

CFO TASKFORCE FOR THE SDGS

Blueprint for CFO Principles implementation

Industry Case Studies Real Estate



CITY
DEVELOPMENTS
LIMITED

Index

Introduction	2
Historical Drivers and Evaluation	3
Sustainability Disruption	7
Strategic Response	10
SDG Investments	13
Assessing Sustainability Outcomes and Financial Results	14

Introduction

City Developments Limited (CDL) is a leading global real estate company with a network spanning 112 locations in 29 countries and regions.

Listed on the Singapore Exchange, the Group is one of the largest companies by market capitalization. Its incomestable and geographically-diverse portfolio comprises residences, offices, hotels, serviced apartments, shopping malls and integrated developments.

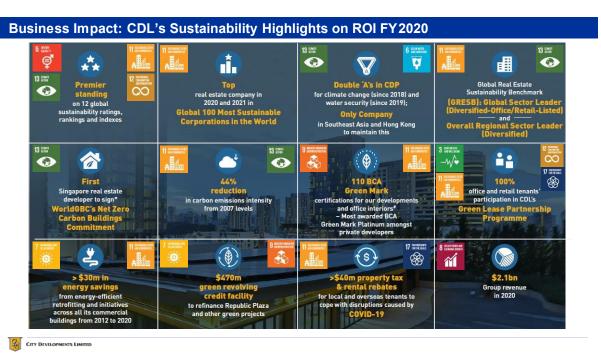
With a proven track record of over 55 years in real estate development, investment and management, the Group has developed over 47,000 homes and owns over 23 million square feet of gross floor area in residential, commercial and hospitality assets globally. Its diversified global land bank offers 3.5 million square feet of land area.

Along with its wholly-owned hotel subsidiary, Millennium & Copthorne Hotels Limited (M&C), the Group has 152 hotels and 44,000 rooms worldwide, many in key gateway cities.

Leveraging its deep expertise in developing and managing a diversified asset base, the Group is focused on enhancing the performance of its portfolio and strengthening its recurring income streams to deliver long-term sustainable value to shareholders. The Group is also developing a fund management business and targets to achieve US\$5 billion in Assets Under Management (AUM) by 2023.

In FY2020, CDL Group's revenue was S\$2.1 billion. Our H1 2021 revenue was S\$1.2 billion. At the end of FY2020, the Group has close to 9,400 employees globally across its headquarters and its subsidiaries.

For details on CDL's financial performance, please refer to CDL Annual Report 2020.



2 Historical Drivers and Evaluation

CDL began in a small, rented office in Amber Mansions on 7 September 1963, staffed by only eight employees, to acquire, develop and sell property. It went public in November 1963 and was listed on what was known then as the Malayan Stock Exchange (now known as the Singapore Stock Exchange).

In 1972, the Hong Leong Group acquired a controlling interest in CDL and embarked on a strategic diversification into investment properties and acquisitions. In the 1980s, CDL emerged as a major property developer in Singapore, and started to expand beyond Singapore in 1980s.

With a view to transform its business model to one that is aligned with global practice, CDL established its ethos of 'Conserving as we Construct' in 1995. It embraced greater care for the environment, internal and external stakeholders, and the community at large.

The built industry in Singapore took a momentous turn in 2005, when the Building and Construction Authority (BCA) launched the BCA Green Mark scheme. It was the first green building rating system in the tropics and sub-tropics, serving as a benchmark for evaluating environmental sustainability in buildings. It also formed the backbone for Singapore's first Green Building Masterplan developed in 2006 to encourage, enable and engage industry stakeholders to adopt new green buildings. The green building standards were raised in the next couple of masterplans. The third Green Building Masterplan in 2014 expanded its focus on engaging building tenants and occupants more actively to drive energy consumption behavioral change and to address the well-being of the people. The fourth and latest Singapore Green Building Masterplan was unveiled during the launch of the Singapore Green Plan in 2021. Also dubbed the "80-80-80 in 2030" plan, the three bold targets for the built sector are:

Target 1: Green 80% of buildings by 2030

Target 2: 80% of new buildings to be Super Low Energy (SLE)*

Target 3: 80% improvement in energy efficiency

* The Super Low Energy building certification represents the next wave of Singapore's green building movement. SLE buildings feature best-in-class energy efficiency, the use of onsite and offsite renewable energy and other intelligent energy management strategies.

