CITY DEVELOPMENTS
LIMITED
GREEN BOND

FRAMEWORK OVERVIEW AND SECOND OPINION BY SUSTAINALYTICS

April 5th, 2017
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1. INTRODUCTION

City Developments Limited (CDL) is planning to issue multiple green bonds that aim to fund and refinance the retrofit of Republic Plaza, its flagship building in Singapore. CDL has engaged Sustainalytics to provide a second opinion on its green bond framework and the bonds’ environmental credentials. As part of this engagement, Sustainalytics held conversations with various members of CDL’s management team to understand the sustainability impact of their business processes and planned use of proceeds for the green bond framework. Sustainalytics also reviewed relevant public and internal documents. This document contains two sections: Framework Overview – summary of CDL’s Green Bond framework; and Sustainalytics’ Opinion – an opinion on the framework.

2. OVERVIEW OF ISSUER

City Developments Limited operates as a listed property arm of Hong Leong Group Singapore. CDL and its subsidiaries engage in the development and investment of real estate properties, and ownership and management of hotels, as well as the provision of hospitality solutions. Building on its track record of over 50 years in real estate development, investment and management, CDL has developed growth platforms in five key international markets – China, United Kingdom (UK), United States (US), Japan and Australia. The company is also leveraging its stable of prime assets and growing its real estate funds management business. It currently has over $3.5 billion in funds under management. CDL has operations in Asia, Europe, North America, New Zealand, and Australia. The company was founded in 1963 and is headquartered in Singapore, Singapore.

CDL states that sustainability has been integrated into its vision and mission to create business value and achieve long-term growth for the company. CDL states a belief that an embedded commitment to sustainability complements the company’s business strategy. The company states that its commitment to sustainability is reflected in its vision of “conserving as it constructs”. To further its commitment to sustainability, and to contribute to Singapore’s greenhouse gas (GHG) emissions reduction goals, CDL is planning to issue multiple green bonds to fund and refinance the retrofit of its flagship building, Republic Plaza and other possible green initiatives.
3. FRAMEWORK OVERVIEW

This section presents CDL’s green bond framework for the use of proceeds, the process for project selection, the management of proceeds, and reporting.

3.1 Use of Proceeds

Proceeds from the first bond issued under this framework will be used to refinance retrofit projects as mentioned in point 1. Proceeds from all future issuances will be used to finance new retrofit projects as mentioned in point 2.

For the current issuance, the proceeds of the green bond will be allocated towards:

1. **Repayment of S$100 million loan extended by CDL to CDL Properties (CDLP), which financed retrofit and upgrading projects for Republic Plaza**
   A sample list of recent retrofit projects from years 2010-2015 that were funded through the loan, and the estimated expenditure per project is available in Appendix 1.

For future issuances, the proceeds of the green bond will be allocated towards:

2. **Funding projects for new retrofits of Republic Plaza**
   A description of potential new projects that may be funded is available in Appendix 2.

All funded and refinanced projects must meet the eligibility criteria outlined below.

Eligibility Criteria

To be eligible for the green bond proceeds, the projects funded must meet one or more of the following eligibility criteria:

1. Expenditures related to the installation or upgrade of equipment that reduces energy consumption of Republic Plaza;

2. Expenditures related to the installation or upgrade of equipment that reduces water consumption of Republic Plaza;

3. Expenditures related to the installation or upgrade of equipment that reduces food and general waste from Republic Plaza.

Context: In its 2016 sustainability report, CDL states that it considers carbon emissions, energy use, water stewardship, and waste and resource management as four key environmental issues that create measurable and sustainable value for its business and stakeholders. Accordingly, CDL maintains the following targets that are aligned with the eligibility criteria of its green bond framework:

- Reduce carbon emissions intensity by 22% by 2020 and 25% by 2030 (from baseline year 2007)
- Reduce energy intensity by 22% by 2020 and 25% by 2030 (from baseline year 2007)
- Reduce water intensity by 22% by 2020 and 25% by 2030 (from baseline year 2007)
3.2 Project Evaluation and Selection Process

Selection process for current issuance
Eligible projects below S$1 million will be selected for refinancing through bond proceeds by the CEO and CFO. Projects over S$1 million will be selected by the Tender Committee, which is made up of the Group General Manager, CFO, and CEO.

Selection process for future green bond issuances
The selection of eligible projects will be overseen by the Property and Facilities Management and Sustainability departments of CDL.

All projects selected for funding through bond proceeds will be selected based on compliance with the eligibility criteria. Additional factors such as applicability to Green Mark certification, environmental impact, size, and tenant needs may also be considered.

3.3 Management of Proceeds

Management of proceeds for current issuance
The first bond issuance under this framework will be issued by CDLP, a subsidiary of CDL. The proceeds from this issuance will be used to repay a S$100 million loan from CDL that was used to finance eligible retrofit projects for Republic Plaza. All proceeds will be allocated towards loan payment immediately at issuance.

