nature groups and stakeholders to strengthen the rigour of the studies and develop effective nature management plans.

Social

Sustainable Living

At HDB, we are dedicated to comprehensive town planning that promotes long-term sustainability. Our towns are designed to be well-connected with a variety of amenities, fostering social integration and community building. As our towns evolve, we continue to preserve and celebrate their unique character and history through thoughtful planning and design, as well as integrating heritage and identity into everyday spaces.

Health, Well-Being, and Safety of Our Residents

Our residents' health, well-being and safety remain a key focus for HDB, and this is embedded in the way we plan, build and upgrade our homes and towns.

Community Engagement and Impact

As Singapore's public housing authority, we aim to make a positive impact on the community through our home ownership and interim housing programmes. Our corporate social responsibility (CSR) initiatives support the disadvantaged and less fortunate, reinforcing our commitment to the community.

We seek to forge vibrant communities through our community engagement efforts, including co-creating community spaces with residents.

Service Quality

We strive to provide a pleasant and seamless experience for all our customers, and to give the public greater confidence and trust in their transactions with us.

Occupational Health, Well-being, and Safety

We remain vigilant about any occupational health, well-being, and safety risks associated with our operations, ensuring the safety of our staff and contractors.

Employee Development

We are dedicated to the well-being of our workforce, offering full-time benefits and training opportunities for upskilling.

Governance

Corporate Governance

We are committed to maintaining the highest level of corporate governance in our operations, fostering trust and confidence among our suppliers, customers, and the Singapore government.

Sustainable Supply Chain Management

We strive to ensure a sustainable and transparent supply chain that minimises negative impacts on the environment, society, and economy.

Data Privacy and Management

Given the scale of our operations, we implement robust measures to mitigate data and cybersecurity risks, ensuring the protection and integrity of our systems.

Stakeholder Engagement

GRI Disclosures 2-25, 2-26, 2-29

We recognise the importance of working closely with our stakeholders to address their concerns and interests. Through regular engagements, we aim to gain insights on key issues that impact our various stakeholders and identify areas for improvement, to better serve their needs.

Table 2: GRI 2-29: Approach to stakeholder engagement

Who We Engage (Stakeholder Groups)	Channels of Engagement	Scope of Engagement
 <p>Customers (i.e. Residents)</p>	<ul style="list-style-type: none"> • Surveys • Interviews • Focus Group Discussions • Mainstream media and online platforms 	<ul style="list-style-type: none"> • Understand their primary needs, concerns, and aspirations
 <p>Industry and Business Partners</p>	<ul style="list-style-type: none"> • Dialogue sessions • Workshops 	<ul style="list-style-type: none"> • Facilitate cross-learning, mutual exchange of knowledge and practices
 <p>Government Bodies and Statutory Boards</p>	<ul style="list-style-type: none"> • Inter-agency meetings • Topic-specific taskforces • Dialogues and symposiums 	<ul style="list-style-type: none"> • Policy formulation • Planning for infrastructure • Research and collaboration opportunities
 <p>Financial Institutions</p>	<ul style="list-style-type: none"> • Surveys • Meetings • Seminars and conferences 	<ul style="list-style-type: none"> • Market updates (e.g. green bonds) • Investor outreach and collaboration opportunities
 <p>Employees</p>	<ul style="list-style-type: none"> • Staff conferences • Surveys • Cohesion activities 	<ul style="list-style-type: none"> • Understand their needs and concerns • Forge organisational identity and awareness • Team-building
 <p>Schools/Institutes of Higher Learning</p>	<ul style="list-style-type: none"> • Meetings • Learning journeys • Workshops • Talks and roadshows 	<ul style="list-style-type: none"> • Mutual exchange of knowledge and practices • Research and collaboration opportunities • Student engagement
 <p>Community Stakeholders (e.g. Nature and Heritage Groups)</p>	<ul style="list-style-type: none"> • Surveys • Site walks • Focus Group Discussions • Mainstream media and online platforms 	<ul style="list-style-type: none"> • Understand public sentiments • Solicit ideas and feedback

Pillar 1

Environment



With the impact of climate change, ensuring environmental sustainability within our built environment is crucial. As Singapore’s public housing authority, we recognise our role in promoting sustainable development in our operations and housing activities. In line with our commitment to caring for the environment, we implemented the HDB Environmental Policy and pledge to:

1. Comply with all applicable environmental laws, regulations, and other relevant requirements.
2. Contribute to environmental sustainability by:
 - Promoting conservation of energy and efficient use of resources in policy formation, 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.
3. Continually improve our environmental performance by setting and reviewing our objectives and targets.
4. Communicate with and educate all persons working for or on behalf of HDB, business partners, customers, and the public to achieve our environmental goals.

The HDB Eco-Office Committee leads our efforts to secure the Eco-Office Label, a Singapore Environment Council certification programme that promotes environmentally friendly practices in offices. The Eco-Office Committee aims to promote an eco-friendly culture among staff through HDB’s Environmental Policy, sharing tips on adopting sustainable lifestyles and encouraging staff to participate in public awareness initiatives like Earth Hour.

Our Sustainability Office and Eco-Office Committee manage and track our sustainability performance and the effectiveness of our measures, to keep our stakeholders informed of our efforts to manage energy consumption.

We have set the following targets and KPIs to track our progress in enhancing environmental sustainability both within and beyond our organisation:



1 Using the latest EMA’s electricity grid emission factor in 2022 of 0.4168kg CO₂/kWh



HDB Green Towns Programme

Making HDB Towns More Sustainable & Liveable

HDB
GREEN
TOWNS



Announced in 2020, the GTP is HDB's 10-year plan to make HDB towns more sustainable and liveable. This programme focuses on 5 key areas. The programme aims to reduce energy consumption in HDB towns by 15% (from 2020's levels) by 2030.

REDUCING ENERGY CONSUMPTION

To reduce energy consumption in HDB towns, we have implemented initiatives such as installing solar panels, smart LED lighting, and the Elevator Energy Regeneration System (EERS). Learn more about our initiatives in the section on [Energy](#).

COOLING HDB TOWNS

In response to rising temperatures due to climate change, we have introduced measures to cool our HDB towns, including the application of cool coating and intensification of greenery. Learn more about our initiatives in the section on [Sustainable Living](#).

RECYCLING RAINWATER

To conserve our scarce water resources, HDB harvests rainwater for subsequent use. Learn more about our water efficiency initiatives in the section on [Water](#).

PROMOTING GREEN COMMUTE

In support of global and local efforts to promote sustainable and low-carbon practices, HDB has been supporting the Land Transport Authority (LTA) in the nationwide deployment of Electric Vehicle (EV) charging points, as well as introduced initiatives such as Dual Bicycle Racks to promote cycling.

REDUCING WASTE

We strive to promote recycling efforts among HDB residents. Learn more about our initiatives in the section on [Waste](#).



Energy

GRI Disclosures 3-3, 302-1, 302-3, 302-4

WHY THIS MATTERS TO US

GRI 3-3

As a statutory board with a sizeable staff strength of over 5,000 employees, we recognise the importance of managing and optimising energy efficiency across HDB-managed premises. At the same time, as Singapore's largest housing developer, we also build energy-efficient and sustainable HDB towns and estates by leveraging innovative technologies and encouraging residents to live eco-friendly lifestyles.

HOW WE MANAGE THIS

GRI 3-3

Within HDB-managed Premises

HDB directly manages 36 commercial complexes, 1 industrial building and 2 recreational chalets, where we actively track electricity and energy consumption in these buildings. We design and retrofit our offices and commercial complexes to be green buildings that meet sustainability standards such as the Building and Construction Authority (BCA) Green Mark certification, with our buildings utilising clean and renewable energy while ensuring energy-efficient operations.

To push the boundaries of green buildings, we also strive for our commercial complexes to achieve Green Mark SLE certification, in line with Singapore Green Building Masterplan. SLE buildings feature the best-in-class energy efficiency, with the use of on-site and off-site renewable energy and other intelligent energy management strategies. In 2023, the Green Mark SLE criteria were successfully piloted in 2 new commercial complexes. HDB

is committed to ensuring 8 existing commercial complexes achieve SLE certification by 2030.

We also run initiatives both internally within HDB and externally across our value chain, to encourage our staff, contractors, and suppliers to adopt green practices and reduce energy consumption.

Public Housing Developments

HDB aims to build public housing developments that have good energy performance and are eco-friendly. For example, our developments are designed to optimise wind flow and minimise solar exposure, which reduces the need for air-conditioning and lowers energy consumption. We ensure that all new public housing developments meet BCA's Green Mark GoldPlus standard or higher.

For Build-to-Order (BTO) housing projects, we encourage contractors to implement sustainability initiatives to minimise the environmental impact of their activities. These include using energy-saving equipment on-site, such as energy-efficient lighting, air conditioning systems and green label appliances at site offices. We are also collaborating with industry partners to explore technologies such as Battery Energy Storage Systems for heavy machineries, which will reduce and eventually eliminate the need for diesel-powered generators at all sites.

Through such efforts, the majority of our BTO project contractors are certified under the Green and Gracious Builder Scheme, with many achieving "Star" and "Excellent" ratings. Introduced by BCA in 2009, this scheme enhances environmental consciousness and professionalism among builders, serving as a benchmark for their corporate social responsibility towards the environment and public during construction. HDB will continue to encourage all contractors to obtain and enhance their certifications.

We ensure that all our new housing developments meet BCA's Green Mark GoldPlus standard or higher.



OUR KEY INITIATIVES AND CASE STUDIES

Within HDB-managed Premises

We have taken significant steps to manage the energy and electricity consumption of buildings and complexes directly under HDB’s management. For example, we have replaced traditional light bulbs with energy-efficient LED bulbs, optimised air handling units for our air-conditioners, and improved chiller efficiency. Furthermore, we are progressively equipping these buildings with solar panels, harnessing renewable energy to power building services and reduce reliance on the electricity grid.

We also upgraded HDB’s data centre to improve cooling efficiency, with the long-term goal of migrating to a government cloud infrastructure. This transition will eliminate the need for an on-premises data centre, thereby reducing our overall energy consumption.

Existing Towns and Estates

Building More Sustainable and Liveable HDB Towns

Under the GTP, we aim to reduce energy consumption in HDB towns by 15% by 2030. To achieve this, we have introduced a suite of energy-efficient initiatives:

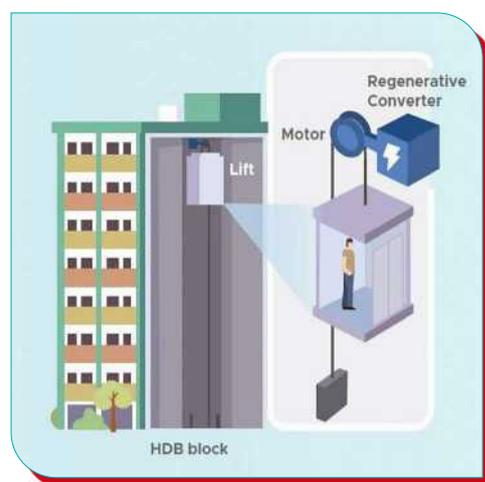
- We are implementing the Smart LED Lighting System (SLS) in common areas of HDB estates, such as corridors and stairways. Using smart motion sensors and advanced analytics, SLS gradually lights up the path ahead for users and dims after they pass. Compared to conventional LED lighting, SLS can reduce energy consumption by up to 60%. HDB supports Town Councils (TCs) in progressively installing SLS in existing estates, as part of TCs’ re-lamping programme.
- We have retrofitted selected HDB lifts with the Elevator Energy Regeneration System (EERS), which converts energy from lift motions and braking operations into electricity for lift services, such as lights and ventilation. HDB collaborates with TCs to expand EERS implementation.
- HDB has launched a pilot project to paint approximately 130 HDB blocks with cool coatings, which contains additives to reflect the sun’s heat and reduce surface heat absorption. This initiative aims to lower the ambient temperature by up to 2 degrees Celsius. This pilot will pave the way for wider use of cool coatings, helping to mitigate urban heat effects and improve the liveability of our towns.

Tracking Energy Consumption within HDB Estates

For new developments, we are progressively deploying sensors to measure the performance of our estate services such as the Pneumatic Waste Conveyance System (PWCS) and carpark ventilation systems. Data such as electricity consumption and CO₂ level are sent back to HDB’s Smart Hub, and analysed to further optimise operations and resource utilisation.

To enhance the operations of HDB-managed commercial premises, HDB developed the Integrated Estate Management System (i-EMS). The system renders a 3D digital twin of our commercial premises, allowing us to monitor the operating performance of chiller systems and cooling towers, as well as identify units due for inspection or maintenance. This helps HDB to optimise building services and better plan our resources.

The Integrated Estate Management System (i-EMS) helps HDB optimise building services and better plan our resources.



The Elevator Energy Regeneration System (EERS) converts energy from lift motions and braking operations into electricity for lift services.

OUR PERFORMANCE AND MOVING FORWARD (WITHIN HDB-MANAGED PREMISES)

In FY2023, our total energy consumption was 63,233,089kWh, marking an increase of 0.44% compared to FY2022. This change was largely attributed to the gradual reopening of the economy post-COVID and increase in activities and footfall

(within HDB-managed premises) in and after FY2022. In FY2023, our EUI was 84.75 kWh/m²/year, marking a decrease of 3.10% compared to our baseline. Moving forward, HDB remains committed to reducing our EUI² by 10% by 2030. We will also increase our reliance on renewable energy by progressively equipping more HDB commercial complexes with solar panels through the SolarNova Programme.

Table 3: GRI 302-1: Energy consumption within the organisation³

Total Energy Consumption	FY2021	FY2022	FY2023
Total Energy Consumption within the organisation (kWh)	59,574,426	62,956,132	63,233,089
Renewable sources	647,030	624,331	619,173
Non-renewable sources	58,927,396	62,331,801	62,613,916

Table 4: GRI 302-3: Energy Intensity

Energy Intensity Type	Baseline	FY2021	FY2022	FY2023
Total Electricity Intensity (kWh/m ² /year)	87.46	79.82	84.44	84.75 ▼ 3.1% from baseline

Table 5: Energy metrics

Indicators	Targets	FY2023 performance
Energy	Achieve a 10% reduction in EUI by 2030, compared to average of 2018-2020 levels	Achieved a 3.1% reduction in EUI, compared to average of 2018-2020 levels
Green buildings	Ensure 100% of buildings meet Green Mark standards by 2030	All 36 commercial complexes that have consumption data listed in the energy/water material topics have met the Green Mark standards

² Energy use is in terms of electricity used per unit area. The calculations exclude energy use from renewable sources in order to recognise the ongoing efforts to harness more renewable energy (e.g. implementation of solar PV systems), and provide a better representation of HDB's sustainability performance.

³ There is no fuel use in HDB and it does not sell any energy. Energy harvested (e.g. from solar panels installed at HDB-managed commercial complexes) is used to power our facilities.