The Singapore government announced its enhanced 2030 Nationally Determined Contribution and its Long-Term Low-Emissions Development Strategy to secure Singapore's future as a climate-resilient nation in 2021. Businesses are expected to play their part. The built industry contributes to almost 40% of energy-related global carbon emissions and 50% of global material use. The sector accounts for some 20% of Singapore's carbon emissions. CDL is committed to supporting both national and global ambitions and has intensified our climate actions. To make a quantum leap in green buildings and support global net zero goals, innovation is key.

Boosting Productivity through Smart Facility Management

Case Study 1: Integrated Building Management System

Technologies in the building industry, such as photovoltaic, efficient lighting, and smart energy management systems, are constantly evolving. Many of these are usually designed as either standalone or overlapping systems/services by different vendors and equipment suppliers. As such, this creates gaps in efficiency and convenience as these solutions are not truly integrated to achieve high energy efficiency and optimal building performance.

For instance, Facilities Management (FM) of a building involves many complex FM services delivery processes. To address the lack of a fully integrated holistic system that provides a comprehensive oversight of the entire service delivery chain, our subsidiary, CBM, has developed an in-house end-to-end FM solution named digiHUB. digiHUB is a smart enterprise platform that enables building owners to centrally and pro-actively manage their building assets for optimal performance with minimum resources. It integrates three key technological

advances in the digital age: 1) IoT Sensors, 2) Analytical Tools 3) Artificial Intelligence and Machine Learning, in order to synergies the different IT capabilities and revolutionize the way FM services are being delivered.

Open Connectivity

What is unique to the design of digiHUB is its open connectivity of the platform to other smart solutions. Technologies are advancing at such a rapid pace that building owners often find themselves having different levels of technology adoptions across their assets within the same building. As such, they are often not able to reap any form of synergy across their existing technology solutions as it is too costly to carry out a complete overhaul. digiHUB's design overcomes this aspect by providing a centralized gateway that is capable of adopting various forms of communication protocol used by the owners' existing technology solutions providers.

Application of AI to transit to Predictive Maintenance

While the predictive maintenance concept is not new to the FM industry, it has traditionally not been practiced due to the high intensity of manual work involved on a day-to-day basis. With the availability of IoT sensors, data pertaining to a wider set of parameters can now be gathered for analysis and trending using AI. The analyzed data together with regular inputs will generate algorithms as the basis for predicting equipment failures, thus changing the way maintenance will be carried out.

Creation of an Eco-System

Unlike conventional FM Systems which focuses more on tracking of internal work progresses, digiHUB creates an eco-system which enables property owners and FM service providers to interact with users (i.e. building tenants or visitors) and monitor contractors' work. The mobile application allows a seamless transmission of building complaints to building management team where the follow up and rectification of the problems can be promptly notified to the complainant. Should extra support be required, building management team(s) can also activate contractors through the system to offer all-round services to users. Moreover, the system's digital library empowers building management team to keep track of expiring licenses/permits, supplier contracts due for renewal and upcoming maintenance activities. All these new features are dedicatedly designed to enhance the FM operational efficiency and increase users' satisfaction.



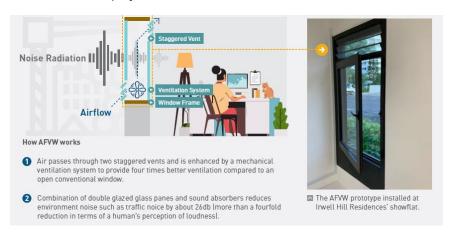
Investing in R&D and Technologies for Low-carbon and Climate-resilient Buildings

R&D and technology are fundamental in improving the quality of the built environment, and raising the standards of building performance and construction methods. In partnership with National University of Singapore (NUS), the NUS-CDL Smart Green Home and NUS-CDL Tropical Technologies Laboratory (NUS-CDL T^2 Lab) were opened in 2019 and 2018 respectively. Both laboratories will conduct studies on smart features, green building technologies, and design for sustainable living.