Management of proceeds for future issuances
For any future issuances based on this framework, allocation of proceeds to eligible projects will be managed and tracked by Group Finance Accounts using a spreadsheet. CDL has disclosed that proceeds from future green bonds will be temporarily held in cash by CDL, until allocated to eligible projects.

3.4 Reporting

Allocation Reporting
CDL has committed to disclosing allocation of proceeds publicly on a project portfolio basis. CDL has also committed to verification of annual proceeds by its auditor in appointment that year. For the first issuance, given that all proceeds will be allocated immediately, allocation reporting will be disclosed all at once at the end of 2017. For future issuances, allocation reporting will be publicly disclosed annually, until full allocation of the bond.

Impact Reporting
CDL will report on the impact of the bond by disclosing energy saved, water saved, or tons of waste reduced on a project portfolio basis. CDL will continue to report on impact in this format annually, throughout the term of the bond. Impact reporting will be disclosed publicly, together with allocation reporting.
4 SUSTAINALYTICS’ OPINION

Importance of carbon emissions, energy, and water management in CDL’s sustainability strategy
Sustainalytics’ research assesses CDL as an industry leader in ESG performance (see Appendix 3). CDL’s strategic approach for sustainability identifies six key sustainability aspects as material to their business-Environment, Employee Relations, Corporate Governance and Risk Management, Stakeholder Relations, and Community. CDL’s environmental commitment, including its policies and strategies, is informed by this identification of environment as a materially important sustainability issue for the company.

CDL has a strong overall environmental commitment, as seen by its environmental policy and targets. Sustainalytics is of the opinion that the strength of CDL’s policy is demonstrated through (i) the approval of its policy by the board of directors (ii) commitment to consult with stakeholders on environmental issues (iii) and commitment to report regularly on established targets.

With respect to targets, the company has set specific objectives for the period 2016-2020, and long-term goals for 2030 that align with the UN Sustainable Development Goals (SDGs). It lists measurable targets for its set objectives, and reports on performance in each year. CDL senior management is obliged to monitor the overall progress towards targets. Sustainalytics is of the opinion that reporting on targets and performance is indicative of the priority the company assigns to achieving results. Specifically, CDL’s targets in the areas of carbon emissions, energy management, and water stewardship indicate the importance of these issues in CDL’s sustainability strategy, and demonstrates alignment of the green bond framework with CDL’s strategic priorities. Details on CDL targets in the areas of emissions reduction, energy efficiency, and water use, and reported performance against these targets are provided in Table 1.

Table 1: CDL Targets on Carbon Emissions, Energy Management, and Water Stewardship

<table>
<thead>
<tr>
<th>Area</th>
<th>Target</th>
<th>Reported performance against target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon emissions</td>
<td>Reduce carbon emissions intensity by 22% by 2020 and 25% by 2030 (from 2007 baseline)</td>
<td>Reduced carbon emissions intensity by 19% in 2015 (from 2007 baseline)</td>
</tr>
<tr>
<td>Energy management</td>
<td>Reduce energy intensity by 22% by 2020 and 25% by 2030 (from 2007 baseline)</td>
<td>Reduced energy use intensity by 27% in 2015 (from 2007 baseline)</td>
</tr>
<tr>
<td>Water Stewardship</td>
<td>Reduce water intensity by 22% by 2020 and 25% by 2030 (from 2007 baseline)</td>
<td>Reduced water use intensity by 17% in 2015 (from 2007 baseline)</td>
</tr>
</tbody>
</table>

Given CDL’s integration of its environmental policy in organizational actions through reporting on targets, and the alignment of CDL’s green bond framework with its overall environmental strategy, Sustainalytics is of the opinion that CDL is well positioned to issue green bonds.
Contribution of use of proceeds to Republic Plaza’s Green Mark Platinum certification

CDL has a track record of constructing and managing green buildings. As of the end of 2016, CDL had 87 Green Mark certified developments and office interiors awarded by the Building and Construction Authority. Sustainalytics’ ESG research also shows that the company seeks Green Mark Gold PLUS certification for all new developments, which is beyond the mandatory Green Mark certification.

Specifically, with regards to Republic Plaza, CDL’s retrofit projects have resulted in the building receiving a Green Mark Platinum award. Green Mark is a sustainable building certification scheme launched by Singapore’s Building and Construction Authority (BCA) in 2005. The Green Mark certification is offered on four levels - Certified, Gold, Gold PLUS and Platinum. BCA assigns a level of Green Mark certification based on the sustainability performance of buildings in five key areas - (i) Energy efficiency, (ii) Water efficiency, (iii) Environmental protection, (iv) Indoor environmental quality, and (v) Green features and innovation. The minimum performance requirements for Green Mark Platinum buildings are detailed in Appendix 4. Additionally, Green Mark buildings certified at all levels are required to be re-assessed every three years to maintain the Green Mark status.