Emissions

GRI Disclosures 3-3, 305-1, 305-2, 305-5

WHY THIS MATTERS TO US

GRI 3-3

Singapore's built environment contributes over 20% of the nation's carbon emissions and uses more than a third of its electricity.⁴ As a major player in this sector, HDB recognises our substantial impact on the environment, necessitating responsible management of operations. We are committed to managing our operations responsibly and leading efforts to decarbonise the built environment, in support of the Singapore Green Plan 2030 and GreenGov.SG.

Our initiatives focus on reducing GHG emissions from construction activities and HDB estates, where HDB works closely with stakeholders to implement solutions.

HOW WE MANAGE THIS

GRI 3-3

We actively track direct emissions from sources owned by HDB, as well as indirect emissions associated with the purchase of electricity to power HDB-managed facilities. We implement initiatives to manage our emissions, and track the progress of our reduction measures. We calculate potential emission reductions from our initiatives in HDB estates, using these calculations as the basis to set targets and prioritise further research and development on initiatives to reduce emissions.

We also prioritise using green materials with lower embodied carbon in our construction projects. In addition, we work with our contractors to decrease the reliance on diesel and fuel usage for machinery, and encourage the use of more sustainable construction solutions.

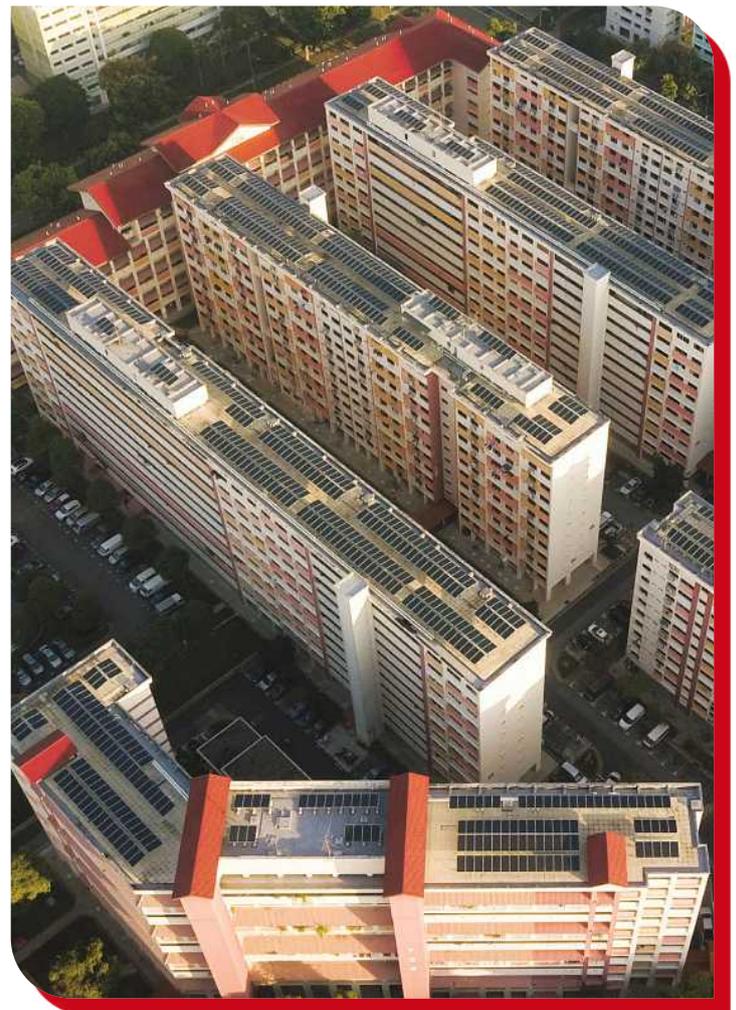
OUR KEY INITIATIVES AND CASE STUDIES

SolarNova Programme

HDB is dedicated to promoting greener towns by installing solar photovoltaic (PV) panels on our blocks. These solar PV panels power essential services such as lifts, lights, and water pumps in the day, with excess energy redirected to the electrical grid.

In 2014, HDB launched the SolarNova Programme together with the Economic Development Board (EDB). The Whole-of-Government effort promotes and aggregates demand for solar PV across government agencies to achieve economies of scale and drive the growth of Singapore's solar industry. 8 tenders have been awarded, totalling approximately 455 MWp in capacity, and we are on track to meet our solar target of 540 MWp by 2030. To date, HDB is the largest driver for the installation of solar PV systems in Singapore.

Under the latest SolarNova tender, we pilot advanced technology to prolong the lifespan of solar panels on HDB blocks. This patented technology uses intense light to re-energise solar cells and extend the lifespan of each solar panel by 4 to 5 years. This technology mitigates the natural degradation of solar panels, which typically causes solar panels to generate around 15% less power towards the end of their 25 to 30 year lifespan.



To date, HDB is the largest driver for the installation of solar PV systems in Singapore. (Photo Credit: Sembcorp Industries Ltd)

⁴ Source: [Singapore Green Building Masterplan: Build Our Green Future Together](#).

Green Construction Materials

Recognising the high carbon footprint of building construction, HDB prioritises the adoption of green materials to minimise embedded emissions. With concrete being the most used construction material, we collaborate with industry players to implement green concrete solutions suitable for local use. For example, instead of Portland Cement, we will progressively introduce Ground Granulated Blast-furnace Slag (GGBS) as a substitute due to its lower embodied carbon.

To reduce our reliance on sand, we encourage the use of Recycled Concrete Aggregates (RCA) within allowable limits. As RCA is produced by crushing waste concrete, it is more environmentally friendly, requiring less energy to produce and doing away with the need for mining.

To ensure the use of materials with lower embodied carbon, we have developed a Carbon Calculator⁵ to track the carbon footprint of common construction materials and fittings listed in HDB’s Material Listing, helping us exclude high-carbon materials from future projects.



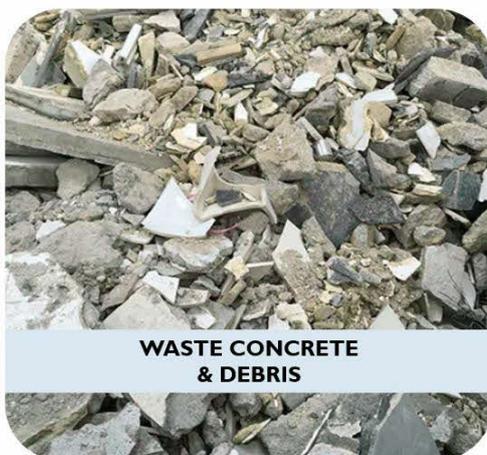
GREEN FINANCING FOR SUSTAINABLE DEVELOPMENT

In 2022, HDB launched the Green Finance Framework to facilitate green finance transactions, including green bonds and green loans, to finance the development of Eligible Green Projects. Specifically, new residential and non-residential developments which are planned to achieve BCA’s Green Mark certification of GoldPlus or higher. This framework, reviewed by Ernst & Young LLP, is developed in accordance with the following principles and standards:

- Green Bond Principles (2021) by the International Capital Market Association
- Green Bond Standards (2018) by the ASEAN Capital Markets Forum
- Green Loan Principles (2021) by the Loan Market Association, Asia Pacific Loan Market Association and Loan Syndications & Trading Association

As at 31 March 2024, HDB has 5 outstanding green bonds totalling \$4.84 billion and the bond proceeds have been fully allocated to the Eligible Green Projects on a portfolio basis. For more details, visit [HDB Green Bonds](#).

HDB adopts green materials like Recycled Concrete Aggregates (RCA) to minimise embedded emissions.



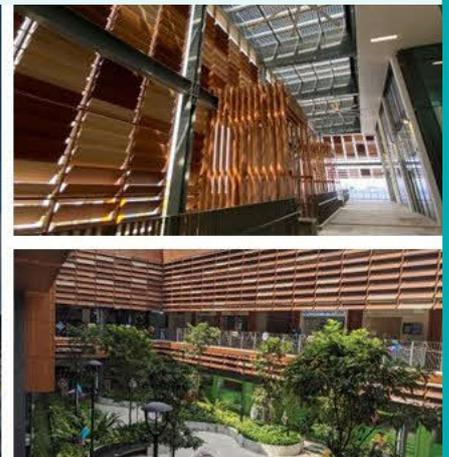
⁵ In line with GreenGov.SG, GHG emissions calculated are measured in carbon dioxide equivalent in tonnes (tCO₂e).



NORTHSHORE PLAZA: HDB'S FIRST SEAFRONT NEW GENERATION NEIGHBOURHOOD CENTRE

Opened in July 2022, Northshore Plaza in Punggol's Northshore District is HDB's first eco-friendly neighbourhood centre. The plaza features an open-concept design for maximum ventilation, skylights for natural light, and solar panels for clean energy.

The neighbourhood centre incorporates smart technologies such as smart fans, smart lighting, and a smart parking system to ensure green operations and maintenance. Through these initiatives, Northshore Plaza has earned the Green Mark Platinum certification, and serves as a model for future HDB neighbourhood centres, combining vibrant commercial offerings and social amenities with minimal environmental impact.



Northshore Plaza, HDB's first eco-friendly neighbourhood centre, features an open-concept design along with smart technologies and lush greenery.

OUR PERFORMANCE AND MOVING FORWARD⁶ (WITHIN HDB-MANAGED PREMISES)

In FY2023, HDB saw a 5.25% increase in our Scope 1 and 2 emissions from the previous year, mainly due to the gradual reopening of the economy post-COVID and increase in activities and footfall in and after FY2022. As a property developer, the bulk of our emissions stem from Scope 2 emissions, with Scope 1 emissions primarily involving limited refrigerant emissions.

We understand the importance of tracking emissions generated as part of our value chain, such as emissions arising from capital goods used in construction. Moving forward, we intend to track and disclose Scope 3 emissions in future reports with a focus on emissions from our contractors' activities.

Table 6: GRI 305-1: Direct GHG emissions, GRI 305-2: Energy indirect GHG emissions

GHG Emissions (tCO ₂ e)	FY2021	FY2022	FY2023
Total Scope 1 + 2 emissions	24,072,212	25,980,058	27,343,811 ▲ 5.25% from previous year
Scope 1⁷ (Direct Emissions)	N/A	N/A	539.25
Scope 2⁸ (Indirect Emissions from Electricity)	24,072,212	25,980,058	27,343,272

⁶ In line with GreenGov.SG, GHG emissions calculated and reported within this report are measured in carbon dioxide equivalent in tonnes (tCO₂e). Additionally, we have set our organisational boundary under the GHG Protocol's 'Operational Control' approach. Under this approach, a reporting entity has control over an operation if the former or one of its subsidiaries has full authority to introduce and implement operating policies.

⁷ Scope 1 emissions include HDB's refrigerant gas top-up, using emission factors from the Intergovernmental Panel on Climate Change.

⁸ Scope 2 emissions are indirect emissions that result from the generation of purchased or acquired electricity by HDB. Emissions factors used are taken from Singapore Energy Statistics published by the Energy Market Authority in Singapore.

Waste Management

GRI Disclosures 3-3, 306-1 to 306-5

WHY THIS MATTERS TO US

GRI 3-3

As a property developer, it is crucial for us to actively manage operational waste from construction activities. We also implement measures to encourage recycling and minimise waste generated in HDB-managed premises and HDB estates.

HOW WE MANAGE THIS

GRI 3-3

Within HDB-managed Premises

HDB implements environmentally friendly business practices, such as removing single-use bottles from meeting rooms and transitioning towards digital submissions and payments to reduce paper waste. Our Eco-Office Committee also shares eco-living tips and encourages staff participation in recycling and waste management initiatives.

In our offices and commercial complexes, we provide recycling bins, and mandate the segregation of any waste generated. We also track the quantities of waste generated across various categories to improve our waste management practices. To ensure accountability and transparency in our efforts, we submit reports to governing bodies such as GreenGov.SG.

Public Housing Developments

HDB champions the use of prefabrication technology, which allows building components to be manufactured off-site, then delivered and assembled on-site. Today, up to 70% of a typical HDB block's concrete structure is constructed using the prefabrication method. Alongside the adoption of Design for Manufacturing and Assembly (DfMA), these methods boost productivity while minimising unnecessary reworks and material wastage.

For general construction waste, HDB requires our contractors to comply with the Environmental Public Health (General Waste Collection) Regulations, which outline processes for proper waste disposal at designated facilities or incineration plants. For any hazardous waste generated, we adhere to the Environmental Public Health Toxic Industrial Waste Regulations 1988, which governs the handling, transport, and disposal of toxic industrial wastes (TIW).

OUR KEY INITIATIVES AND CASE STUDIES

Public Housing Developments



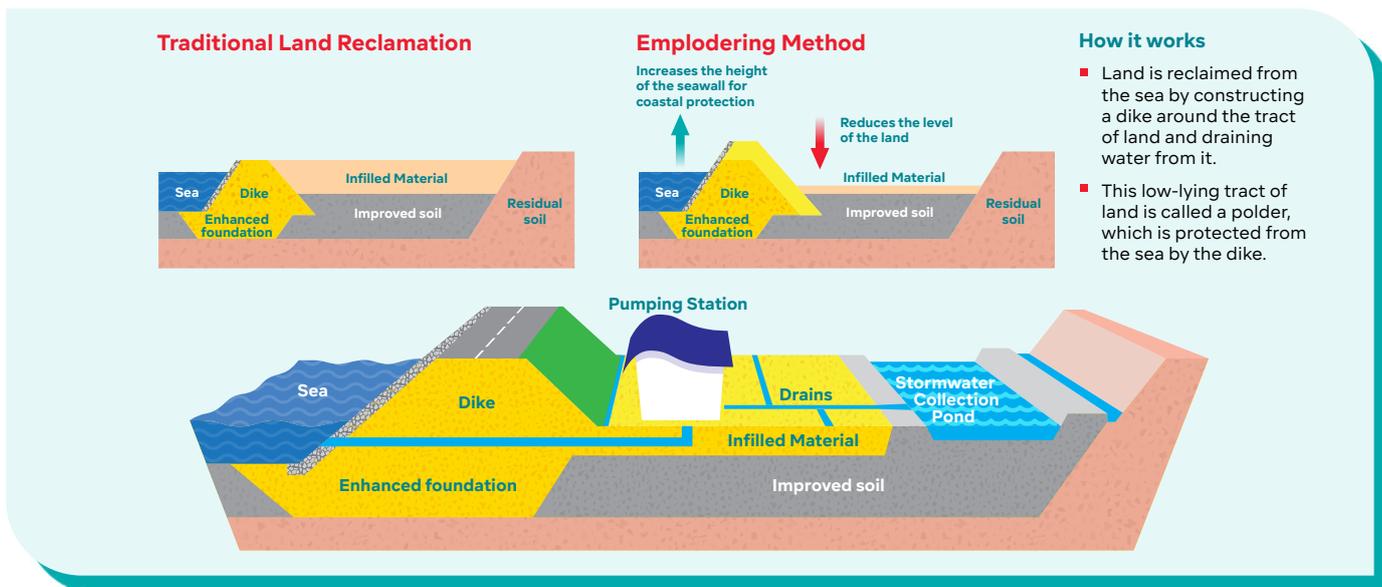
DESIGN FOR MANUFACTURING AND ASSEMBLY (DFMA)

To minimise waste generated through our construction activities, we adopt DfMA in all new HDB projects, where we standardise designs and adopt prefabrication techniques to streamline production and assembly. Since 2019, we have implemented Building Information Modelling (BIM) and Virtual Design and Construction (VDC) in our projects, enabling detailed reviews of data-rich 3D models and better coordination among consultants. These technologies improve productivity and reduce unnecessary work processes downstream. With precast technology, our construction components are modular and standardised, allowing repeated use of precast moulds, minimising wastage during casting.