Case Study 2: Innovations by NUS-CDL Smart Green Home

(i) Acoustic Friendly Ventilation Window (AFVW)

The Acoustic Friendly Ventilation Window (AFVW) allows for air change efficiency of up to four times more than conventional windows, allowing fresh air in while reducing noise. The AFVW prototype was installed at Irwell Hill Residences' showflat in March 2021 for test bedding and system refinement as part of the NUS-CDL Smart Green Home collaboration. Based on the findings of the pilot, CDL will explore moving this technology into larger-scale implementation in our future projects.



(ii) Anti-microbial Disposable Film

The novel anti-microbial disposable adhesive film is the first locally-developed coating that protects high-touch areas against virus contamination and surface transmission. It uses nanotechnology solution that enables surfaces to be self-decontaminating by denaturing the surface-contaminated pathogens over four to six months. As part of system testing, these films have been installed at selected locations at CDL managed buildings.



Case Study 3: Collaborations with SERIS

In support of Singapore's long-term low-emissions development vision, CDL and Solar Energy Research Institute of Singapore (SERIS) jointly applied for a Solar Competitive Research Programme in 2020 to testbed high-power density Building-integrated photovoltaics (BIPV) modules at Central Mall. PPVC technology improves construction productivity and reduces cost, as it is deployed modularly at the construction site. Integration of BIPV modules with such prefabrication technology could greatly reduce the cost of BIPV integration.

Working with architects and building contractors, SERIS developed a "modular pod", i.e. a building block consisting of various prefabricated BIPV elements (panelized wall, monsoon windows, unitized wall and fixture wall) to mimic the different real-world building components. The modular pod has been installed, and the

various BIPV elements are monitored and evaluated for their indoor thermal and visual comfort as well as electrical performance. The development of such prefabricated BIPV elements would allow architects and developers to easily integrate BIPV into future buildings.



Diagram credit: SERIS, NUS
 Modular pod installed at Central Mall featuring modular
 RIPV blocks

In the same year, SERIS and CDL piloted a new generation of PV art wall (bifacial BIPV panels) at City Square Mall. These bifacial BIPV panels were integrated into the outdoor balustrades at level 6 of City Square Mall, serving both as an aesthetic feature and power generator. These BIPV panels serve as a testbed for more efficient PV installations.



Bifacial BIPV printed panels piloted at City Square Mall.

These R&D and pilot projects are conducted with a view for a larger scale application subject to feasibility studies. We will review the results with our partner and internal stakeholders at the end of the pilot and continue exploring opportunities to adopt these technologies in our new development projects and wholly-owned buildings that we manage. Such renewable energy initiatives are part of CDL's plan to rejuvenate our existing assets while working towards achieving our WorldGBC Net Zero Carbon Buildings Commitment.

The metrics to measure the success of listed property developers and asset managers like CDL has been financially-driven. Common metrics include the size of the company's land bank for property development, the number of units from residential developments rolled out within the year, the sales performance of new property launches (e.g. % units sold in the development), tenancy rates and revenue margins.

However, we have observed new metrics on the horizon which are sustainability driven. These include the number of certified green buildings, the carbon footprint of the company per revenue dollar earned, the extent of green features in a development, the setting of SBTi-validated carbon emissions reduction targets and indoor environmental quality of buildings.

Sustainability Disruption

To address changing stakeholder expectations, tackle emerging risks and future-proof our business, we have conducted annual materiality assessments since 2014. In 2020, we recognized the need to conduct a special assessment with a more extensive scope and depth to identify the shifting priorities and expectations of our stakeholders in the "new normal". To review CDL's business strategy for sustained growth, we engaged an independent external consultant to identify key Economic, Environmental, Social and Governance (EESG) issues that were deemed material by our key stakeholders.

We conducted an extensive macro scanning exercise to determine the list of material risks and opportunities relevant to CDL's business. We sent out online surveys and received responses from more than 250 stakeholders. They represent the stakeholder groups: employees, customers, builders and suppliers, investors and analysts, lenders, media, government and regulators, academics and industry experts and the community. Through interviews with selected senior-level stakeholders, we gained more insight into how COVID-19 impacted them, their perspectives on the relevance of sustainability to business resilience, and how CDL can remain competitive and sustainable in a post- COVID environment. The preliminary material issues were validated by CDL's Senior Management, followed by the approval of the Board Sustainability Committee.