Sustainalytics is of the opinion that using bond proceeds for eligible retrofit projects will contribute to achieving and maintaining the energy and water efficiency requirements of a Green Mark Platinum certification.

In addition, CDL actively engages with its tenants so as to share best practices and encourage them to take up environmentally friendly habits through various initiatives such as the Green Lease Partnership Program. For example, the program aims to provide support to commercial tenants in reducing their energy consumption and environmental footprint. To enable tenants to better control and manage their energy usage, a real-time digital energy and carbon footprint monitoring portal was launched in partnership with Tuas Power. As an incentive to encourage greater energy conservation amongst tenants, CDL further introduced a 1% electricity rebate for commercial tenants who attain 2% savings over the previous quarter’s bill. CDL sets a target of 100% tenant participation for this program. Sustainalytics is of the opinion that such additional tenant focussed initiatives are demonstrative of CDL’s commitment to promote greater environmental responsibility in the areas of carbon emissions and energy management.

Importance of green real estate in climate change mitigating in Singapore

As a low-lying island state of 719.2 km² with no natural resources, Singapore has to accommodate not only housing and commercial centres, but also power plants, reservoirs, air/seaports and industries within city boundaries. Singapore has one of the highest population densities in the world (7,797 persons per km²).¹

Singapore is also alternative energy disadvantaged. The relatively flat land, low wind speeds and lack of geothermal resources limit Singapore’s access to alternative energy options such as hydro-electric, wind or geothermal power. Given Singapore’s small land area and high population density, the risks of

¹ http://www.singstat.gov.sg/statistics/latest-data#16
nuclear energy currently outweigh the potential benefits. Due to the same reasons, although Singapore is located in the tropics, it is difficult to harness solar energy in a significant way. Singapore therefore is dependent on fossil fuels.

Despite this dependence, in 2009, Singapore pledged to reduce emissions by 16% from business-as-usual (BAU) levels by 2020. In 2015, building on its earlier commitment, Singapore pledged to reduce its emissions intensity (CO₂e/SSGDP) by 36% from 2005 levels by 2030, and stabilize emissions with the aim of peaking around 2030. To reach the targets, Singapore made a policy choice to reduce its greenhouse gas (GHG) footprint by switching from fuel oil to natural gas for electricity generation. Today, over 95% of electricity is generated from natural gas, which also means that the capacity to further reduce emissions by substituting fuel oil with natural gas is reaching the limit.

Therefore, energy conservation becomes top priority, which was also highlighted in Singapore’s INDC after the COP21. With buildings (including households) accounting for 49% of the total electricity consumption at end-use level in Singapore (and 23% of GHGs), promoting energy efficiency in buildings is an effective way to achieve energy conservation and help address climate change. The Climate Action Plan, announced by Singapore’s National Climate Change Secretariat (NCCS) in 2015, sets up a series of strategic plans and policies to improve energy efficiency in the building environment. The government aims at achieving BCA Green Mark standards for 80% of buildings by 2030.

Given this scenario, it is clear that real estate companies have a large role to play in Singapore in mitigating climate change. CDL’s efforts to improve energy efficiencies of its properties is a step in the right direction and strongly in line with the government of Singapore’s plans.

Importance of water management in Singapore
Singapore is officially classified by the World Resources Institute as one of the countries with the “highest water stress” in the world. Current water demand in Singapore is about 430 million gallons a day, of which 45% is for domestic use. By 2060 water demand will almost double from today’s level, estimated by Singapore’s National Water Agency (PUB). However, Singapore has no freshwater lakes or aquifers. Currently over 40% of Singapore’s water supply is imported from the Johor River, the main river in the Malaysia state of Johor; 20% is contributed by the advanced rainwater capture systems (Local Catchment); 30% added by grey water reuses (NEWater) and 10% produced by desalination. In addition to the lack of natural water resources, climate change imposes significant risks on Singapore’s water supply, especially due to the intensity of weather variability. Periods of drought can reduce the

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4 The BCA Green Mark is a green building rating system to evaluate a building for its environmental impact and performance, launched in January 2005 by the Building and Construction Authority (BCA) under the Ministry of National Development. It is also endorsed and supported by the National Environment Agency. The assessment identifies the specific energy efficient and environment-friendly features and practices incorporated in the building projects. Points are awarded for incorporating energy efficient and environment-friendly features which are better than normal practice. Depending on the overall assessment and point scoring, the building will be certified to have met the BCA Green Mark Platinum, Gold™, Gold or Certified rating. Certified Green Mark buildings are required to be re-assessed every three years to maintain the Green Mark status. New buildings certified will subsequently be re-assessed under the existing buildings criteria.
5 http://www.wri.org/sites/default/files/aqueduct_country_rankings_010914.pdf
6 https://www.pub.gov.sg/watersupply/singaporewaterstory
reliability of water supply from the Johor River and local catchments, while sudden episodes of intense rainfall could overwhelm the city’s drainage system and lead to flash floods. Moreover, water usage in the Johor state of Malaysia is increasing substantially because of the fast industrialization and the rapid expanding of plantations for agricultural commodities such as palm oil and rubber. In fact, the dry conditions of 2015-2016 have had led to serious water shortages.