By using precast and prefabrication technology, we can increase construction productivity and minimise material wastage.

By using empoldering technology, HDB can reclaim land with significantly less infill material.



Sustainable Practices in Land Reclamation

Land reclamation is important for coastal protection, in addition to land creation for strategic urban development. HDB pioneered the use of empoldering technology in Singapore, with a pilot polder development in Pulau Tekong that spans an area of 810 ha. This innovative approach allows HDB to reclaim land with significantly less infill material.

In addition, HDB actively seeks to recycle materials from the construction industry for land reclamation. Soil excavated from mainland construction sites are transported via barges, where it is repurposed as infilling material for the creation of new land.

Encouraging Recycling Amongst our Residents

HDB works closely with other agencies to encourage recycling amongst residents, such as by providing a dual refuse chute system in new developments since 2014. This system allows residents to deposit their recyclables as conveniently as disposing of their trash, while making it easier for cleaners to collect the recyclables to send for processing.

OUR PERFORMANCE AND MOVING FORWARD (WITHIN HDB-MANAGED PREMISES)

In FY2023, HDB saw a 0.87% reduction in our waste generated and 0.91% reduction in WDI compared to FY2022, primarily due to increased recycling rate and a ban on the use of disposables for dine-in customers at Food and Beverage establishments across HDB-managed commercial complexes. In addition, the Eco-Office Committee has taken steps to reduce the use of disposables, such as giving HDB staff reusable cutlery sets.

Moving forward, we aim to reduce our WDI by 30% from our baseline by 2030, by continuing to implement measures to increase recycling and reduce overall waste. This includes equipping all our commercial complexes with food digesters by 2026, which helps to sort and process food waste that would otherwise have been thrown away as general waste. This will reduce the amount of general waste that needs to be transported for waste collection.

Table 7: GRI 306-3: Waste generated, GRI 306-4: Waste diverted from disposal and GRI 306-5: Waste directed to disposal

	FY2021	FY2022	FY2023
Total Waste Generated (kg)	N/A	20,581,846	20,403,461
Waste Diverted from Disposal (kg)	N/A	244,967	249,264
Waste Directed to Disposal (kg)	N/A	20,336,879	20,154,197
	Baseline ⁹	FY2023	
WDI (kg/person/day)	0.241	0.239 ▼ 0.91% from baseline	

⁹ Baseline for waste disposal index is set at FY2022, aligned with GreenGov.SG

Water Management

GRI Disclosures 3-3, 303-1 to 303-3, 303-5

WHY THIS MATTERS TO US

GRI 3-3

Water being a precious resource for Singapore, HDB is committed to sound water management practices. We also implement water management initiatives in our towns.

HOW WE MANAGE THIS

GRI 3-3

Within HDB-managed Premises

Across all our premises, we implement water efficiency systems to reduce consumption, including upgrades to water-efficient toilets, installation of rainwater harvesting systems for irrigation and washing, and improvements to the Cycle of Concentration (CoC) for cooling towers in commercial complexes using chilled water systems. For premises with an annual water consumption of over 60,000 cubic metres, we adopt a Water Efficiency Management Plan to track water usage and identify measures to reduce consumption.

Public Housing Developments

To mitigate the potential health and environmental impacts of water discharge from construction activities, we enforce strict adherence to environmental laws.¹⁰ We encourage BTO project contractors to use water-saving and recycling equipment on-site, as well as utilise recycled water for tasks like flushing toilets and washing vehicles.

OUR KEY INITIATIVES AND CASE STUDIES

Public Housing Developments

Improving Water Management in BTO Projects

HDB introduced smart technologies within new BTO developments to improve water management, where feasible.

- To conserve water, the UrbanWater Harvesting System (UWHS) was installed in suitable BTO projects since August 2018. The UWHS collects and stores rainwater in an underground tank, which is treated before being reused for washing common areas and watering plants. This reduces potable water use by over 50%. UWHS also detains stormwater, before releasing it slowly to public drains, which mitigates flood risks and avoids costly drainage upgrades.

For existing estates, HDB is piloting UWHS in Yishun and Jurong, and will consider wider scale implementation where feasible.



The UrbanWater Harvesting System (UWHS) collects and stores rainwater, which is then treated before being reused.

¹⁰ Environmental Protection and Management Act (Part V – Water Pollution Control) 2008, Environmental Protection and Management (Trade Effluent) Regulations 2008, Sewerage and Drainage Act 2001, and Sewerage and Drainage (Surface Water Drainage) Regulations 2007.

- HDB’s smart irrigation system uses moisture sensors and considers various factors that may affect the amount of water retained in the soil (such as rainfall and exposure to sunlight) to optimise watering schedules and usage. The system provides a water-efficient and less labour-intensive approach to maintain greenery and landscapes.

OUR PERFORMANCE AND MOVING FORWARD (WITHIN HDB-MANAGED PREMISES)

In FY2023, we have consumed a total of 888,296 m³ of water, marking an increase of 3.47% compared to FY2022. Our WEI is 15.23% higher than our baseline, primarily due to the opening of new commercial complexes, along with increased footfall following the gradual reopening of the economy post-COVID. Moving forward, HDB is committed to reducing our WEI¹¹ by 10% by 2030.

Table 8: GRI 303-5: Water consumption¹²

	FY2021	FY2022	FY2023
Total Water Consumption (cubic metre)	778,608	858,546	888,296
	Baseline¹³	FY2021	FY2022
WEI (litres/person/day)	9.13	9.22	10.17
			10.52 ▲ 15.23% from baseline

¹¹ Water use in terms of water used per person per day.

¹² The amount of water consumed is the same as the amount of water withdrawn. The source of water withdrawn mainly stems from potable water. NEWater has been supplied for a few sites as well. The water consumption data provided combines the consumption amount for both potable water and NEWater.

¹³ For water efficiency index, the average of FY2018-FY2020 was adopted as baseline, aligned with GreenGov.SG



Biodiversity

GRI Disclosures 3-3, 101-1, 101-2, 101-4 to 101-8

WHY THIS MATTERS TO US

GRI 3-3

We adopt a holistic, evidence-based, and methodological approach to balance developmental needs with environmental goals in Singapore. This ensures that our projects are undertaken with great care, and that Singaporeans' housing needs, both present and future, are met.

HOW WE MANAGE THIS

GRI 3-3

To balance the need for housing with nature conservation, we continually explore viable alternative development options. These include optimising housing densities and redeveloping urban brownfield sites to keep more forested areas green for as long as possible.

When developing greenfield sites, we conduct detailed studies including an Environmental Impact Assessment (EIA) and Environmental Management and Monitoring Plan (EMMP), to better understand the site context

(e.g. topography, flora, fauna, and hydrology) and assess environmental impacts. These insights guide development plans and inform mitigating measures to manage and minimise the potential impact on the environment. Possible measures include retaining high-value habitats, creating ecological corridors for connectivity, and integrating natural elements within developments where possible.

We also engage community stakeholders such as nature groups (e.g. Nature Society Singapore), and invite public feedback on published EIA reports. The findings from the studies and feedback received through these engagements are carefully considered, together with government agencies such as the Urban Redevelopment Authority (URA) and National Parks Board (NParks), before proceeding with any project.

Through continuous planning, research, and innovation, we also develop ways to integrate greenery into our estates. Our Biophilic Town Framework, piloted at Punggol Northshore district in 2015, outlines the strategies to strengthen the connection between the built environment and nature. Centred around 5 key elements – soil, flora and fauna, outdoor comfort, water and people – the framework enables residents to better connect with nature and enjoy its intrinsic benefits. The framework was subsequently refined and is now applied to all new housing projects launched from July 2018.



PUNGGOL NORTHSHORE DISTRICT – BIOPHILIC LANDSCAPE PLANNING

The HDB Biophilic Town Framework was piloted at the Punggol Northshore district in 2015, to further integrate our public housing developments with nature. Key elements of neighbourhood landscape focus on maintaining ecological balance, enhancing outdoor comfort, and achieving good air and water quality.

Before work at the site commenced, HDB carried out site analyses and field surveys to study the existing natural habitats. Green spaces were then strategically

planned and placed to enhance the ecological connectivity between the existing habitats in the district and the entire Punggol town. New habitats such as dragonfly ponds, bird sanctuaries and butterfly gardens were also introduced to support diverse species of fauna.

Information panels and educational boards were installed at selected locations, to increase residents' environmental awareness and appreciation of nature.

At Punggol Northshore, we strategically planned green spaces like landscaped decks and dragonfly ponds.



OUR KEY INITIATIVES AND CASE STUDIES

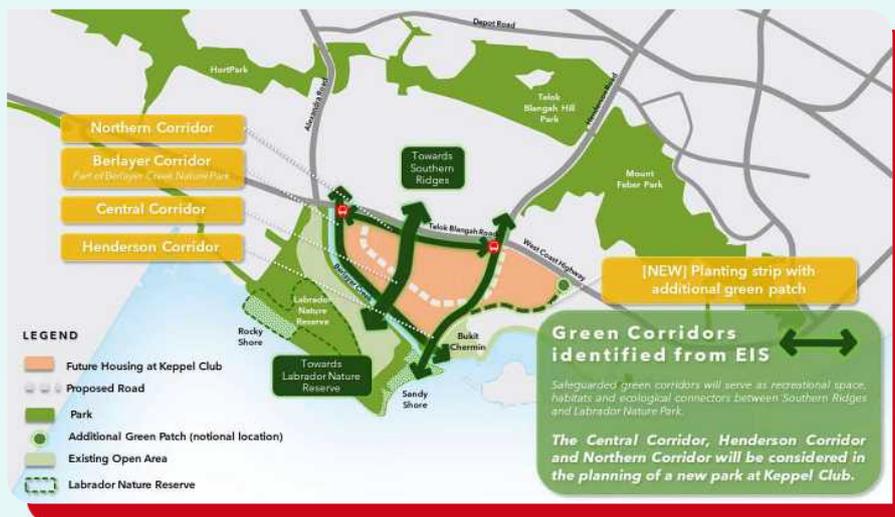


FORMER KEPPEL CLUB SITE – EIA AND EMMP

As part of the transformation of the Greater Southern Waterfront, the former Keppel Club site, which has been zoned for residential use since 2014, will be redeveloped for housing. Given the site's proximity to nature areas such as the Southern Ridges and Labrador Nature Reserve, HDB and URA engaged an external consultant in November 2020 to carry out an EIA to sensitively guide development plans in the area.

The study identified more than 390 plant species and 380 animal species at the site, mostly located within 3 areas of high conservation value – Bukit Chermin, the mangroves along Berlayer Creek, and the marine area. Taking into consideration the findings from the EIA as well as feedback received from Nature Groups and the public, we have safeguarded close to 10 hectares of green spaces within the site, which will form ecological corridors that maintain and enhance ecological connectivity. These green spaces will serve as conducive habitats and ecological corridors between the Southern Ridges and Labrador Nature Reserve, while doubling up as recreational areas for residents.

HDB will carry out mitigation measures to minimise the potential impact on flora and fauna in the surrounding areas. For example, we will phase clearance activities to avoid the bird breeding season, and conduct shepherding of wildlife before site clearance. Tree protection zones will also be set up to protect large trees. In developing the estate, we will put in place an EMMP to ensure the effectiveness of the mitigation measures, and closely monitor and manage any potential environmental impact arising from the infrastructure and building works. This includes an environmental incident and response protocol, methodologies for on-site monitoring of noise, air, and water quality, as well as a biodiversity awareness and training plan for all relevant personnel.



We have safeguarded close to 10 hectares of green spaces within the former Keppel Club site, which will form ecological corridors.

OUR PERFORMANCE AND MOVING FORWARD (WITHIN HDB-MANAGED PREMISES)

Moving forward, HDB will continue to assess our sites to minimise environmental impacts, and implement measures to enhance the overall greenery and biodiversity in our housing estates.

We also aim to assess the effectiveness of design strategies under the Biophilic Town Framework by deploying sensors in Punggol Northshore. Based on the environmental and usage data collected, we aim to quantify the effectiveness of our efforts by developing a Biophilic Index.

We engage stakeholders such as the Nature Society Singapore (NSS) in developing our projects.



Pillar 2

Social



Driving sustainable development within HDB and across Singapore involves engaging diverse stakeholders, including residents and our staff. Our focus areas include maintaining the integrity of our buildings and estates, promoting the well-being of residents and staff, and supporting vulnerable community members.

To measure our progress in social sustainability, we have set specific targets and KPIs:

KEY PERFORMANCE AND ACHIEVEMENTS IN FY2023



Launched about
22,500
BTO flats



Issued
19,345
keys to home owners



90%
home ownership rates among HDB dwellers



3,835
interim/rental housing units provided



236
projects (cumulative) supported under Lively Places Fund



\$1.2 million
(cumulative) disbursed under Lively Places Fund



3,434
active volunteers within the Friends of Our Heartlands networks



96.51%
occupancy rate of commercial properties in HDB managed commercial complexes
Target: >95% occupancy rate



5.5
(average) training days per staff



100%
of staff received training on anti-corruption policies and practices



0
staff work-related fatality
Target: 0 fatalities



100%
of operations have implemented local community engagement, impact assessments, understanding communities' needs



HOUSING A NATION: THE HDB JOURNEY

Providing affordable housing is our founding mission, as well as a key tenet of sustainable development under the United Nations' Sustainable Development Goals. HDB was established in 1960 to tackle a severe housing shortage in a rapidly growing nation. For more than 60 years, HDB has built quality homes for Singaporeans and fostered vibrant communities in HDB towns.

Early Housing

In its early years, HDB focused on providing basic, functional low-cost housing quickly. These flats had modern amenities like piped water, electricity, gas, and sanitation. Within 5 years, HDB built nearly 55,000 flats, significantly alleviating Singapore's housing crisis by the end of the 1960s.

Promoting Home Ownership

Central to HDB's mission is our home ownership programme. Under HDB's Home Ownership for the People Scheme, HDB flats are sold to citizens on a 99-year lease, promoting rootedness and a sense of belonging. This in turn contributes to the overall economic, social, and political stability of Singapore.