Our 2020 materiality study revealed the reprioritization of CDL's top 2019 critical material ESG issues, where the top five priorities are now: occupational health, safety, and well-being; innovation; product/service quality and responsibility; economic contribution to society; and energy efficiency and adoption of renewables. As anticipated, COVID-19 has emphasized the importance of wellness, health, and safety, catapulting the "S" in "ESG" to the top of the list.

CDL's Top 8 Material ESG Issues

For the full listing of 15 material ESG issues, please refer to CDL ISR 2021, pg 23-27.

CDL's Top Material ESG Issues	Risks/Opportunities
Occupational Health, Safety and Well-being Supporting SDGs: 3 MODIFICATION 8 CONTINUES AND TRANSPORTER MINISTRANSPORTER MODIFICATION	Most activities at CDL's construction sites and managed buildings are carried out by our appointed contractors. Safety lapses by our contractors can expose CDL to reputation and regulatory risks. In the wake of COVID-19, safe management measures need to be effectively enforced to prevent community transmission at CDL's construction sites and managed buildings. Failure to enforce the measures may lead to regulatory fines and/or disruptions to CDL's operations. Anticipating and controlling workplace hazards that could impair CDL employees' physical and mental health and well-being is vital to CDL.
Innovation Supporting SDGs: 3 GOODHAIN 7 ATTOMMARAY 9 POINTY AND STRONG 11 SISTAMARETIES 13 G. MADIE 15 ON LAND	To build value in a pandemic-inflicted economy, it is important to innovate and evolve swiftly to changes. Innovative real estate business models, such as providing safe and healthy spaces as a service, are also gaining traction in response to COVID-19's impact on changing customer demands.
NSH UUDAS	By investing in green building technologies and adapting to new business models, CDL can ensure that

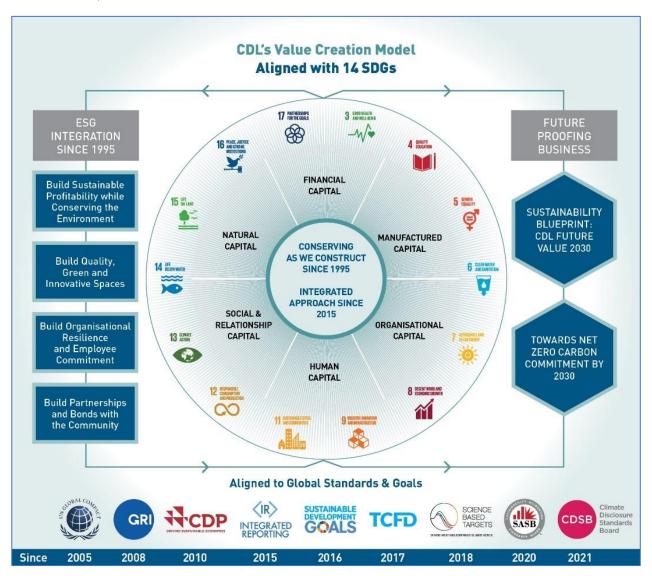
	our products and services operate at the highest efficiency and remain relevant and resilient against impending disruptions.	
Product/Service Quality and Responsibility Supporting SDGs: 9 RESTREMENTAL 11 SERMANDERS 12 RESTREMENT AND PRODUCT ON LAND AN	As the impact of COVID-19 on the construction sector has a cascading effect on the value chain, the relief provided by the Singapore government allowed CDL to focus on delivering safe and high-quality products and services, particularly for our residential and commercial projects. As a landlord, CDL also has the responsibility of ensuring a safe and healthy environment for all its building users, by preventing the spread of COVID-19.	
Economic Contribution to Society Supporting SDGs: 8 DECENTABRE AND THE PRINT PROTECTION OF THE PRINT PROTECTION OF THE PRINT PRINT PROTECTION OF THE PRINT	CDL's financial performance impacts the vested interests of our employees, shareholders, investors and supply chain.	
Energy Efficiency and Adoption of Renewables Supporting SDGs: 7 ATTORNAGE AND STREET MODIFIED TO STREET ADDRESS ADDRE	Globally, there is increased pressure for businesses to accelerate the transition towards a low-carbon economy. More stringent regulations on the energy performance of buildings and rising carbon tax are also expected, with the launch of the Singapore Green Plan 2030 in February 2021. As energy consumption contributes to a significant portion of CDL's building's operating expenses and carbon footprint, CDL needs to implement robust low-carbon strategies for our managed buildings, to maintain our leadership as a green developer.	
Stakeholder Impact and Partnerships Supporting SDGs: 4 (BUALITY 11 SEMANALIZIES 12 REPUBBRE 13 CHAILE 14 BERTWARER 15 UIR 17 PRINCESIES 17 PRINCESIES 18 CHAILE 18 CHAI	Building goodwill in the community provides CDL with a strong social license to operate. Through working with like-minded partners, CDL has pioneered partnerships that create multiplier effects on outreach and impact. Taking action during COVID-19 requires an understanding of how CDL's community and key stakeholders have been affected so that CDL can provide immediate responses, where relevant.	
Climate Resilience Supporting SDGs:	The built sector contributes to some 40% of global energy-related carbon emissions and is heavily reliant on natural resources for operations.	