Singapore's current per capita domestic water consumption is 151 litres per day. The target is to lower it to 147 litres by 2020 and 140 litres by 2030. By 2060, Singapore aims to be self-reliant with respect to water. The government has been expanding the water catchment area but there is a limit — hence the emphasis has been on reusing water (NEWater) and desalination. These unconventional sources of water are expected to represent 55% and 30% of the supply respectively by 2060. The problem is that both processes are extremely energy intensive (therefore sensitive to energy price and emission caps). Therefore, water demand management becomes an important complementary method to the development of unconventional water sources in order to achieve not only sustainability but also water self-sufficiency. Given the significant importance of domestic water consumption, it is clear that real estate companies have a large role to play in Singapore in relieving water stress and adapting to climate change. CDL’s efforts to improve the resource efficiency, including water, of its properties will help to reduce the domestic consumption and therefore augment the supply.

Alignment with Green Bond Principles 2016
Sustainalytics has determined that CDL’s green bond aligns with the four pillars of the ICMA Green Bond Principles 2016. Please see Appendix 5 for details.

Climate Bonds Certification
CDL has disclosed to Sustainalytics that it will also apply for a Climate Bonds Certification for its inaugural green bond. CDL intends to certify its bond against the Climate Bonds Low Carbon Buildings standard.

Conclusion
Overall, CDL’s green bond framework is transparent and provides clarity regarding the outcomes of the Green Bond investments. Furthermore, the green bond framework is in line with CDL’s overall environmental strategy and the climate change mitigation priorities of Singapore. Sustainalytics considers CDL’s green bond framework to be robust and credible.

**APPENDICES**

**Appendix 1: Sample Eligible Retrofit Projects Financed through Loan**

List of sample eligible retrofit projects for Republic Plaza that will be refinanced through current bond issuance.

<table>
<thead>
<tr>
<th>Year of work</th>
<th>Description / Main Objectives Achieved</th>
<th>Energy/ Water Savings (Per Year)</th>
<th>Estimated Savings (Per Year)</th>
<th>Capex Amount Spent</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>Toilet upgrading: raised level of comfort and hygiene for tenants, and increased water efficiency.</td>
<td>10,255 m³ of water</td>
<td>$12,000</td>
<td>$7,198,299</td>
</tr>
<tr>
<td>2010</td>
<td>Lift interior lights: replacement of halogen lights with energy efficient lights that emit less heat. User comfort raised and energy usage reduced.</td>
<td>27,000 kWh</td>
<td>$5,400</td>
<td>$180,000</td>
</tr>
<tr>
<td>2011</td>
<td>Toilet lights upgrade: infra-red motion sensors installed in toilets. Reduced energy usage effectively.</td>
<td>171,000 kWh</td>
<td>$34,200</td>
<td>$150,000</td>
</tr>
<tr>
<td>2012</td>
<td>Retrofitting of chiller plants (Phase 1): significantly raised energy efficiency of air conditioning of the building.</td>
<td>3,100,000 kWh</td>
<td>$620,000</td>
<td>$4,433,100</td>
</tr>
<tr>
<td>2012</td>
<td>Lobby lighting at Level 1 &amp; 2 at Tower 1: small scaled upgrading but some energy savings achieved.</td>
<td>10,000 kWh</td>
<td>$2,000</td>
<td>$290,000</td>
</tr>
<tr>
<td>2012</td>
<td>Common areas lighting upgrading: converted lighting to T5 and raised energy efficiency substantially.</td>
<td>289,926 kWh</td>
<td>$57,985</td>
<td>$77,655</td>
</tr>
<tr>
<td>2013</td>
<td>Atrium lighting upgrading: raise level of comfort for visitors and tenants, and increased energy.</td>
<td>25,112 kWh</td>
<td>$10,924</td>
<td>$48,955</td>
</tr>
<tr>
<td>Year</td>
<td>Initiative Description</td>
<td>Savings</td>
<td>Cost of Project</td>
<td>Total Cost</td>
</tr>
<tr>
<td>------</td>
<td>-----------------------------------------------------------------------------------------</td>
<td>---------</td>
<td>-----------------</td>
<td>-------------</td>
</tr>
<tr>
<td>2013</td>
<td>Carpark lighting upgrading: adoption of light emitting diode (LED) lights with motion sensor significantly raised energy efficiency.</td>
<td>169,585 kWh</td>
<td>$33,917</td>
<td>$153,506</td>
</tr>
<tr>
<td>2013</td>
<td>Staircase lighting: motion detector installed for all staircases and replacement of T8 lighting to T5. Both initiatives contributed to tremendous energy savings.</td>
<td>172,299 kWh</td>
<td>$34,460</td>
<td>$8,855</td>
</tr>
<tr>
<td>2015</td>
<td>Upgrading of lighting to T5 fittings for offices.</td>
<td>196,923 kWh</td>
<td>$39,384</td>
<td>$58,095</td>
</tr>
<tr>
<td>2015</td>
<td>Retrofitting of chiller plants (Phase 2) for air conditioning: further raised energy efficiency.</td>
<td>1,800,000 kWh</td>
<td>$360,000</td>
<td>$2,972,000</td>
</tr>
<tr>
<td>2015</td>
<td>Façade crown lighting from neon to LED: raised energy efficiency and gave a more modern and dynamic look to the building.</td>
<td>44,388 kWh</td>
<td>$8,877</td>
<td>$725,250</td>
</tr>
<tr>
<td></td>
<td>Recurrent savings of $1,219,147 per year</td>
<td></td>
<td></td>
<td>$16,295,715</td>
</tr>
</tbody>
</table>
Appendix 2: Description of Potential New Eligible Projects