HDB towns, also known as the 'heartlands', are home to a community of diverse residents. Policies such as the Ethnic Integration Policy (EIP) ensure racial harmony and preserve Singapore's multicultural identity.

Housing for All

HDB's affordable housing initiatives cater to diverse groups, including singles, seniors, vulnerable families, as well as families in transitional housing. Income ceilings to buy a new flat from HDB, receive grants, and take up an HDB housing loan are also regularly reviewed to maintain accessibility.

For families who cannot afford to buy a flat, HDB helps them through its Public Rental Scheme which offers monthly rents as low as \$26 for a 1-room unit. We also provide personalised support for rental tenants who are ready to progress to homeownership.

Comprehensive Town Planning

Once the housing crisis was resolved, HDB shifted its focus to enhancing the quality of life for residents through comprehensive town planning. Towns were planned to be self-sufficient, where people could live, work, play, and learn with essential amenities such as commercial facilities and schools within easy reach.

Affordable Housing

HDB remains committed to keeping new flats affordable, especially for first-time buyers. Flats are priced below market rates, and buyers also enjoy substantial subsidies such as housing grants. Since 2020, HDB has disbursed over \$4.5 billion in housing grants.

Close to 80% of new and resale flat buyers in 2023 could service their HDB loan instalments with CPF contributions, with little or no monthly cash payment. This has contributed to the high home ownership rate of 90% among all HDB dwellers in Singapore.

Evolving with the Times

Today, HDB continues to meet the changing aspirations and lifestyle needs of Singaporeans, building sustainable homes that are relevant now and in the future.

Sustainable Living

WHY THIS MATTERS TO US

GRI 3-3

Over the past 6 decades, HDB has provided homes for generations of Singaporeans. We adopt comprehensive town planning principles that promote sustainability and the well-being of residents across all ages. Our towns are well-connected with a variety of amenities and communal spaces, to foster social integration and community building.

As our towns continue to evolve, we have also taken steps to strengthen their unique identity and preserve their distinctive local flavour.

HOW WE MANAGE THIS

GRI 3-3

Our Planning Principles

In planning our towns, we adhere to key principles in our planning and town development:

- **Planning for Self-Sufficiency:** Our towns are designed as complete living environments where people can live, work, play and learn. This ensures residents can meet their daily needs within their towns, without needing to commute to neighbouring areas or the city.
- **Hierarchy of Facilities:** Facilities at the precinct, neighbourhood, and town levels complement one another, offering residents easy access to a variety of amenities, from fitness corners and neighbourhood shops, to malls, sports complexes and libraries.
- **Checkerboard Concept:** Low-rise developments like schools, parks and community buildings are interspersed with high-rise residential buildings. This provides visual and spatial relief throughout the town, creating a more pleasant living environment.
- **Planning for Connectivity:** Towns are designed with comprehensive transport infrastructure including cycling and pedestrian networks. Each block has easy access to bus stops or MRT/ LRT stations, making travelling convenient within the town and to the rest of Singapore. Town centres typically serve as integrated hubs for public transportation, with MRT stations and bus interchanges.

Smart Towns for Better Living

Technology and innovation are key to our vision of building liveable, efficient, and sustainable towns. In 2011, HDB formulated a holistic and comprehensive Sustainable Development (SD) Framework to steer the development of HDB towns. The framework sets out 10 broad desired outcomes in the aspects of environmental, economic and social considerations. Our efforts to develop smart and sustainable homes were further augmented with the development of the Smart HDB Town Framework in 2014.

The Smart HDB Town Framework comprises 5 key dimensions:

- **Smart Planning:** We use computer simulations and data analytics to improve the way we plan our towns, and derive optimal and cost-effective solutions to achieve sustainability goals
- **Smart Environment:** We use sensors to capture real-time information on environmental factors such as temperature and humidity, and trigger solutions that can help maintain a pleasant environment for residents
- **Smart Estate:** We collect data to help optimise maintenance cycles, pre-empt problems, and understand usage patterns of common amenities such as lifts and lights, to improve estate services
- **Smart Living:** We design homes that can support smart home solutions, helping residents monitor and reduce their energy consumption
- **Smart Community:** We also partner programme collaborators to introduce community lifestyle apps, fostering stronger connections among residents through digital platforms

Punggol Northshore, HDB's first smart and sustainable district, served as a testbed for these smart initiatives. Since November 2021, HDB has extended these initiatives to all new BTO developments.

Strengthening Heritage and Identity

When developing new sites for housing, we consider existing heritage elements, which include buildings, structures, and community spaces with heritage value.

For sites with heritage significance, we have piloted detailed heritage studies. These studies provide a comprehensive evaluation of the heritage significance of the site, the potential impact of development, and proposed mitigating measures. We also engage heritage groups and other relevant stakeholders, considering their views before finalising the redevelopment plans.

Rejuvenating Towns and Estates

HDB constantly renews our towns through programmes such as the Neighbourhood Renewal Programme (NRP) and Remaking Our Heartland (ROH). For example, the ROH programme helps existing HDB towns to meet the changing needs of the community, while ensuring that our heartlands remain distinctive and endearing homes for Singaporeans. To guide our upgrading plans, we conduct surveys and focus group discussions with residents and stakeholders, to understand the improvements they hope to see in their town. Towns upgraded under ROH will see refreshed town and neighbourhood centres, as well as enhanced connectivity and green spaces. We also introduce heritage elements to preserve the towns' identities and celebrate their rich histories.

OUR KEY INITIATIVES AND CASE STUDIES

Planning and Design at Tengah

Tengah, our newest HDB town, is fully integrated with the natural environment, and incorporates smart and biophilic initiatives from the planning stage. Notably, Tengah is the first HDB town with a car-free Town Centre, designed to encourage green commuting through dedicated walking and cycling paths.

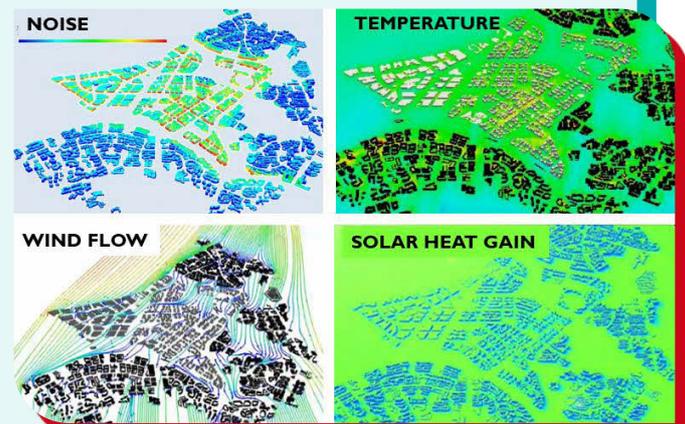
Homes in Tengah are designed with the residents' physical, mental, and social well-being in mind. For example, Parc Clover @ Tengah features facilities like a Sky Sports Park, running circuit, and sprint track to encourage active lifestyles. Beyond the BTO projects, Tengah's neighbourhood centres are designed as social and wellness hubs, offering a variety of community spaces and amenities. The neighbourhood centre at Parc Residences @ Tengah, for example, will feature an open plaza for community events, a therapeutic garden, playgrounds, and exercise areas.



INTEGRATED ENVIRONMENTAL MODELLER – DESIGNING NEW TOWNS FOR COMFORT

HDB and A*STAR developed an advanced modelling tool, the Integrated Environmental Modeller (IEM), to plan newer estates such as Tengah. The IEM uses high-resolution 3D models to simulate the interaction of environmental factors such as wind flow and solar irradiance on the urban landscape. This identifies ideal spots for solar panels, and optimises the design and placement of HDB blocks and communal spaces to create a more comfortable living environment for residents.

HDB and A*STAR received the President's Technology Award for the development of the tool in 2019. Beyond Tengah, IEM has been used to design BTO projects in estates such as Punggol Northshore and Bayshore.



Using the Integrated Environmental Modeller (IEM), we carry out environmental simulations to optimise building layouts and communal spaces.



The Sky Sports Park at Parc Clover @ Tengah boasts features to encourage active lifestyles, such as a full 300m running track and a range of exercise amenities.

HDB Town Design Guides (TDG)

HDB introduced TDGs in 2018 to enhance the distinctiveness of each HDB town and strengthen its identity. Each TDG offers a comprehensive overview of the town’s history, planning vision, and design intent, and guides new developments in the town, as well as the rejuvenation of existing areas under various programmes, which are carried out by different government agencies and Town Councils (TCs). HDB has completed 13 TDGs so far, with plans to develop guides for all towns.

Incorporating Heritage into Our Developments

We actively seek opportunities to celebrate the unique heritage of each site. In recent years, we have retained several physical heritage buildings and repurposed them to serve the community in new capacities, while safeguarding the architectural character of the building and commemorating its historical significance. This approach breathes new life into these buildings whilst retaining their historical value.

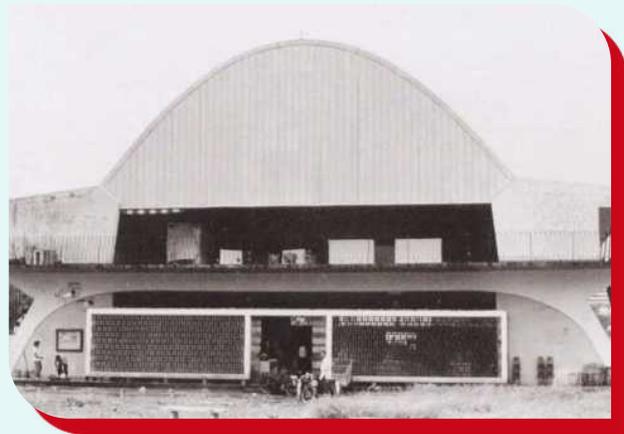


BLK 38 MARGARET DRIVE

The former 2-storey Commonwealth Avenue market is now a conserved heritage building and has been revitalised into a vibrant lifestyle centre. Today, Margaret Market features commercial shops, communal spaces, and health-related services for residents. Mosaic tiles and a mural depicting old Queenstown evoke the area’s rich heritage and nostalgic charm.

- The former Commonwealth Avenue market (right) was conserved and transformed into a vibrant lifestyle centre (bottom).

(Photo Credits: National Archives of Singapore (right), and Margaret Market (bottom))





THEMATIC PLAYGROUND IN KEAT HONG QUAD

Keat Hong Quad honours Choa Chu Kang's military history with army-themed playgrounds featuring watchtowers, military trucks, and tanks. This design offers children a playful way to learn about Singapore's past while evoking a sense of nostalgia in older residents, fostering community connections across generations.



Army-themed playgrounds at Keat Hong Quad honour Choa Chu Kang's military history.

OUR PERFORMANCE AND MOVING FORWARD

HDB will continue to improve the way we plan and manage our towns, to keep pace with changing needs and aspirations of Singaporeans.

Given Singapore's ageing population, HDB is also focused on making our estates more senior-friendly. Aligning with the national Age Well SG programme, these efforts will support seniors to age well in their homes and communities. We will progressively roll out senior-centric upgrading works to over 20 older precincts with a higher density of seniors. These improvements include barrier-free access along routes frequented by seniors for improved mobility, prominent signage and distinctive

wayfinding features to aid seniors navigate their neighbourhoods independently, as well as fitness trails and therapeutic gardens to promote health and wellness.

As we finalise the remaining TDGs to guide the planning and design of existing towns, we will continue to conduct heritage studies and work with stakeholders to preserve the distinctive identities of our towns.

To ensure our towns are well-maintained and liveable, HDB invests in R&D. This includes developing a Smart Facilities Management platform, which aims to provide TCs with real-time monitoring and workflow management, enhancing the overall efficiency and responsiveness of estate management.

Health, Well-being, and Safety of Our Residents

GRI Disclosures 3-3, 416-1, 416-2

WHY THIS MATTERS TO US

GRI 3-3

HDB develops public housing with the health, well-being, and safety of residents in mind. This commitment begins from the planning and construction of our developments, and extends to the upgrading and rejuvenating of homes and towns to keep pace with residents' evolving needs.

HOW WE MANAGE THIS

GRI 3-3



Our people-centric well-being framework guides the planning and design of our towns.

HDB adopts an overarching well-being framework in the planning and design of our towns. This framework takes a people-centric approach, considering residents' needs holistically to improve well-being in 3 key areas:

- **Physical Well-Being:** Providing a safer and more comfortable environment for our residents, to lead a healthier and more active lifestyle
- **Mental Well-Being:** Incorporating greenery and recreational facilities in our towns to promote positive mental well-being, and stimulate the mind
- **Social Well-Being:** Planning towns to provide opportunities for communities to thrive, and strong social ties to be formed

HDB actively seeks feedback from residents to refine our flat designs and provisions. Post Occupancy Surveys are conducted 1 to 2 years after residents move into new developments. Assessing satisfaction with design, amenities, construction quality, and overall living conditions, these surveys provide valuable insights for future improvements.

Once every 5 years, HDB conducts Sample Household Surveys (SHS) to gather feedback on residents' public housing experiences and evolving needs. Our 2023/24 survey includes new focus areas such as single occupiers' housing aspirations and the impact of residents' lifestyles on well-being. From October 2023 to April 2024, 8,600 households and single occupiers across HDB towns have participated in the SHS.

OUR KEY INITIATIVES AND CASE STUDIES

Building Quality Housing

Safety and quality standards are key considerations at every stage of our development. During the planning stage, external experts and stakeholders, including architects and urban planners, are engaged to ensure designs are comprehensive and responsive to community needs. Each stage of the construction process is monitored closely and checked for compliance with approved drawings, specifications, and work methods. This includes the setup of supervision systems at the beginning of the project, tight control of the usage of building materials and equipment, as well as development of virtual mock-ups for early identification and rectification of potential design, safety, and maintenance issues. When completed, all flats will have to pass a handover inspection by HDB, with visual checks and functional tests conducted. The flats will also undergo a Temporary Occupancy Permit (TOP) inspection by BCA, where technical authorities will check for regulatory compliance and adherence to building codes, with comprehensive checks that includes safety provisions and design for accessibility.

HDB provides all new flat owners with a 1-year Defects Liability Period (DLP) commencing from the key issuance date, during which imperfections or defects can be reported to the building contractor for rectification. To facilitate this process, a Building Service Centre (BSC) is set up in new precincts to attend to feedback from residents promptly. Any rectification works are inspected and certified by HDB's supervising consultant, before a joint inspection with the owners is arranged to acknowledge the completion of the works. Feedback is monitored closely to ensure defects are rectified in a timely and acceptable manner.

To further assess the quality of HDB's building projects, additional measures like the Construction Quality Assessment System (CONQUAS), the national standard for evaluating construction workmanship, are employed.