7 ATERIORIES 9 ROSSISTAMANIA 13 ACTION	Regulatory transition risks such as carbon tax, water pricing and potentially stricter building design requirements will pose challenges to maintain profitability and sustained growth. Extreme weather patterns can lead to stranded assets and affect the well-being of building occupants. In the face of climate change, climate-proofing CDL's buildings for a low-carbon future is key to our growth strategy.
Healthy Buildings Supporting SDGs: 3 MONRIEARY PROBLEM 11 SECHMANICOUS ACCOUNTS ACC	Building occupants are paying more attention to attributes of a healthy environment in buildings that can contribute to their health, well-being and productivity. Buildings with poor IAQ and sanitation practices are susceptible to viral transmissions.

Since 2020, CDL has disclosed against the SASB Real Estate Sector Framework in our integrated sustainability report. The topics based on the SASB framework are energy management, water management, management of tenant sustainability impacts and climate change adaptation, which are aligned to CDL's material ESG issues. For details on our SASB disclosures, please refer to CDL ISR 2021, pg 104-107.

4 Strategic Response

CDL's value creation business model is developed over the last two decades, anchoring on our ethos of "Conserving as We Construct" established in 1995. The model encapsulates our role as a developer, an asset owner, and a corporate citizen, and guides us in creating sustained value for our business and our stakeholders. The CDL Future Value 2030 sustainability blueprint was first published in 2017. It sets goals for our integrated sustainability strategy towards 2030—a milestone year for sustainable development and the global climate agreement. Since July 2017, we also voluntarily publish an online <u>quarterly sustainability report</u> that updates stakeholders of our progress towards key goals and targets set under the sustainability blueprint. Out of the 17 SDGs, our value creation model is aligned with 14 relevant SDGs—3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17. These are aligned with the SDGs that CDL can impact on based on our material ESG issues.

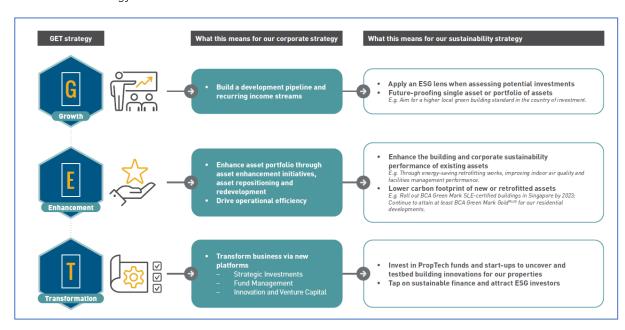


The CDL Future Value 2030 sustainability blueprint sets goals for our integrated sustainability strategy towards 2030. Supported by three goals - Building Sustainable Cities and Communities; Reducing Environmental Impact; and Ensuring Fair, Safe and Inclusive Workplace, it communicates CDL's 2030 ESG targets, interim annual targets and our progress against our interim annual targets.