Description of eligible retrofit projects for Republic Plaza that may be financed through future bond proceeds.

<table>
<thead>
<tr>
<th>Eligibility Criteria</th>
<th>Project Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy Efficiency</td>
<td>Modernization of Vertical Transportation</td>
<td>CDL is looking into upgrading Republic Plaza’s lift system, which will improve traffic performance, reduce waiting time and improve energy efficiency.</td>
</tr>
<tr>
<td></td>
<td>Low-E Window Glass Panels</td>
<td>The effectiveness and feasibility of Low-Emissive (Low-E) window glass for solar control in enhancing energy efficiency, improving comfort and reducing air-conditioning costs is currently being researched. Based on the product specification, this glass panel can be easily installed over the existing windows panels. Energy savings of the panels are estimated to be 5 - 10% of air-conditioning operating costs.</td>
</tr>
</tbody>
</table>
Appendix 3: Sustainalytics’ ESG Assessment of CDL

<table>
<thead>
<tr>
<th>Overall performance</th>
<th>Overall ESG Score</th>
<th>Relative Position</th>
<th>Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>90</td>
<td>Leader</td>
<td>100th</td>
</tr>
<tr>
<td>Environment</td>
<td>97</td>
<td>Leader</td>
<td></td>
</tr>
<tr>
<td></td>
<td>78</td>
<td>Leader</td>
<td></td>
</tr>
<tr>
<td>Governance</td>
<td>94</td>
<td>Leader</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 4: Requirements for BCA Green Mark Platinum Certification