Upgrading Homes and Neighbourhoods

HDB's Home Improvement Programme (HIP) addresses common maintenance issues in ageing flats, such as spalling concrete and ceiling leaks. Essential works include repairs, installation of new clothes drying racks and electrical load upgrades. Optional improvements, such as bathroom upgrading works, new entrance doors, grille gates and refuse chute hoppers, are also offered.

To further support seniors, the Enhancement for Active Seniors (EASE) programme provides slip-resistant bathroom tiles, grab bars, and ramps for wheelchair access. HIP and EASE improvements are either fully or heavily subsidised, ensuring residents can remain safe and comfortable in their homes.

Beyond the home, HDB enhances block and precinct amenities under the NRP. The programme is fully funded by the Government, and includes upgrading works to common areas such as residents' corners, seating areas at void decks, drop-off porches, covered linkways and playgrounds. By improving communal spaces, we aim to improve residents' quality of life and enhance overall well-being.

OUR PERFORMANCE AND MOVING FORWARD

In FY2023, we recorded 0 cases of non-compliance with health and safety regulations. All HDB residential developments and commercial properties are assessed for improvement with regard to any health and safety impacts.

Moving forward, we are dedicated to maintaining this standard and will continue implementing programmes to safeguard the health, safety and well-being of our residents.



The Home Improvement Programme (HIP) addresses common maintenance issues in ageing flats, while the Enhancement for Active Seniors (EASE) programme subsidises items that improve mobility and safety within the flat.

Community Engagement and Impact

GRI Disclosures 3-3, 413-1, 413-2

WHY THIS MATTERS TO US

GRI 3-3

Beyond building homes and towns, HDB is dedicated to building vibrant and close-knit communities through our community engagement activities, as well as uplift and give back to the communities around us.

HOW WE MANAGE THIS

GRI 3-3

Through programmes like the Lively Places Programme, HDB empowers residents to form interest groups and lead community projects by offering skills training and funding support, helping to bring communities together.

As part of our corporate social responsibility efforts, HDB also supports underprivileged residents through our Bringing Cheer events, where we organise grocery distributions through home visits with HDB's Staff Union. Additionally, HDB contributes to the Community Chest's Social Help & Assistance Raised by Employees (SHARE) programme, with more than 80% of HDB staff making monthly donations that benefit over 100 social service agencies and charities.

Beyond engaging residents, HDB supports local retailers to ensure they remain relevant and competitive. We also actively contribute to the growth of Singapore's R&D and innovation sectors by offering grants and research opportunities to local Institutes of Higher Learning (IHLs).

OUR KEY INITIATIVES AND CASE STUDIES

GRI 413

Public Education and Resident-led Initiatives and Activities

To foster harmonious living, we implement public education initiatives to encourage responsible homeownership and neighbourliness. We also empower the community by providing funding and training for resident-led initiatives under the Lively Places

Programme. As of March 2024, nearly \$1.2 million has been committed to support 236 projects. These include pet parks, community cafes, allotment gardens, community libraries, and workshop spaces which were implemented in common areas such as community living rooms, open greens, and carpark roof decks.

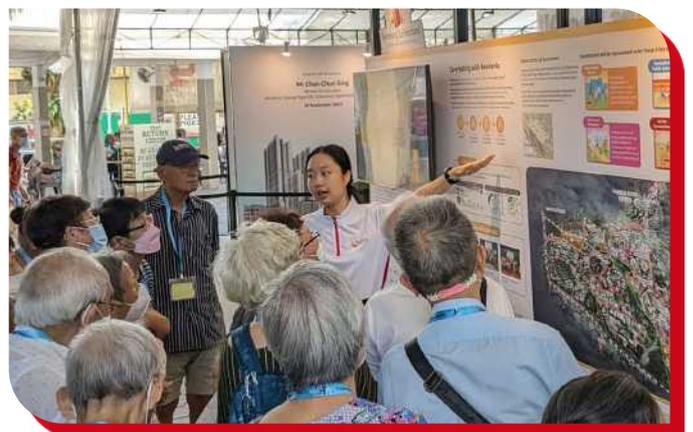
We support resident-led initiatives under the Lively Places Programme.



Friends of Our Heartlands (FOH)

The FOH network offers volunteering opportunities for Singaporeans to deepen their involvement in community-building, such as through cultivating neighbourliness and eco-friendly living, activating community spaces with vibrant activities, and facilitating discussions on local developments. In FY2023, over 3,400 volunteers contributed to creating a positive living experience in the heartlands.

The Friends of Our Heartlands (FOH) network provides volunteering opportunities in the heartlands.



Community Participatory Projects

HDB's Community Participatory Projects encourage residents to take ownership of their community spaces by involving them in the design and development of community spaces like playgrounds, parks, and social nodes. Residents provide feedback and suggestions to shape the design of improvement works in their neighbourhood, thus fostering a sense of pride in residents, and encouraging responsible usage and ownership of community spaces. As of March 2024, HDB has involved close to 8,000 residents in co-designing public spaces across HDB estates.

Schemes to Support and Nurture Local Retailers and Enterprises

Heartland shops and neighbourhood businesses are an integral part of daily living in Singapore. In 2021, HDB and EnterpriseSG embarked on the Heartland Shops Study to better understand ways to help heartland shops to innovate and transform, while retaining their unique culture and character. The study engaged over 2,800 stakeholders, including residents, business owners, workers, and merchants' associations. To ensure that heartland shops continue to meet the needs of residents, HDB has implemented initiatives such as:

- **Revitalisation of Shops (ROS) scheme:** Provides co-funding to help retailers carry out improvement works at the common area
- **Social Enterprise Policy:** Grants eligible social enterprises and businesses a 30% rental discount for the first 3 years of their tenancy, with an option to renew
- **Entrepreneur Scheme:** Allocates local start-ups shop spaces in HDB's new generation neighbourhood centres, and provides a 10% rental discount for the first 3 years of their tenancy

Enhancing Growth, R&D, and Innovation

To promote sustainable living in Singapore, HDB advances R&D and innovation through various initiatives. For example, we collaborate with IHLs and the private sector to drive research excellence, as well as help translate early-stage R&D prototypes into market-ready products for deployment. We also develop robust commercialisation strategies to better manage and maximise the value of our intellectual property, and contribute to Singapore's growth as an Urban Solutions Hub.

Launched in 2017, the Cities of Tomorrow (CoT) R&D programme is a multi-agency effort led by MND that seeks to sustain Singapore's success in the decades ahead by leveraging on Research and Innovation (R&I). The vision of CoT is to establish Singapore as a highly liveable, sustainable, resilient city of the future, and as a vibrant urban solutions hub. In 2022, the CoT R&I Framework was refreshed to guide research priorities to support other national goals such as the Singapore Green Plan 2030, and in view of emerging challenges such as climate change and ageing infrastructure.



COOL IDEAS ENTERPRISE (CIE)

CIE is HDB’s innovation platform inviting innovators to co-develop solutions that enhance living environments and improve residents’ quality of life. Through CIE, participants receive funding, mentorship, and access to HDB facilities to testbed their ideas. Successful CIE applicants have the unique opportunity to pilot solutions in HDB estates, and potentially expand their solutions abroad.

As of April 2024, 7 companies, including 4 local small and medium enterprises (SMEs), are engaged in product development, test bedding and pilot trial activities. Additionally, we have forged at least 3 other partnerships with major local enterprises, multinational corporations (MNCs) or government bodies, providing SMEs with commercial validation and deployment opportunities. Currently, at least

1 project is progressing towards securing business opportunities through paid commercial trials or contractual agreements.



Innovative solutions identified through CIE include robots with painting and skimming functions, which were trialled at select BTO projects.



“BRINGING CHEER”

Jointly organised by HDB and our Staff Union since 2016, the annual ‘Bringing Cheer’ event is a cornerstone of our CSR and ground engagement initiatives. At these events, HDB’s Senior Leadership team and key Staff Union officials join HDB staff volunteers to distribute groceries to households living in rental flats or receiving public assistance.

Through the donation drive as part of 2024’s Bringing Cheer event, we raised more than \$25,500. The funds raised were used to provide a grocery and daily essential pack to the 740 rental tenants living in the Bendemeer area, with 140 staff volunteers distributing groceries and engaging the beneficiaries.



The 2024 edition of our ‘Bringing Cheer’ event benefitted 740 rental tenants living in Bendemeer.

OUR PERFORMANCE AND MOVING FORWARD

As an organisation, our SHARE committee raised more than \$397,000 in FY2023 to support over 100 social service agencies, reflecting HDB’s commitment to fostering a spirit of giving.

Looking ahead, we aim to deepen community engagement by continuing to offer opportunities for residents to co-design communal spaces and offering a wider range of volunteer roles with relevant training.

In 2025, we will launch the next edition of the Lively Places Challenge, where we target to support 30 ground-up projects and empower the community to improve their neighbourhoods.

Service Quality

WHY THIS MATTERS TO US

GRI 3-3

Our customers are at the heart of what we do. We strive for our customer experience to be hassle-free, intuitive, and assuring, giving the public greater confidence and trust in their transactions with HDB.

HOW WE MANAGE THIS AND KEY INITIATIVES

GRI 3-3

Guided by our Service Master Plan, HDB's customer service approach has shifted from transaction-centric to customer-centric, understanding our customers' needs and engaging them across various touchpoints.

Digital First, but Not Digital Only

To offer greater convenience to home buyers and sellers, we launched the HDB Flat Portal in 2021 and enhanced the portal in 2023. Today, this integrated platform allows home buyers and sellers to view listings of HDB flats on sale, apply for an HDB Flat Eligibility (HFE) Letter, and request housing loans from HDB and participating Financial Institutions. These enhancements offer a more seamless digital experience for flat buyers and sellers, providing step-by-step guidance on completing their transactions.

At the same time, we recognise the diverse needs of our customers, including those who require more high touch, personalised service. We continue to provide physical touchpoints at HDB Hub and our Branch Offices for services such as financial counselling, and milestone events such as key collection for new flats.



Physical touchpoints at HDB Hub and the Branch Offices offer personalised services such as key collection and financial counselling.

Service Delivery Performance Tracking

To get in touch with HDB, customers can send their feedback through our e-feedback form. Cases are then logged and routed to the respective staff for follow-up.

Service performance indicators are tracked quarterly across our physical and digital channels. Pulse sensing surveys sent post-interaction allow HDB to gather prompt feedback on our service delivery.

HDB also taps on other research and survey tools to measure broader service outcomes such as customer satisfaction scores. Beyond the surveys administered at the Whole-of-Government level, we commission our own customer experience surveys for a deeper dive into specific service journeys and touchpoints.



MAKING A GREAT IMPACT ON CUSTOMERS (MAGIC)

Our internal recognition framework affirms staff who deliver exceptional service to customers, and have a positive impact on their colleagues and service delivery within HDB. Comprising 3 levels of recognition – Achievers, Heroes, and Champions – awardees receive monetary incentives and are recognised at an annual award ceremony. The MAGIC Awards recognise individual achievements, while reaffirming HDB's commitment to outstanding customer service.

OUR PERFORMANCE AND MOVING FORWARD

In our ongoing efforts to enhance customer experience and operational efficiency, HDB has made significant strides in digital transformation. In FY2023, 99.7% of end-to-end customer transactions were completed digitally, surpassing our target of 90 – 95%. Our digital services garnered an overall customer satisfaction score of 84.3%, exceeding the Digital Government Blueprint target of 75%. We also maintained high satisfaction levels at our physical touchpoints, with over 75% of customers reporting positive experiences.

Looking ahead, we are focused on developing a seamless experience leveraging both digital and physical touchpoints, to optimise customer service and meet residents' evolving needs. This ensures high-quality service while maintaining efficient resource utilisation, improving employee productivity and well-being.

Occupational Health, Well-being and Safety

GRI Disclosures 3-3, 403-1 to 403-9

WHY THIS MATTERS TO US

GRI 3-3

As Singapore's largest housing developer, HDB is committed to occupational safety and health, including the mental and emotional well-being of our staff.

HOW WE MANAGE THIS

GRI 3-3

HDB places utmost importance on the safety and health of all our officers, contractors, and visitors, striving for the highest standards and aiming for 0 accidents.

We enforce strict Workplace Safety and Health (WSH) policies to effectively manage occupational safety hazards.

Our WSH Framework focuses on reducing risks at the source, by requiring stakeholders to eliminate or minimise risks, and prioritise proactive safety measures. We also encourage accountability within the construction industry, and prevent accidents by enforcing higher penalties for poor safety management.

To achieve our safety goals, we foster a culture where every officer takes responsibility for workplace safety and health, and adheres strictly to all relevant government regulations, such as the WSH Act. At construction sites, we enforce robust safety measures, including the Design for Safety (DfS) and Safety Disqualification Framework (SDQ), working closely with contractors to ensure safety and health are at the centre of all operations.

Working closely with HDB Staff Union, Club HDB, and Group representatives, the WSH Steering Committee and the CSR & Work-Life Committee ensure synergy between the various WSH, CSR, and work-life initiatives, and promote the physical and mental well-being of our staff through various programmes.

OUR KEY INITIATIVES AND CASE STUDIES

Occupational Safety and Health

WSH Steering Committee

HDB's WSH Steering Committee, which comprises nominated representatives from all HDB Groups, HDB Staff Union, and Club HDB, was established in 2011 to oversee workplace safety initiatives. Since then, the committee has developed a WSH Policy statement for all HDB offices, clearly outlining the organisation's goals, commitments, and strategies for occupational health and safety. They set risk assessment protocols, conduct audits, review risk management plans, and update the WSH Policy and Standard Operating Procedures (SOPs) regularly. The committee tracks quarterly reports on workplace injuries, which are also submitted to the Ministry of Manpower (MOM) in compliance with the Work Injury Compensation Act (WICA), implementing WSH training to increase staff awareness, conducts audits, and recommending preventive actions to mitigate workplace risks.



We support staff well-being through a range of programmes and initiatives.

WSH Programmes and Training

To raise awareness on workplace safety and health, HDB offers various programmes, including health talks and a mandatory e-learning WSH Awareness Course for all staff. To further reinforce the importance of WSH, we hold a biennial WSH Seminar where experts provide insights and updates on the latest safety protocols.

- At our Workplace Safety and Health (WSH) seminar, staff learn skills to help maintain a safe work environment, such as cardiopulmonary resuscitation (CPR).