Future Value 2030 Goals	2030 Targets	Interim 2020 Annual Targets	FY2020 Performance
Goal 1: Building Sustainable Cities and Communities	Achieve Green Mark certification for 90% of CDL owned and/ or managed buildings ¹	≥ 85%	○○● 85% achieved
1 1 1 1 1 1 1 1 1 1	Maintain 100% retail and office tenant participation in CDL Green Lease Partnership Programme	Achieve 100%	○○● 100% maintained
	Maintain high level of commitment to adopt innovations and technology of green buildings	Average of two innovations or new technology adoptions per year	Contactless eCall lift solution UVC disinfection robots to autonomously disinfect areas with high traffic and touch points
	Maintain high level of sustainability engagements and advocacy activities	Average of ≥ 36 engagement and advocacy initiatives and activities per quarter. Target revised due to COVID-19	O○● Average of 42 engagement and advocacy initiatives and activities per quarter
Goal 2: Reducing Environmental Impact	Achieve science-based target of reducing carbon emissions intensity by 59% from 2007 levels ²	40% reduction	○○● 44% reduction
2 mm, 2 mm, 3 m 5 m, 1 m	Asset Management (AM) – Office & Industrial ² :		
	Reduce energy use intensity by 45% from 2007 levels	Energy use intensity: 37% reduction	○○● Energy use intensity: 48% reduction
	Reduce water use intensity by 50% from 2007 levels ³	Water use intensity: 46% reduction	○○● Water use intensity: 69% reduction
	Reduce waste intensity by 16% from 2016 levels ^{3,4}	Waste intensity: 14% reduction	○○● Waste intensity: 27% reduction
	Asset Management (AM) – Retail ² :		<u> </u>
	Reduce energy use intensity by 18% from 2010 levels	Energy use intensity: 13% reduction	○○● Energy use intensity: 30% reduction
	Reduce water use intensity by 9 % from 2010 levels	Water use intensity: 8% reduction	○○● Water use intensity: 43% reduction
	Reduce waste intensity by 12% from 2016 levels ⁴	Waste intensity: 11% reduction	Waste intensity: 2% increase Waste intensity increased when normalised against footfall, which was significantly reduced due to COVID-19.

Future Value 2030 Goals	2030 Targets	Interim 2020 Annual Targets	FY2020 Performance
Goal 2: Reducing Environmental Impact 7 consists 12 constant 13 cause 15 title	Corporate Office:		
	Reduce energy use intensity by 31% from 2007 levels	Energy use intensity: 28% reduction	000
			Energy use intensity: 41% reduction
	Property Development (PD)5:		
	Achieve an energy use intensity of 95 kWh/m ²⁶	Energy use intensity: ≤105 kWh/m²	○○● Energy use intensity: 82.12 kWh/m²
	Achieve a water use intensity of 1.54 m³/m²6	Water use intensity: ≤1.75 m³/m²	○○● Water use intensity: 0.78 m³/m²
	Achieve a waste intensity of 40 kg/m ^{2 k.7}	Waste intensity: <50 kg/m²	Waste intensity: 53.66 kg/m² More waste was generated at Forest Woods during construction from 2017 to Nov 2020 due to modification works to meet regulatory compliance
	Ensure 100% of appointed suppliers® are certified by recognised EHS standards	≥85% of suppliers appointed by AM; 100% of main contractors and ≥85% of key consultants appointed by PD	93% of suppliers appointed by AM; 100% of main contractors and 100% of key consultants appointed by PD
	Reduce embodied carbon of building materials by 24% compared to their conventional equivalents	7% reduction for new projects awarded from 2018 onwards	Performance is on track to meet target. Data will b reported at end of 20229 when projects obtain TOF
Goal 3: Ensuring Fair, Safe and Inclusive Workplace	Maintain zero corruption and fraud incidents across CDL's operations	Zero	○○● Zero corruption and fraud incident
	Maintain zero fatality across CDL's operations and direct suppliers in Singapore	Zero	○○● Zero fatality
	Maintain zero occupational disease across CDL's operations and direct suppliers in Singapore	Zero	○○● Zero occupational disease
	Maintain a Major Injury Rate (Major IR) ¹⁰ of 10.0 across CDL's operations and direct suppliers in Singapore	≤ 17.5	○○● Zero Major IR
	Maintain a Minor Injury Rate (Minor IR) ¹⁰ of 250.0 across CDL's operations and direct suppliers in Singapore	≤ 361.0	225.3 Minor IR

In 2018, CDL Group embarked on the GET strategy—focussing on **G**rowth, Enhancement and Transformation, to renew and reposition our business, sharpen our value proposition and expand our asset portfolio to deliver performance improvements and superior outcomes. Our sustainability efforts are complementary and integrated within the **GET** strategy.