**POINT ALLOCATION – BCA Green Mark for Existing Non-Residential Buildings (Version 3.0)**

<table>
<thead>
<tr>
<th>Category</th>
<th>Point Allocations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ENERGY EFFICIENCY</strong></td>
<td></td>
</tr>
<tr>
<td>Part 1 – Energy Efficiency</td>
<td></td>
</tr>
<tr>
<td>ENRB 1-1 Thermal Performance of Building Envelope</td>
<td>5</td>
</tr>
<tr>
<td>ENRB 1-2 Air Conditioning System (applicable to air-conditioned areas)</td>
<td>32</td>
</tr>
<tr>
<td>ENRB 1-3 Natural Ventilation/ Mechanical Ventilation</td>
<td>13</td>
</tr>
<tr>
<td>ENRB 1-4 Artificial Lighting</td>
<td></td>
</tr>
<tr>
<td>ENRB 1-5 Ventilation in carparks</td>
<td>4</td>
</tr>
<tr>
<td>ENRB 1-6 Ventilation in Common Areas</td>
<td>5</td>
</tr>
<tr>
<td>ENRB 1-7 Lifts and Escalators</td>
<td>2</td>
</tr>
<tr>
<td>ENRB 1-8 Energy Efficient Practices &amp; Features</td>
<td>12</td>
</tr>
<tr>
<td>ENRB 1-9 Energy Policy &amp; Management</td>
<td>1</td>
</tr>
<tr>
<td>ENRB 1-10 Renewable Energy</td>
<td>15</td>
</tr>
<tr>
<td><strong>Category Score for Part 1 – Energy Efficiency</strong></td>
<td><strong>89</strong></td>
</tr>
<tr>
<td><strong>OTHER GREEN REQUIREMENTS</strong></td>
<td></td>
</tr>
<tr>
<td>Part 2 – Water Efficiency</td>
<td></td>
</tr>
<tr>
<td>ENRB 2-1 Water Monitoring</td>
<td>4</td>
</tr>
<tr>
<td>ENRB 2-2 Water Efficient Fittings</td>
<td>12</td>
</tr>
<tr>
<td>ENRB 2-3 Alternative Water Sources</td>
<td>3</td>
</tr>
<tr>
<td>ENRB 2-4 Water Efficiency Improvement Plans</td>
<td>1</td>
</tr>
<tr>
<td>ENRB 2-5 Irrigation System and Landscaping</td>
<td>2</td>
</tr>
<tr>
<td>ENRB 2-6 Cooling Towers</td>
<td>2</td>
</tr>
<tr>
<td><strong>Category Score for Part 2 – Water Efficiency</strong></td>
<td><strong>24</strong></td>
</tr>
<tr>
<td>Part 3 – Sustainable Operation &amp; Management</td>
<td></td>
</tr>
<tr>
<td>ENRB 3-1 Building Operation &amp; Maintenance</td>
<td>4</td>
</tr>
<tr>
<td>ENRB 3-2 Post Occupancy Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>ENRB 3-3 Waste Management</td>
<td>7</td>
</tr>
<tr>
<td>ENRB 3-4 Sustainable Products</td>
<td>6</td>
</tr>
<tr>
<td>ENRB 3-5 Greenery</td>
<td>10</td>
</tr>
<tr>
<td>ENRB 3-6 Environmental Protection</td>
<td>3</td>
</tr>
<tr>
<td>ENRB 3-7 Green Transport</td>
<td>4</td>
</tr>
<tr>
<td><strong>Category Score for Part 3 – Sustainable Operation and Management</strong></td>
<td><strong>39</strong></td>
</tr>
<tr>
<td>Part 4 – Indoor Environmental Quality</td>
<td></td>
</tr>
<tr>
<td>ENRB 4-1 Indoor Air Quality Performance</td>
<td>8</td>
</tr>
<tr>
<td>ENRB 4-2 Indoor Air Pollutants</td>
<td>2</td>
</tr>
<tr>
<td>ENRB 4-3 Lighting Quality</td>
<td>5</td>
</tr>
<tr>
<td>ENRB 4-4 Thermal Comfort</td>
<td>2</td>
</tr>
<tr>
<td>ENRB 4-5 Internal Noise Level</td>
<td>1</td>
</tr>
<tr>
<td><strong>Category Score for Part 4 – Indoor Environmental Quality</strong></td>
<td><strong>18</strong></td>
</tr>
<tr>
<td>Part 5 – Other Green Features</td>
<td></td>
</tr>
<tr>
<td>ENRB 5-1 Green Features &amp; Innovations</td>
<td>10</td>
</tr>
<tr>
<td><strong>Category Score for Part 5 – Other Green Features</strong></td>
<td><strong>10</strong></td>
</tr>
<tr>
<td><strong>Category Score for Other Green Requirements</strong></td>
<td><strong>91</strong></td>
</tr>
<tr>
<td><strong>Green Mark Score</strong></td>
<td>180</td>
</tr>
</tbody>
</table>
Green Mark Award Rating

BCA Green Mark Award Rating and Pre-requisite Requirements

<table>
<thead>
<tr>
<th>Green Mark Score</th>
<th>Green Mark Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>90 and above</td>
<td>Green Mark Platinum</td>
</tr>
<tr>
<td>85 to &lt;90</td>
<td>Green Mark Gold™</td>
</tr>
<tr>
<td>75 to &lt;85</td>
<td>Green Mark Gold</td>
</tr>
<tr>
<td>50 to &lt;75</td>
<td>Green Mark Certified</td>
</tr>
</tbody>
</table>

Pre-requisite Requirements for Existing Non-residential Building Criteria

PART 1 - ENERGY EFFICIENCY

1. ENERGY EFFICIENCY

<table>
<thead>
<tr>
<th>Green Mark Rating</th>
<th>Minimum points achievement from Part 1 – Energy Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green Mark Certified</td>
<td>30 points</td>
</tr>
<tr>
<td>Green Mark Gold</td>
<td>35 points</td>
</tr>
<tr>
<td>Green Mark Gold™</td>
<td>40 points</td>
</tr>
<tr>
<td>Green Mark Platinum</td>
<td>45 points</td>
</tr>
</tbody>
</table>

2. MINIMUM SYSTEMS' EFFICIENCY

Minimum Design System Efficiency/Operating System Efficiency (DSE/OSE)