Workplace Safety at Construction Sites

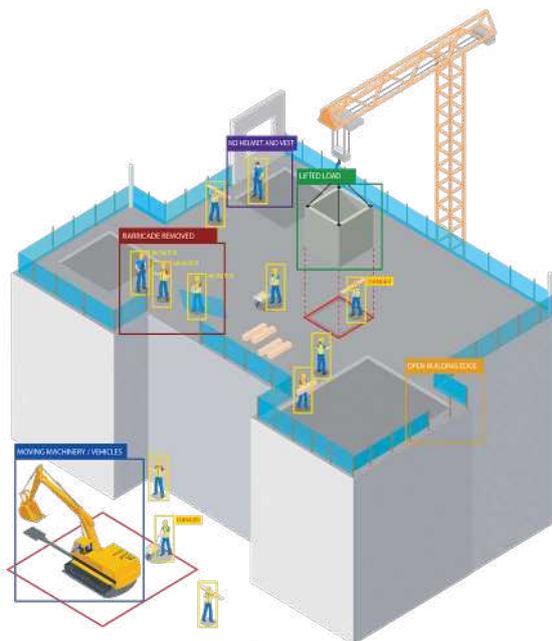
HDB prioritises safety in our construction projects through comprehensive safety standards and measures specified in HDB's contracts. These include mandatory personal protective equipment for site visitors, safety signage for public awareness, and worker certification requirements. For example, all site personnel must attend regular safety refresher courses, and sub-contractors must maintain a valid bizSAFE Level 3 certification. To further enhance safety, the DfS process is employed to identify and mitigate WSH hazards at the design stage, with DfS review meetings conducted for projects exceeding \$10 million. Any residual risks are addressed through Safe Work Procedures and Risk Assessments during subsequent project phases.

HDB collaborates with contractors or consultants to review work processes and ensure adequate risk mitigation measures are in place. Thorough risk assessments are also conducted before work commences, with additional reviews for high-risk activities. Full-time WSH Officers are required onsite to implement appropriate safety measures and procedures in accordance with the WSH Act and relevant regulations.

Since 2023, HDB has mandated the use of AI technology and video analytics for all new HDB housing projects, to effectively detect and alert safety supervisors to potential high-risk situations in construction sites. WSH technology, daily checks and unannounced audits by an independent safety team forms part of a multi-layered inspection system to ensure compliance, backed by strict enforcement measures. Non-compliance requires immediate rectification, with work halted until it is safe to resume. HDB may also impose demerit points or administrative charges on contractors, and contractors with poor WSH performance may be temporarily disqualified from participating in HDB-related tenders under the Safety Disqualification Framework (SDQ). Conversely, HDB's WSH Bonus Scheme seeks to foster a strong safety culture across projects by rewarding contractors with good safety record.

Risk Assessments for HDB Offices

Risk assessments take place every 3 years for HDB offices. Assessments are also conducted whenever new information on safety and health risks surfaces, changes to work areas, or after an accident or serious incident occurs. Following these assessments, additional risk controls are implemented where needed, such as displaying posters on the proper handling of office equipment and other safe workplace practices. HDB Groups also perform annual internal inspections, while external auditors conduct biennial audits to ensure workplace safety.



- HDB mandates the use of AI technology and video analytics to detect high-risk situations in construction sites, with closed-circuit television (CCTV) cameras mounted onto cranes to monitor projects.

Occupational Well-Being

Healthcare Access and Insurance

In line with Public Service policies, our employees are entitled to medical and dental benefits. HDB provides access to a network of clinics island-wide, offering subsidised outpatient treatment by covering 85% of consultation fees, with the remaining recovered from employees' monthly payroll. This arrangement enables employees to have access to necessary medical care without the burden of upfront payment. Additionally, staff are covered under Work Injury Compensation Insurance, as per MOM regulations.

To promote overall health, HDB prioritises preventive healthcare by organising health screenings for our employees every 2 years at HDB Hub and our Branch Offices. HDB also offers a fully subsidised annual influenza vaccination for all staff.

Ensuring Mental and Emotional Well-being

Recognising the importance of mental well-being, HDB provides all staff with access to professional and confidential counselling services that are available round-the-clock. In 2023, HDB introduced the Emotional Support

Wellness Guide to foster a supportive work environment, and promote self-care and mutual support. The guide helps staff recognise distress symptoms and offers practical advice on how to respond.

OUR PERFORMANCE AND MOVING FORWARD

Since 2008, HDB has maintained its bizSAFE partner status, with the latest renewal valid until February 2026. In FY2023, we recorded 0 work-related fatalities and high-consequence injuries among HDB employees, and 20 work-related injuries, mainly due to slips, trips, falls, and sports incidents. There was 1 occupational fatality¹⁴ and 91 work-related injuries among non-HDB employees at our construction sites, primarily caused by improper usage of tools, improper material handling, and unsafe work-at-height.

Upholding the highest safety standards is top priority for HDB, and we aim to achieve 0 workplace accidents by adopting best industry practices. To this end, HDB plans to introduce new incentives to encourage WSH among contractors, including safety recognition, increased tender opportunities, and support for contractors with poor safety records to improve their performance. These efforts underscore our commitment to ensuring a safer work environment across our operations.

Table 9: GRI 403-8: Workers covered by an OHS management system

	Covered under OHS system	Covered under Internally Audited System	Covered under Externally Audited System
Number of employees	5,395	5,395	5,395
Number of workers who are not employees	52,600	N/A	52,600 ¹⁵
Percentage of workers who are not employees but whose work and/or workplace is regulated by the organisation	90.70%	N/A	90.70%

Table 10: GRI 403-9: Work-related injuries

Work-related Injuries	For All Employees	For workers who are not employees but whose work and/or workplace is controlled by the organisation
Number of fatalities from work-related injuries	0	1
Number of high-consequence work-related injuries	0	0
Number of recordable work-related injuries	20	91
Main types of work-related injury	Slips, trips and falls and sports-related injuries	<ul style="list-style-type: none"> Unsafe use of handheld/electrical tools – 40% Inappropriate method of manual handling of materials (e.g. poor posture) – 26% Work-at-height (e.g. falling from an unsafe work platform or ladder) – 16%

¹⁴ There was a fatal accident at a HDB construction site (Sembawang Avenue) in October 2023, involving a contractor worker. In response to this incident, HDB enforced a safety timeout at the affected project site for the conduct of investigations as well as safety audit inspections. Sharing sessions were conducted with project contractors to reinforce the importance of worksite safety. HDB rendered all the support and assistance needed to the worker's family, while also reviewing our enforcement measures against contractors with egregious safety lapses.

¹⁵ Construction companies with a worksite contract sum of \$30 million or more need to use the Construction Safety Audit Scoring System (ConSASS) to audit their workplace's safety and health management system. The audit scores and the supporting audit documents are required to be submitted to the Ministry of Manpower.

Employee Development

GRI Disclosures 2-26, 2-30, 3-3, 401-1 to 401-3, 404-1 to 404-3, 405-1, 406-1

WHY THIS MATTERS TO US

GRI 3-3

Our staff are central to HDB. We focus on attracting talent, fostering an inclusive workplace, and investing in continuous learning. By supporting staff development, we aim to boost employee morale and loyalty, as well as equip them with the skills needed to drive HDB forward.

HOW WE MANAGE THIS

GRI 3-3

We build workforce capabilities through training, job rotations, and short-term roles to enhance flexibility and growth. Continuous refinement of work processes and leveraging of technology help ease workloads, enabling staff to focus on high-value tasks and core responsibilities. These efforts keep our workforce adaptable to meet evolving challenges.

OUR KEY INITIATIVES AND CASE STUDIES

Attracting, Hiring and Retaining Talent

Hiring and Re-employment Practices

Diversity and inclusion underpin HDB's hiring process. Equal opportunities are provided for all candidates, regardless of age, gender, or background; focusing solely on merit. Complementing this, a structured re-employment framework has been in place since 2008. This allows retiring staff to transition smoothly into re-employed positions, often maintaining their previous role and pay grade. This approach ensures continuity in contributions, while retaining valuable experience of long-serving employees.

Strengthen Professional Competencies

In 2022, HDB instituted Professional Chief positions for key technical and professional fields. These Professional Chiefs oversee the growth and development of specific technical skills amongst relevant HDB staff, guide staff on their professional development journey, and strengthen professional competencies in HDB.

Ensuring Leadership Continuity

To ensure strong leadership and smooth transitions across key positions, we nurture potential leaders within the organisation and prepare them for higher-level roles. Annual reviews evaluate suitable leadership candidates across all HDB Groups. These evaluations are further reviewed by the HDB Establishment Committee, chaired by the CEO, to ensure HDB's leadership pipeline remains robust and ready to meet future challenges.

Enhancing Operational Efficiency

To improve efficiency, HDB leverages technology such as Robotic Process Automation (RPA) to automate task like processing payment e-invoices and progress claims, saving time and ensuring prompt payments.

HDB also employs data analytics to help internal audit teams prioritise and streamline audit work, while uncovering gaps and improving our operations.

To foster a culture of innovation, staff are encouraged to propose ideas that can improve work processes through the internal IdeaSpace portal, with standout suggestions recognised by the BrightIdeas Award.

Staff Benefits

HDB offers a comprehensive range of staff benefits,¹⁶ including maternity, paternity, and childcare leave to support work-life balance, as well as study and exam leave to encourage continuous learning. Our staff also have access to sports and recreational facilities at Club HDB, and can take time-off for exercise to maintain a healthy lifestyle.

¹⁶ Both full-time and part-time staff receive leave benefits, with pro-rated leave for part-timers



Training and Upskilling

We help staff reach their full potential through a range of learning and development opportunities. These include competency-based training, job rotations, secondments, and special projects providing exposure to various organisational functions. Staff can also participate in cross-functional teams and attend overseas conferences, study trips and seminars, gaining exposure to international best practices.

We also support skill development by implementing competency frameworks and learning roadmaps, which includes courses on functional training, personal effectiveness, and emotional resilience. The roadmap is updated annually to ensure the courses remain relevant and impactful.

Annual appraisals facilitate performance feedback and help employees create Individual Learning Plans, allowing employees to take charge of their own growth. We regularly review staff learning and development needs to enhance competencies, and ensure they keep pace with the changing work landscape.

Through our workforce transformation plan, we identify emerging capabilities essential for growth. Resources are provided through HDB's Learning & Development Ecosystem, with additional support available via the Public Service Division's (PSD) network of career coaches.

To further develop professional, technical, and managerial competencies, HDB offers postgraduate scholarships and sponsorships. We provide full-pay study leave for full-time studies, and unrecorded leave for part-time studies to support our staff in their academic pursuits.

Fostering an Inclusive Workplace

HDB values a diverse, multi-generational workforce. We implement programmes that enhance inclusivity, while

enforcing a zero-tolerance policy towards racism and discrimination. Training programmes are offered to equip staff with the skills to work effectively with colleagues of all ages and bridge generational differences.

We also prioritise harmonious relations between our staff and management, and engage the HDB Staff Union regularly to discuss matters such as policy changes, guided by the following principles:

- **Open Communication:** Regular, transparent, and honest dialogue to address concerns and issues
- **Mutual Respect:** Valuing each other's perspectives and roles
- **Collaborative Problem-Solving:** Working together to find solutions that benefit both parties
- **Trust Building:** Following through on commitments and maintaining confidentiality
- **Joint Goal Setting:** Aligning goals and objectives for the benefit of our organisation and employees
- **Regular Feedback:** Sharing information and feedback to foster understanding and improvement
- **Dispute Resolution:** Establishing a fair and efficient process for resolving disputes and grievances
- **Flexibility and Adaptability:** Being open to change and willing to adapt to new situations and challenges

Within HDB, a grievance procedure is also in place to resolve issues or complaints from employees. When issues are raised, HDB and the Union make their best effort, within reason, to resolve the grievance or complaint from employees.

OUR PERFORMANCE AND MOVING FORWARD

In FY2023, the total number of employees in HDB was 5,395.¹⁷ We maintained a stable workforce with a 7.6% turnover rate and a 7.3% hiring rate. We remain committed to attracting, hiring and retaining talent, alongside fostering an inclusive and supportive work environment. No discrimination incidents were found to have taken place in FY2023

In terms of staff benefits, our maternity and paternity leave policies meet statutory requirements, with 154 staff members who were eligible for parental leave during the FY. About 61.5% of employees are members of the HDB Staff Union and are covered by collective bargaining

agreements, which is higher than the national unionisation rate.¹⁸ Employees who are not union members also enjoy working conditions aligned with industry standards.

As part of our commitment to career development, all staff received regular performance and career development reviews.¹⁹ We also invest in employee upskilling to enhance adaptability in a changing economy, with HDB staff receiving an average of 5.5 training days in FY2023.

HDB achieved a score of 85% for Engagement to Organisation on the Employee Engagement Survey (EES), which is carried out every 2 years on a Whole-of-Government basis. This score is higher than the public service average of 81%.

Table 11: GRI 2-7: Employees

FY2023		Male	Female	Total
PERMANENT	Full-time	1,604	2,614	4,218
	Part-time	1	13	14
CONTRACT	Full-time	543	613	1,156
	Part-time	2	5	7
	Temporary employees	52	108	160

Table 12: GRI 2-8: Workers who are not employees

Total number of workers who are not employees in FY2023	52,600
Most common type of workers who are not employees	Construction worker
Type of contractual relationship with the organisation	Contractor/ subcontractors
Type of work performed	Construction and renovation works and management of building sites
How numbers are reported (headcount/ full-time equivalent/ other methodology)	Periodic reports (e.g. on headcount, resource usage, workplace safety and incidents) submitted by contractors to HDB

Table 13: GRI 401-1: New employee hires and employee turnover

Breakdown of New Employee Hires and Employee Turnover by Age Group (FY2023)	Number of New Hires	Rate of New Hires	Number of Turnovers	Rate of Turnover
20–24 years old	57	1.1%	7	13.0%
25–29 years old	120	2.2%	46	11.1%
30–34 years old	92	1.7%	90	14.4%
35–39 years old	64	1.2%	45	5.3%
40–44 years old	32	0.6%	30.5	4.9%
45–49 years old	19	0.1%	16	2.1%
50–54 years old	7	0.1%	10	1.4%
55–59 years old	1	0.0%	15	3.5%
>60 years old	4	0.1%	149.5	16.4%

¹⁷ Excludes 160 temporary employees

¹⁸ Based on the National Trade Union Congress' Labour Movement Annual 2020, the unionisation rate of workers in Singapore was 29.5% in 2018.

¹⁹ 100% of employees received regular performance and career development reviews, regardless of gender.