Our current ESG strategy has positioned us well in the race to a low-carbon economy. Anchored on four key pillars – Integration, Innovation, Investment and Impact, our value creation business model provides a solid foundation to mitigate and adapt to unprecedented climate and health threats. We integrate our ESG strategies into our business, organization, and governance structure at all levels through integrated reporting frameworks and approaches. In addition, we adapt and implement various innovative technologies and solutions in our push to accelerate green buildings. Our longstanding investments in R&D and in our stakeholders help us to engage the wider community in sustainability practices. Finally, we amplify positive economic, social, and environmental impact by reaching out to our value chain of stakeholders to create long-term value for the business and the environment.

CDL's ESG Pillars & Deliverables>> Advancing Business Resilience & Sustained Growth

INTEGRATION

Integrated into our business, organisation & governance structure at all levels. Integrated reporting framework and approach.

INNOVATION & ADAPTATION

Technologies & Solutions to Accelerate Green Building, a Low Carbon & Resilient Economy.

INVESTMENT

Growing ESG Investing & Sustainable Financing Reward Green & Responsible Businesses. Accelerates Climate Action, Innovation & Communities.

IMPACT

Reaching out to Value Chain & Larger Ecosystem of Stakeholders.

Creating Positive Impact and Long -term Value for Business & the Environment.

Prompt Reporting.

Decarbonisation

- Pledge for WorldGBC Net Zero Carbon Buildings Commitment
- Joined UNGC's "Business Ambition for 1.5°C" campaign
- Green Buildings & Renewable Energy

Digitalisation & Innovation

 Green Building Innovation & Technology to design, build and manage >> lower carbon footprint for new and existing assets

Disclosure & Communication

- Efficient Tracking, Analysis & Reporting vs Goals/Targets
 - Prompt & Transparent ESG disclosure



We are committed to achieving three deliverables based on our ESG strategy: 'Decarbonisation', 'Digitalization & Innovation' and 'Disclosure & Communication'. Under the Paris Agreement, businesses are encouraged to adopt SBTi-validated carbon reduction targets. As the first Singapore real estate company to set SBTi-validated carbon reduction targets in 2018, CDL has advanced the search and application of technology and innovative solutions to raise higher operational efficiency in the global race to net zero. With greater expectations for clean, safe, and low-carbon spaces, CDL has applied digital and artificial intelligent solutions to design, build and manage our buildings, with decarbonisation as a top priority.

At our core, we have a strong foundation to adjust and adapt to change and to turn ambition into action by supporting the global transition to net zero buildings and a low-carbon future. In deepening our ambitious decarbonisation goals, we are reviewing our SBTi-validated GHG reduction targets to align with a 1.5° C warmer scenario-compliant business model. This complements CDL's pledge of support to the Business Ambition for 1.5° C led by the UNGC, SBTi and We Mean Business coalition, of which CDL was one of the pioneering 87 companies to sign on to the campaign in September 2019. In 2021, CDL has become the first real estate developer in Singapore and the first real estate conglomerate in Southeast Asia to sign the WorldGBC's Net Zero Carbon Buildings Commitment, pledging to achieving net zero operational carbon emissions by 2030 and advocating for all buildings to be net zero operational carbon by 2050. As a signatory to the WorldGBC's Net Zero Carbon Buildings Commitment, CDL is also a member of EP100, pledging to improve its energy productivity by deploying energy-efficient technologies and practices.

5 SDG Investments

The real estate industry is an inherently carbon intensive industry. Following CDL's WorldGBC pledge for net zero operational carbon for our new and existing wholly owned assets and developments by 2030 under our direct operational and management control, we have mapped out the key pathways where we must invest in, to decarbonize our business to transition to a zero-carbon economy,