(i) For buildings using Water-Cooled Chilled-Water Plant

<table>
<thead>
<tr>
<th>Green Mark Rating</th>
<th>Building Cooling Load (RT)</th>
<th>Efficiency (kW/RT)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt; 500</td>
<td>≥ 500</td>
</tr>
<tr>
<td>Certified</td>
<td>0.85</td>
<td>0.75</td>
</tr>
<tr>
<td>Gold</td>
<td>0.80</td>
<td>0.70</td>
</tr>
<tr>
<td>Gold™</td>
<td>0.75</td>
<td>0.68</td>
</tr>
<tr>
<td>Platinum</td>
<td>0.70</td>
<td>0.65</td>
</tr>
</tbody>
</table>

(ii) For Buildings using Air Cooled Chilled-water Plant or Unitary Air-Conditioner

<table>
<thead>
<tr>
<th>Green Mark Rating</th>
<th>Building Cooling Load (RT)</th>
<th>Efficiency (kW/RT)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt; 500</td>
<td>≥ 500</td>
</tr>
<tr>
<td>Certified</td>
<td>1.1</td>
<td>1.0</td>
</tr>
<tr>
<td>Gold</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Gold™</td>
<td>0.85</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Platinum</td>
<td>0.78</td>
<td></td>
</tr>
</tbody>
</table>

For building with building cooling load of more than 500 RT, the use of air cooled central chilled-water plant or other unitary air-conditioners are not applicable for Gold and higher ratings.

Note: The performance of the overall air-conditioning system for the building is based on the Operating System Efficiency (OSE) of the system during the normal building operating hours as defined below:

- **Office Building:**
  - Monday to Friday: 9am to 6pm
  - Retail Mall:
    - Monday to Sunday: 10am to 9pm
  - Institutional:
    - Monday to Friday: 9am to 5pm
- **Hotel and Hospital:**
  - 24-hour
- **Industrial and Other Building Types:**
  - To be determined based on the operating hours
3. CHILLER PLANT M&V INSTRUMENTATION

(i) Provision of permanent measuring instruments for monitoring of water-cooled chilled-water system and air-cooled chilled water system operating system efficiency. The installed instrumentation shall have the capability to calculate resultant plant operating system efficiency (i.e. kW/RT) within 5% of its true value and in accordance with ASHRAE Guide 22 and AHRI 550/590. Heat balance test for water-cooled chilled-water system is required for verification of the accuracy of the M&V instrumentation.

4. NATURAL VENTILATION AREA (only applicable to occupied areas, excluding circulation, plant rooms and transit areas):

Pre requisite requirement for Platinum - At least 75% of natural ventilated areas with effective cross ventilation with North and South facing window opening

**PART 4 - INDOOR ENVIRONMENTAL QUALITY**

1. IAQ Audit - to conduct an full IAQ audit three yearly that complies with NEA’s Guidelines for Good Indoor Air Quality in Office Premises or SS564:2009 Code of Practice for “Indoor air quality for air-conditioned buildings” (4 points) [ENRB 4-1(a)]
Appendix 5: Adherence to Green Bond Principles 2016

Green Bond/Green Bond Programme External Review Form

Green Bond / Green Bond Programme
External Review Form

Section 1. Basic Information

Issuer name: City Developments Limited (CDL)
Green Bond ISIN or Issuer Green Bond Framework Name, if applicable:
Review provider’s name: Sustainalytics
Completion date of this form: April 5, 2017
Publication date of review publication:

Section 2. Review overview

SCOPE OF REVIEW

The review assessed the following elements and confirmed their alignment with the GBPs:
☒ Use of Proceeds
☒ Management of Proceeds
☒ Process for Project Evaluation and Selection
☒ Reporting

ROLE(S) OF REVIEW PROVIDER
☒ Consultancy (incl. 2nd opinion)
☐ Verification
☐ Other (please specify):
☐ Certification
☐ Rating

Note: In case of multiple reviews / different providers, please provide separate forms for each review.

EXECUTIVE SUMMARY OF REVIEW and/or LINK TO FULL REVIEW (if applicable)
Section 3. Detailed review

1. USE OF PROCEEDS

Overall comment on section (if applicable):
Sustainalytics is of the opinion that the eligibility criteria described in this framework have clear environmental impact as they result in energy efficiency, water efficiency, and reduction in food waste. Sustainalytics considers the eligibility criteria for the use of proceeds to be credible. Based on its review, Sustainalytics is of the opinion that by funding eligible projects, CDL will contribute to creating environmental impact in areas that are most contextually relevant in Singapore: greenhouse gas (GHG) emissions from real estate, and water resource efficiency.

Use of proceeds categories as per GBP:

☐ Renewable energy
☐ Pollution prevention and control
☐ Terrestrial and aquatic biodiversity conservation
☒ Sustainable water management
☐ Eco-efficient products, production technologies and processes
☐ Unknown at issuance but currently expected to conform with GBP categories, or other eligible areas not yet stated in GBPs

☒ Energy efficiency
☐ Sustainable management of living natural resources
☐ Clean transportation
☐ Climate change adaptation
☒ Other (please specify): waste management by reduction of waste

If applicable please specify the environmental taxonomy, if other than GBPs:
2. PROCESS FOR PROJECT EVALUATION AND SELECTION

**Overall comment on section (if applicable):**
Projects are selected for funding through bond proceeds based on compliance with the eligibility criteria. Additionally, Projects may also be evaluated on other factors such as applicability to Green Mark certification, environmental impact, size, and tenant needs. Sustainalytics is of the opinion that the process to select eligible projects for funding through green bond issuances is transparent and robust.