Table 14: GRI 401-3: Parental leave

	FY2023	
	Male	Female
Total number of employees that were entitled to parental leave	65	89
Total number of employees that took parental leave	63* (*2 staff did not apply for Paternity leave)	89
Total number of employees that returned to work in the reporting period after parental leave ended	63	89
Total number of employees that returned to work after parental leave ended that were still employed 12 months after their return to work	60	87
Return to work rate of employees that took parental leave	100%	100%
Retention rate of employees that took parental leave	95%	98%

Table 15: GRI 404-1: Average hours of training per year per employee

Employee Category (by Level and Function)	FY2023		
	Management	Professionals	Paraprofessionals
Total number of employees by employee category in FY2023	371	2,313	2,711
Total number of training days provided to employees by Employee Category in FY2023	2,709	16,885	10,031
Average days of training provided to employees by Employee Category in FY2023	7.3	7.3	3.7
Percentage of total employees by employee category who received a regular performance and career development review in FY2023	100%	100%	100%

Table 16: GRI 405-1: Diversity of governing bodies and employees

Governance Body Members by Gender	Male	Female	Total
Management	171	200	371
Percentage of management by gender	46.1%	53.9%	100%
Professionals and Paraprofessionals	1,979	3,045	5,024
Percentage of Professionals and Paraprofessionals by gender	39.4%	60.6%	100%

Table 17: GRI 405-1: Diversity of governing bodies and employees

Governance Body Members by Age Group in FY2023	<30 years	30-50 years	>50 years
Management	0	206	165
Percentage of management by age group	0%	55.5%	44.5%
Professionals and Paraprofessionals	470	2,841	1,713
Percentage of Professionals and Paraprofessionals by age group	9.4%	56.5%	34.1%

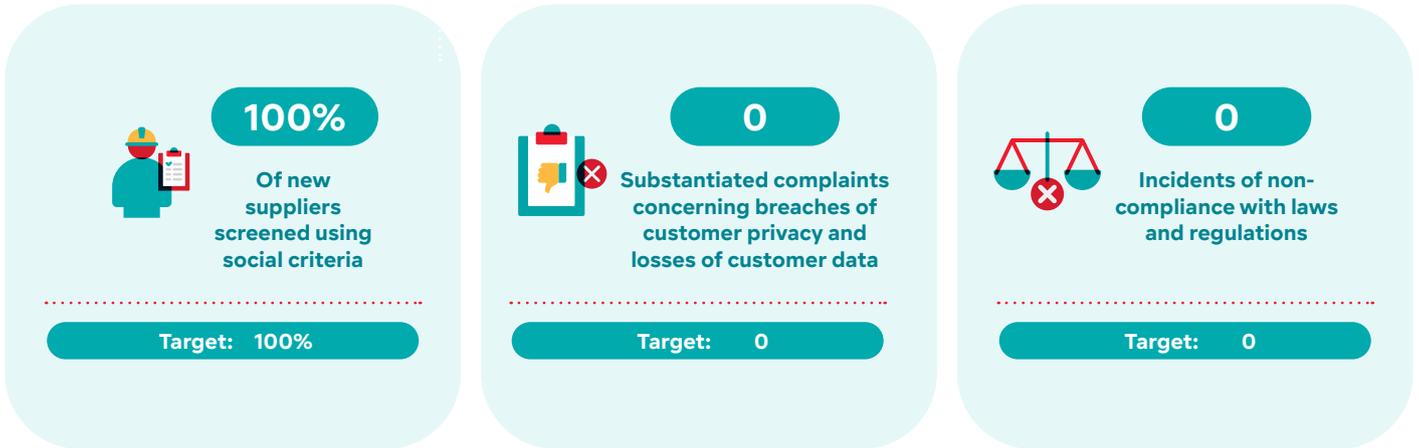
Pillar 3

Governance



Integrity is one of HDB's shared values. As a government agency, we are committed to responsible and ethical governance to foster a positive, sustainable impact. By embedding these principles into our processes, we ensure transparency, accountability, and compliance with governance regulations. To track our progress in governance sustainability, we have set specific targets and KPIs:

KEY PERFORMANCE AND ACHIEVEMENTS IN FY2023



Corporate Governance

GRI Disclosures 2-15, 2-16, 2-25 to 2-27, 3-3, 205-1 to 205-3, 206-1

WHY THIS MATTERS TO US

GRI Disclosure 3-3

HDB takes a firm stance against corruption and unfair business practices. To uphold integrity, we implement policies and management practices, such as a Code of Conduct, internal control systems, as well as internal audits.

HOW WE MANAGE THIS

GRI Disclosures 3-3, 2-15, 2-16, 2-25, 2-26 and 2-27

HDB implements strict corporate governance policies and management practices across all operations. Staff are regularly reminded of HDB's Code of Conduct, and are trained on proper management practices and protocols. We conduct regular reviews and audits of our internal processes, where we share learning points and develop improvement plans.

Conflicts of Interest

GRI Disclosure 2-15

Under Section 24 of the Public Sector (Governance) Act (PSGA), members of public bodies must promptly disclose any relevant conflicts of interest they may have, as soon as they become aware of them.

Communication of Critical Concerns

GRI Disclosure 2-16

We use various communication channels to update the Board on matters of critical concern, such as project delays, worksite fatalities or service disruptions. These channels include board meetings, site visits, email updates, and electronic submissions. In FY2023, there

were 2 critical concerns surfaced to the Board, related to a worksite fatality and e-services disruption.

OUR KEY INITIATIVES AND CASE STUDIES

Anti-Corruption and Anti-Competitive Behaviour

Ethical conduct training begins when new staff join HDB, as they are rostered to attend a mandatory Good Governance seminar and anti-corruption talks by the Corrupt Practices Investigation Bureau (CPIB). All employees are also informed of HDB's Fraud and Wrongful Practices Reporting Channel (FWPC), a confidential whistleblowing platform for reporting suspected fraud and wrongful practice to the Audit & Risk Committee (ARC) Chairman.

To help strengthen the integrity of HDB's services, we implement risk mitigation strategies such as annual staff declarations of financial embarrassments and investments, and Mandatory Block Leave (MBL) for fraud-prone roles.

HDB's internal control system safeguards our assets, maintains proper accounting records, and ensures reliable financial information. This framework includes clearly defined authority and delegation limits for operations and financial controls. An annual budgeting and monthly financial reporting system is in place for all operating units.

Internally, we conduct annual audits to ensure Groups' compliance with government regulations and HDB policies. Audit observations are reported to Groups for follow-up, as well as to HDB Management and the ARC. Audit insights are shared with Groups to drive better governance and continuous improvement, and these measures collectively strengthen transparency, accountability, and compliance throughout HDB.



OUR PERFORMANCE AND MOVING FORWARD

In FY2023, HDB had 0 incidents of non-compliance with laws and regulations, fraud, and corruption across our operations. HDB communicated anti-corruption policies and procedures to all staff, governance body members,

and business partners. All staff also received training on anti-corruption as part of this initiative. Building on these efforts, the aim is to maintain 0 cases of non-compliance with anti-competitive behaviour and corruption policies.

Table 18: GRI 205-1: Operations assessed for risks related to corruption, GRI 205-2: Communication and training about anti-corruption policies and procedures.

- 100%** of our 104 operations have been assessed for risks relating to corruption
- 100%** of our 14 governance body members have received training on anti-corruption
- 100%** of our 2684 employees who are executive-level and above have received communication on HDB's anti-corruption policies and procedures, and received training on anti-corruption
- 100%** of our 2711 employees who are non-executives have received communication on HDB's anti-corruption policies and procedures, and received training on anti-corruption
- 100%** of our 3645 business partners have received communication on HDB's anti-corruption policies and procedures



Sustainable Supply Chain Management

GRI Disclosures 3-3, 204-1, 308-1, 308-2, 414-1, 414-2

WHY THIS MATTERS TO US

GRI 3-3

Environmental and social stewardship is a collective effort that requires commitment within our organisation, as well as across our entire value chain. We put in place measures to ensure all our partners, suppliers, and relevant stakeholders uphold the highest standards of accountability and transparency.

HOW WE MANAGE THIS

GRI 3-3

In developing and implementing our programmes, HDB collaborates closely with stakeholders and partners, including government agencies, architects, engineers, contractors, and suppliers. We adopt best practices in the procurement and evaluation of construction and consultancy tenders, ensuring compliance with performance standards at every stage.

We also enforce strict supply chain policies and guidelines, and conduct environmental and social screening along our supply chain to manage potential risks effectively while adhering to relevant guidelines.

OUR KEY INITIATIVES AND CASE STUDIES

Procurement Practices

As a Government Procuring Entity (GPE), HDB adheres to the Ministry of Finance’s Instruction Manual on Procurement and its Financial Regulations, which are based on 3 principles:



Open and Fair Competition

HDB treats all suppliers equally, ensuring they receive the same information to compete fairly



Transparency

HDB maintains an open procurement process, with requirements and evaluation criteria available on the Government Electronic Business portal (GeBIZ)



Value for Money

HDB procures from suppliers that meet our requirements and offer the best value. Beyond monetary value, we consider cost, quality, risk, timeliness, and reliability, when evaluating bids

These key principles guide our procurement practices, and ensure we uphold Singapore’s international obligations, maintain the fairness and integrity of the tendering system, and eliminate any anti-competitive behaviour. Some of HDB’s core operating principles include:

- Tender evaluation proposals should be evaluated based on like-for-like comparisons wherever possible. High-value projects require quantifiable methods to assess lifecycle costs and benefits, reducing subjectivity.
- Negotiations are only allowed in limited competition scenarios to obtain better value-for-money purchases. Safeguards are adopted to ensure incorruptibility, fairness, and transparency.

- There should be separate committees for evaluation and approval of quotations or tenders with segregation of duties when carrying out any procurement functions to ensure independent decision-making.
- Officers involved in any part of the procurement process should declare any conflict of interest that may arise in the performance of their duties. An officer's private interests should be separate from his public duties.

HDB also engages in green procurement practices, partnering environmentally responsible vendors, suppliers, and selecting venues with sustainability certification. For example, when sourcing external venues, we select venues with a Green Mark Platinum rating or equivalent, where possible.

We also prioritise the use of local supplies and talent. For example, BTO project tenders require 50% of precast components to be locally produced, which also enhances HDB's precast resilience. Similarly, we engage local companies for projects to support the local economy.

To ensure the highest level of integrity, HDB's vendors are informed of anti-corruption measures and potential consequences when registering on GeBIZ, with similar clauses included in contracts. We maintain full compliance with the relevant procurement, financial, ICT management, and administrative regulations.

HDB also develops staff capabilities in sustainable supply chain management through training for new employees and periodic training for procurement officers. We provide resources to guide staff on procurement workflows, and update staff on key changes to procurement guidelines through circulars and sharing sessions.

Supplier Environment and Social Assessments

We recognise that our operations can impact the environment through carbon emissions, noise pollution, and air quality-related issues. To mitigate these effects, we apply stringent environmental assessments to suppliers. For example, construction project contractors must comply with key environmental regulations, such as the Environmental Protection and Management Act.

As mandated by law, contractors employ Environmental Control Officers (ECOs) who advise on crucial environmental management issues. The ECOs must conduct regular inspections and take prompt corrective



We work closely with our contractors and vendors to ensure responsible work practices, minimising environmental and social impacts.

action to ensure the cleanliness and hygiene of our facilities and workers' quarters. These include vector control, waste disposal, noise and dust pollution management, and site housekeeping.

HDB is currently enhancing its green procurement framework for construction tenders, by incorporating sustainability criteria into the evaluation process. We hope to encourage tenderers towards green accreditation, and nudge them to implement sustainable initiatives and develop decarbonisation plans. These initiatives highlight HDB's commitment to embedding environmental sustainability into all aspects of our construction projects.

Social considerations are also integral to HDB's supplier assessments. Aligned with international standards, including the World Trade Organisation's Agreement on Government Procurement (WTO-GPA) and Free Trade Agreements (FTAs), HDB's procurement process requires suppliers to submit their track record, with HDB conducting additional background checks. On the GeBIZ portal, HDB may also require suppliers to hold relevant qualifications, such as WSH certifications, to ensure their services meet industry standards.

In addition, HDB imposes debarment on suppliers for infringement or non-compliance, barring them from future government contracts for 1 to 5 years depending on the severity. Grounds for debarment include contract abandonment, false information, corruption, and safety violations. HDB may also claim liquidated damages if a tenderer fails to meet contractual obligations, ensuring prudent use of public funds and effective risk mitigation.



HDB PROFESSIONAL ENGAGEMENT AND KNOWLEDGE-SHARING (PEAK) FORUM

HDB's PEAK Forum brings together industry partners from the Built Environment sector, including architects, engineers, and builders. The forum provides a platform for HDB to share best practices and promote sustainable development in the public housing ecosystem. We invite renowned experts to share insights and encourage industry partners to offer suggestions to enhance the design and delivery of public housing, fostering collaboration and innovation within the Built Environment sector.



We aim to foster collaboration and innovation within the Built Environment sector at our annual Professional Engagement and Knowledge-sharing (PEAK) Forum.

OUR PERFORMANCE AND MOVING FORWARD

In FY2023, HDB engaged 3,645 suppliers, all of whom were screened using environmental and social criteria, with no incidents of non-compliance reported. Looking ahead, HDB is developing more comprehensive green procurement strategies, particularly in building and construction, to strengthen our commitment to sustainability and responsible sourcing across our supply chain.

Table 19 : GRI 204-1: Proportion of spending on local suppliers

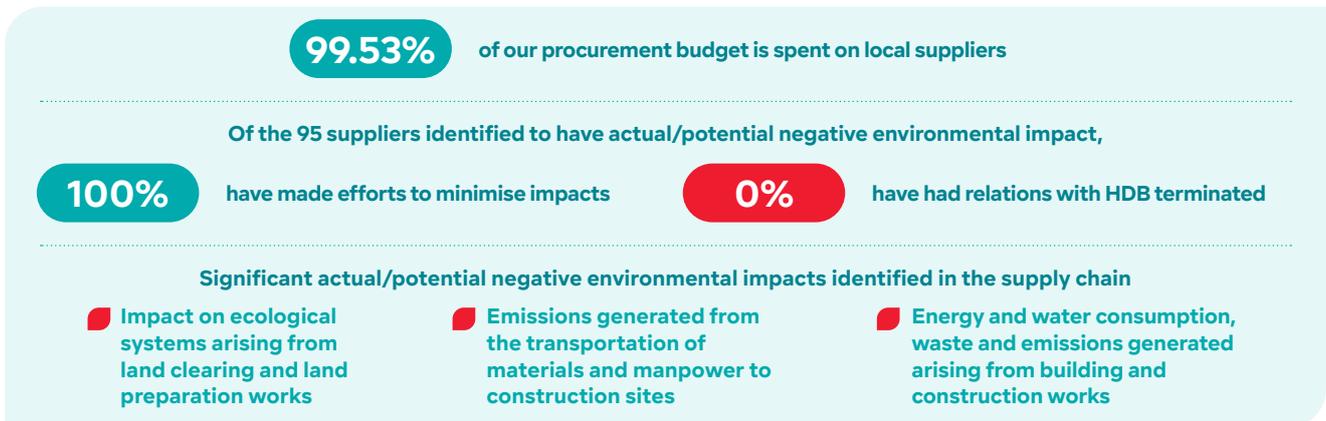
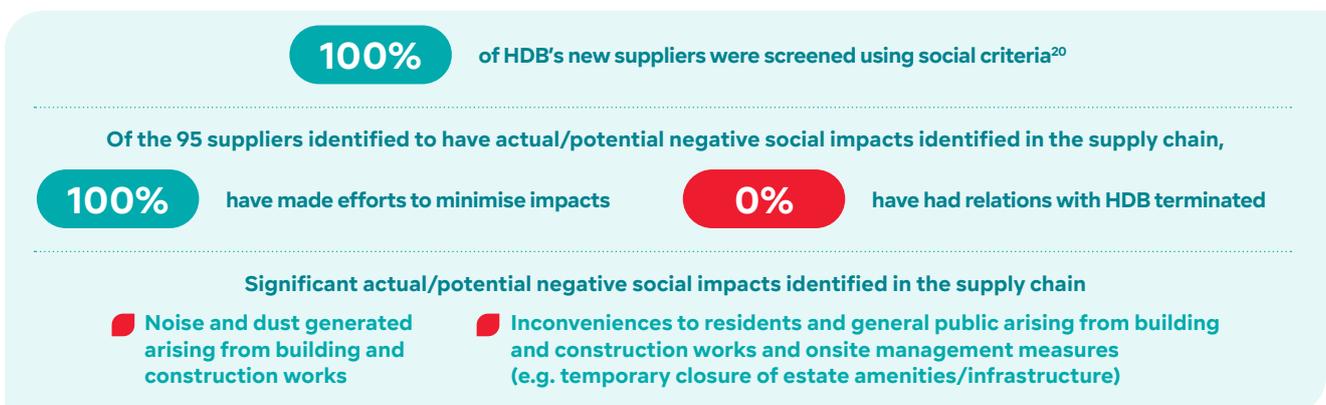


Table 20 : GRI 414-2: Negative social impacts in the supply chain and actions taken



²⁰ Criteria used for screening include those mentioned in our write-up above.