- Land-scarce Singapore is limited when it comes to our choices of renewable energy. With solar energy as the most promising in Singapore, we strive for onsite generation of solar energy, where possible, and the procurement of Renewable Energy Certificates (RECs), to help us minimize our carbon footprint.
- We will engage our value chain to join the race to zero and increase their level of understanding and adoption of global climate action e.g. SBTi goal setting, World Green Building Council's Advancing Net Zero commitment.
- We aim to explore the adoption of technologies such as carbon capture utilization and storage (CCUS), as well as hydrogen fuel cell to replace power sources with high emissions.
- On-site generators for construction sites are still reliant on diesel as fuel. CDL is working with our main contractors to trial alternative fuels that emit less carbon emissions at our project sites. We anticipate larger scale implementations in the future.
- The construction industry is dependent on concrete and steel. Low carbon alternatives are emerging but not effective for large scale implementation yet. CDL has been actively investing and working with collaboration partners to source and research on more sustainable building materials. E.g. CDL and Temasek Polytechnic embarked on a research project to repurpose mixed plastic waste as sand replacement in lightweight concrete for non-structural building applications.

Besides the construction phase, the management of our buildings' carbon footprint over their life span is critical as well. CDL invests in R&D that can help to achieve environmental efficiencies in our building operations. In end-July 2021, CDL achieved the discount on interest rate of our SDG Innovation Loan through an innovation project, digiHUB, which had a successful testbed at Republic Plaza, CDL's flagship building. Developed by our subsidiary, CBM Pte Ltd, digiHUB is a smart enterprise platform that enables building owners to centrally and proactively manage their building assets for optimal performance with minimum resources. It provides insight on key areas of asset/facilities management based on efficient data collation, tracking and analytics. During the Proof of Concept at Republic Plaza, digiHUB was proven to have met the KPI of up to 20% (on site manpower time savings).

Assessing Sustainability Outcomes and Financial Results

Secured discount for SDG Innovation Loan

In 2019, CDL secured a S\$250m SDG Innovation Loan in the form of a three-year revolving credit facility provided by DBS Bank Ltd. This is a first-of-its-kind concept that CDL has pioneered for a sustainability- linked loan to accelerate innovative solutions that have a positive impact on SDGs. The loan supports SDG 9: Industry, Innovation and Infrastructure, SDG 11: Sustainable Cities and Communities and SDG 13: Climate Action. It complements global sustainability trends and answers the Singapore government's call for climate action, smart cities, green innovation as well as sustainable development and financing.

CDL is eligible for a discount on the interest rate of the loan when it achieves sustainability-related performance targets mutually agreed with DBS on innovations that contribute positively to the SDGs. To qualify, CDL is required to be the first in Singapore to adopt and apply such innovations to its projects. An authoritative expert or expert panel will be appointed to independently assess and endorse the innovative nature of CDL's proposal against market norms. In addition, CDL must remain listed on at least one leading global sustainability index.

In end-July 2021, with DBS's endorsement, CDL achieved the discount on interest rate through submission of an innovation project, digiHUB, which had a successful testbed at Republic Plaza, CDL's flagship building. digiHUB is a smart enterprise platform that enables building owners to centrally and proactively manage their building assets for optimal performance with minimum resources. It provides insight on key areas of asset/facilities management based on efficient data collation, tracking and analytics. During the Proof of Concept at Republic Plaza, digiHUB was proven to have met the KPI of up to 20% (on site manpower time savings). It was also recognized by Infocomm Media Development Authority as an innovation under its Smart Estates Initiative (SEI).

Quantifying Environmental Benefits

Through energy-efficient retrofitting and initiatives across CDL's commercial buildings from 2012-2020, more than \$30m energy savings were reaped. Aligned with our material issue "Climate resilience", CDL achieved a 44% reduction in carbon emissions intensity from 2007 levels, on track to achieving our SBTi target of 59%.

Corporate Governance Mechanisms

Under CDL's Sustainable Finance Framework, the process for project evaluation and selection requires joint approval from CDL's Chief Sustainability Officer and Group Chief Financial Officer so that sustainability and financial perspectives are considered.

Strong endorsement by 13 Global Sustainability Ratings, Rankings, and Indices

As COVID-19 has illustrated, companies with long-term ESG-centric business strategies, as well as robust and transparent sustainability reporting, are in a prime position to weather disruptive storms. What gets measured gets managed—our experience in ESG disclosure and sustainability for almost two decades has helped us identify gaps and improve our ESG performance, allowing us to attract fast-growing ESG funds and resulting in CDL's inclusion in 13 prominent global ratings, rankings, and indexes.