**Evaluation and selection**
- Defined and transparent criteria for projects eligible for Green Bond proceeds
- Summary criteria for project evaluation and selection publicly available
- Documented process to determine that projects fit within defined categories
- Other (please specify):

**Information on Responsibilities and Accountability**
- Evaluation / Selection criteria subject to external advice or verification
- In-house assessment
- Other (please specify):

3. MANAGEMENT OF PROCEEDS

**Overall comment on section (if applicable):**
CDL’s Group Finance Accounts division has sufficient oversight over the management of proceeds. CDL has established an internal process to track the disbursement of proceeds to eligible projects; this is in line with industry norms.

**Tracking of proceeds:**
- Green Bond proceeds segregated or tracked by the issuer in a systematic manner
- Disclosure of intended types of temporary investment instruments for unallocated proceeds
- Other (please specify):

**Additional disclosure:**
- Allocations to future investments only
- Allocation to individual disbursements
- Disclosure of portfolio balance of unallocated proceeds
- Allocations to both existing and future investments
- Allocation to a portfolio of disbursements
- Other (please specify):
4. REPORTING

Overall comment on section (if applicable):
For this current issuance, all proceeds will be allocated at issuance. All allocation reporting for this green bond issuance will be done on a project portfolio basis at the end of the year. For all future issuances, CDL will annually disclose allocation reporting on a project portfolio basis publicly. CDL has also committed to annually reporting the impact of use of proceeds on a project portfolio basis. Impact reporting will also be disclosed publicly. This is in line with industry norms.

Use of proceeds reporting:

☐ Project-by-project
☐ Linkage to individual bond(s)
☒ On a project portfolio basis
☐ Other (please specify):

Information reported:

☒ Allocated amounts
☐ Other (please specify):

Frequency:

☒ Annual
☐ Semi-annual
☐ Other (please specify): Allocation reporting for current issuance will take place at the end of the year of issuance. Allocation reporting for future green bond issuances will take place annually throughout the term of the bond, or until proceeds are allocated.

Impact reporting:

☐ Project-by-project
☐ Linkage to individual bond(s)
☒ On a project portfolio basis
☐ Other (please specify):

Frequency:

☐ Annual
☒ Semi-annual
☐ Other (please specify):

Information reported (expected or ex-post):

☐ GHG Emissions / Savings
☒ Energy Savings
☐ Other ESG indicators (please specify):
Water savings, tons of waste reduced
Means of Disclosure

☐ Information published in financial report
☐ Information published in sustainability report
☐ Information published in ad hoc documents
☒ Reporting reviewed *(if yes, please specify which parts of the reporting are subject to external review):*
Allocation reporting subject to external verification

Where appropriate, please specify name and date of publication in the useful links section.

USEFUL LINKS

BCA Green Mark certification website:

SPECIFY OTHER EXTERNAL REVIEWS AVAILABLE, IF APPROPRIATE

Type(s) of Review provided:

☐ Consultancy (incl. 2nd opinion)
☒ Certification: Climate Bonds Initiative certification
☐ Verification / Audit: Verification for CBI certification
☐ Rating
☐ Other *(please specify):*

Review provider(s): KPMG

Date of publication:

ABOUT ROLE(S) OF REVIEW PROVIDERS AS DEFINED BY THE GBP

(i) Consultant Review: An issuer can seek advice from consultants and/or institutions with recognized expertise in environmental sustainability or other aspects of the issuance of a Green Bond, such as the establishment/review of an issuer’s Green Bond framework. “Second opinions” may fall into this category.

(ii) Verification: An issuer can have its Green Bond, associated Green Bond framework, or underlying assets independently verified by qualified parties, such as auditors. In contrast to certification, verification may focus on alignment with internal standards or claims made by the issuer. Evaluation of the environmentally sustainable features of underlying assets may be termed verification and may reference external criteria.

(iii) Certification: An issuer can have its Green Bond or associated Green Bond framework or Use of Proceeds certified against an external green assessment standard. An assessment standard defines criteria, and alignment with such criteria is tested by qualified third parties / certifiers.

(iv) Rating: An issuer can have its Green Bond or associated Green Bond framework rated by qualified third parties, such as specialised research providers or rating agencies. Green Bond ratings are separate from an issuer’s ESG rating as they typically apply to individual securities or Green Bond frameworks / programmes.
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SUSTAINALYTICS

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