Data Privacy and Management

GRI Disclosures 3-3, 418-1

WHY THIS MATTERS TO US

GRI 3-3

Given HDB's extensive operations, we recognise the need for proper data management and cybersecurity to prevent adverse impacts on the organisation and our stakeholders. We also implement policies to protect HDB's Intellectual Property (IP).

HOW WE MANAGE THIS

GRI 3-3

HDB conducts risk assessments on Information and Communication Technology (ICT) implementation, including cybersecurity, data security, and project risks. The assessments identify the residual risks of ICT systems, after implementing necessary mitigating controls.

We also implement robust data privacy and digital risk management policies across all operations. This includes an ICT and Data Incident Response Standard Operating Procedure (SOP) in alignment to Government Instruction Manual on data management, and validation exercises, which seek to:

- Ensure timely incident detection and reporting
- Familiarise all responders with reporting protocols and consequence management procedures

- Outline communication strategies to maintain public confidence

At the same time, HDB has developed an IP policy, which covers guidelines for the management, usage, and commercial development of IP. With proper IP protection and management, HDB can harness the value of IP and leverage its innovations and brand, benefitting both HDB and our business partners by creating new industry opportunities.

OUR KEY INITIATIVES AND CASE STUDIES

In the process of administering public housing programmes and services, stakeholder data is collected to facilitate service delivery, policy formulation, and innovation and research. We manage this data with utmost care. Consent is obtained before data collection with clear explanations of intended use, and individuals can withdraw consent subject to legal or contractual restrictions.

After data is collected, we implement stringent safeguards to prevent unauthorised access or misuse, including encrypted storage systems. Access to sensitive data is restricted on a need-to-know basis, with staff access requiring high-level approval and subject to annual reviews. Additional safeguards apply when sharing data with non-government entities to protect stakeholder data and ensure compliance with government guidelines.



To manage ICT or data incidents, HDB applies a 5-phase ICT and Data Incident Management SOP to guide crisis responders (including third-party service providers) in timely incident reporting, escalation, and consequence management.



1

Detection

An incident alert should be raised immediately upon detecting an incident



2

Notification

An incident notification should be escalated upwards within stipulated timelines



3

Report

A detailed incident report should be submitted, with the incident management team working closely within HDB and with third-party service providers (if required) on investigation and containment measures



4

Update

Updates on investigations should be provided within stipulated timelines



5

Follow-up

Measures should be implemented to ensure business continuity and recovery/ restoration, with minimal impact to customers and our operations. An After Action Review will be conducted to identify gaps and learning points, and guide the review of internal processes (if required).

**ENSURING CYBERSECURITY**

At HDB, cybersecurity is seen as a collective responsibility. All staff are required to complete mandatory training to increase their awareness of evolving threats and learn risk mitigation strategies. Staff are also educated on proper protocols for handling cybersecurity risks, and are required to change their passwords at regular intervals. To reinforce good data hygiene, periodic e-newsletters offer tips such as creating strong passwords, and securing laptops and data storage devices.

OUR PERFORMANCE AND MOVING FORWARD

In FY2023, we maintained our record of 0 substantiated complaints regarding breaches of customer privacy or losses of customer data. This track record underscores our commitment to upholding the highest standards of data security and privacy.



Appendix



CONTENT INDEX
ESSENTIALS SERVICE

2024

GRI CONTENT INDEX

For the Content Index – Essentials Service, GRI Services reviewed that the GRI content index has been presented in a way consistent with the requirements for reporting in accordance with the GRI Standards, and that the information in the index is clearly presented and accessible to the stakeholders.

Statement of use	Housing & Development Board (HDB) has reported in accordance with the GRI Standards for the period [1 Apr 2023 to 31 Mar 2024].
GRI 1 used	GRI 1: Foundation 2021
Applicable GRI Sector Standard(s)	N.A.

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	PAGE REFERENCE/ DIRECT ANSWERS	OMISSION		
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION
GENERAL DISCLOSURES					
GRI 2: General Disclosures 2021	2-1 Organizational details	Pages 3-4			
	2-2 Entities included in the organization's sustainability reporting	Page 4			
	2-3 Reporting period, frequency and contact point	Page 4			
	2-4 Restatements of information	Page 4. There are no restatements of information in this report.			
	2-5 External assurance	Page 4. External assurance has not been sought for this report.			
	2-6 Activities, value chain and other business relationships	Pages 3, 5-6			
	2-7 Employees	Page 45			
	2-8 Workers who are not employees	Page 45			
	2-9 Governance structure and composition	Pages 7-8			
	2-10 Nomination and selection of the highest governance body	Page 8			
	2-11 Chair of the highest governance body	Pages 7-8			
	2-12 Role of the highest governance body in overseeing the management of impacts	Page 7			
	2-13 Delegation of responsibility for managing impacts	Page 7			
	2-14 Role of the highest governance body in sustainability reporting	Page 7			
	2-15 Conflicts of interest	Page 49			
	2-16 Communication of critical concerns	Page 49			
	2-17 Collective knowledge of the highest governance body	Page 7			
	2-18 Evaluation of the performance of the highest governance body	Page 8			
	2-19 Remuneration policies	Page 8			
	2-20 Process to determine remuneration	Page 8			
	2-21 Annual total compensation ratio		2-21	Confidentiality constraints	As HDB is a statutory board of the Singapore government, HDB is not disclosing this information due to its sensitive nature.

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	PAGE REFERENCE/ DIRECT ANSWERS	OMISSION		
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION
GRI 2: General Disclosures 2021	2-22 Statement on sustainable development strategy	Pages 5-6			
	2-23 Policy commitments	Page 9; Respective material topic sections			
	2-24 Embedding policy commitments	Page 9; Respective material topic sections			
	2-25 Processes to remediate negative impacts	Pages 11, 49-50			
	2-26 Mechanisms for seeking advice and raising concerns	Pages 11, 43-44 49			
	2-27 Compliance with laws and regulations	Pages 49-50			
	2-28 Membership associations	<u>Local</u> <ol style="list-style-type: none"> Contact Centre Association of Singapore (CCAS) Singapore Green Building Council (SGBC) Singapore Institute of Architects Singapore Institute of Management (SIM) Singapore National Employers Federation (SNEF) Singapore Productivity Association (SPA) The Institute of Internal Auditors Singapore 8Singapore International Facility Management Association (SIFMA) <u>International</u> <ol style="list-style-type: none"> Council on Tall Buildings and Urban Habitat (CTBUH) Town Centre Management (TOCEMA) Worldwide Scientific Committee The Urban Land Institute (ULI) 			
	2-29 Approach to stakeholder engagement	Page 11			
	2-30 Collective bargaining agreements	Page 43-45			
	MATERIAL TOPICS				
GRI 3: Material Topics 2021	3-1 Process to determine material topics	Page 10			
	3-2 List of material topics	Page 10			
Biodiversity					
GRI 3: Material Topics 2021	3-3 Management of material topics	Pages 25-26			
GRI 101: Biodiversity 2024	101-1 Policies to halt and reverse biodiversity loss	Pages 25-26			
	101-2 Management of biodiversity impacts	Pages 25-26			
	101-3 Access and benefit-sharing		101-3	Not applicable	This disclosure mainly applies to organisations that use generic resources to conduct research and development and is thus not not relevant to HDB's scope of activities and material topic.

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	PAGE REFERENCE/ DIRECT ANSWERS	OMISSION		
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION
GRI 101: Biodiversity 2024	101-4 Identification of biodiversity impacts	Pages 25-26			
	101-5 Locations with biodiversity impacts	Pages 25-26			
	101-6 Direct drivers of biodiversity loss	Pages 25-26			
	101-7 Changes to the state of biodiversity	Pages 25-26			
	101-8 Ecosystem services	Pages 25-26			
Energy					
GRI 3: Material Topics 2021	3-3 Management of material topics	Pages 15-16			
GRI 302: Energy 2016	302-1 Energy consumption within the organization	Page 17			
	302-2 Energy consumption outside of the organization		302-2	Not applicable	HDB does not consume energy consumption outside of the organisation.
	302-3 Energy intensity	Page 17			
	302-4 Reduction of energy consumption	Page 17			
	302-5 Reductions in energy requirements of products and services		302-5	Information unavailable/incomplete	HDB does not have information on energy consumption across HDB towns.
Water Management					
GRI 3: Material Topics 2021	3-3 Management of material topics	Pages 23-24			
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	Pages 23-24			
	303-2 Management of water discharge-related impacts	Pages 23-24			
	303-3 Water withdrawal	Page 24			
	303-4 Water discharge		303-4	Information unavailable/incomplete	HDB has not started tracking quantitative data for this disclosure.
	303-5 Water consumption	Page 24			
Emissions					
GRI 3: Material Topics 2021	3-3 Management of material topics	Pages 18-20			
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	Page 20			
	305-2 Energy indirect (Scope 2) GHG emissions	Page 20			
	305-3 Other indirect (Scope 3) GHG emissions		305-3	Information unavailable/incomplete	HDB is still in the process of collecting data for this disclosure and endeavour to disclose Scope 3 emissions in future reports, with a focus on emissions from our contractors' activities.
	305-4 GHG emissions intensity		305-4	Not applicable	There are no organisation-specific metrics used across statutory boards of the Singapore government to calculate GHG emissions intensity.
	305-5 Reduction of GHG emissions	Pages 18-19			
	305-6 Emissions of ozone-depleting substances (ODS)		305-6	Not applicable	HDB does not track such data.
	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions		305-7	Not applicable	HDB does not track such data.

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	PAGE REFERENCE/ DIRECT ANSWERS	OMISSION		
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION
Waste Management					
GRI 3: Material Topics 2021	3-3 Management of material topics	Pages 21-22			
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	Pages 21-22			
	306-2 Management of significant waste-related impacts	Pages 21-22			
	306-3 Waste generated	Page 22			
	306-4 Waste diverted from disposal	Page 22			
	306-5 Waste directed to disposal	Page 22			
Sustainable Living					
GRI 3: Material Topics 2021	3-3 Management of material topics	Pages 30-33			
Occupational Health, Well-being and Safety					
GRI 3: Material Topics 2021	3-3 Management of material topics	Pages 40-42			
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	Pages 40-41			
	403-2 Hazard identification, risk assessment, and incident investigation	Pages 40-41			
	403-3 Occupational health services	Pages 40-41			
	403-4 Worker participation, consultation, and communication on occupational health and safety	Pages 40-42			
	403-5 Worker training on occupational health and safety	Pages 40-41			
	403-6 Promotion of worker health	Page 42			
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Pages 40-42			
	403-8 Workers covered by an occupational health and safety management system	Page 42 There are 0 cases of work related fatalities and high consequence injuries for all HDB employees.			
	403-9 Work-related injuries	Page 42			
	403-10 Work-related ill health		403-10	Information unavailable/incomplete	HDB does not currently track data for this requirement.
Employee Development					
GRI 3: Material Topics 2021	3-3 Management of material topics	Pages 43-44			
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	Page 45			
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	Pages 43-44			
	401-3 Parental leave	Page 46			
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	Page 46			
	404-2 Programs for upgrading employee skills and transition assistance programs	Page 44			
	404-3 Percentage of employees receiving regular performance and career development reviews	Page 45			

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	PAGE REFERENCE/ DIRECT ANSWERS	OMISSION		
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	Page 46			
	405-2 Ratio of basic salary and remuneration of women to men		405-2	Confidentiality constraints	HDB is not disclosing this information due to the sensitive nature of information.
GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	Page 45			
Community Engagement and Impact					
GRI 3: Material Topics 2021	3-3 Management of material topics	Pages 36-38			
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	Pages 36-38			
	413-2 Operations with significant actual and potential negative impacts on local communities		413-2	Not applicable	This is not applicable to our material topic.
Health, Well-being, and Safety of Our Residents					
GRI 3: Material Topics 2021	3-3 Management of material topics	Pages 34-35			
GRI 416: Customer Health and Safety 2016	416-1 Assessment of the health and safety impacts of product and service categories	Page 35 All HDB residential developments and commercial properties are assessed for improvement.			
	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	Page 35 There were 0 cases of non-compliance with health and safety impact of products and services.			
Service Quality					
GRI 3: Material Topics 2021	3-3 Management of material topics	Page 39			
Corporate Governance					
GRI 3: Material Topics 2021	3-3 Management of material topics	Page 49			
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	Page 50			
	205-2 Communication and training about anti-corruption policies and procedures	Page 50			
	205-3 Confirmed incidents of corruption and actions taken	Page 50 There were 0 incidents of non-compliance with laws and regulations in FY2023.			
GRI 206: Anti-competitive Behavior 2016	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Page 50			
Sustainable Supply Chain Management					
GRI 3: Material Topics 2021	3-3 Management of material topics	Pages 51-52			
GRI 204: Procurement Practices 2016	204-1 Proportion of spending on local suppliers	Page 53			

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	PAGE REFERENCE/ DIRECT ANSWERS	OMISSION		
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	Page 53			
	308-2 Negative environmental impacts in the supply chain and actions taken	Page 53			
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	Pages 51-53			
	414-2 Negative social impacts in the supply chain and actions taken	Page 53			
Data Privacy and Management					
GRI 3: Material Topics 2021	3-3 Management of material topics	Pages 54-55			
GRI 418: Customer Privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	Page 55 HDB maintained our record of 0 substantiated complaints regarding breaches of customer privacy or losses of customer data.			

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

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