



Bauhinia ILBS 3 Limited Pre-issuance Impact Report

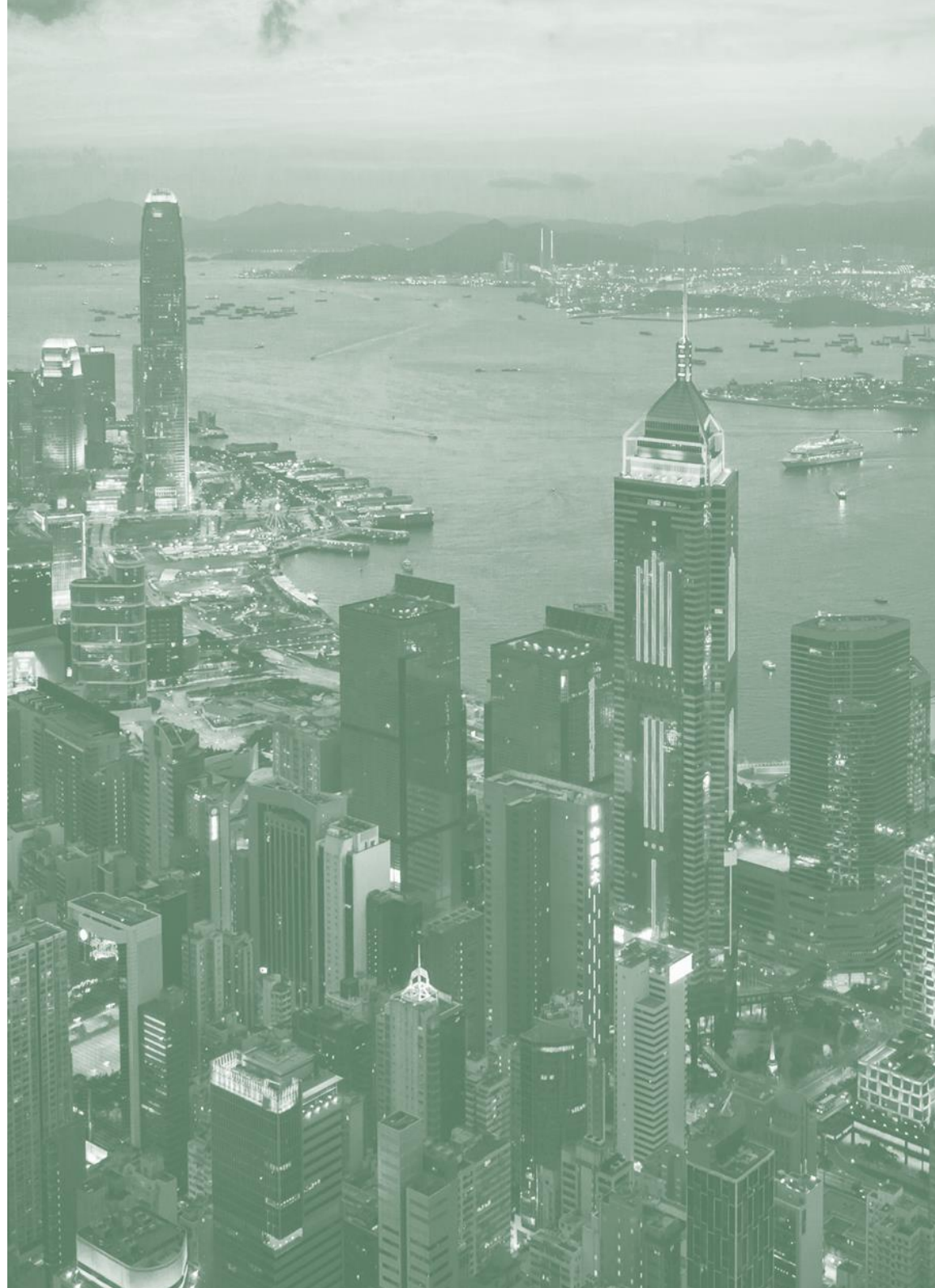
For the sustainable assets included in the Sustainability Tranche
of the Bauhinia ILBS 3 Limited Note issuance

Final Impact Assessment Dated 17 October 2025

Elaborated for



香港按揭證券有限公司
The Hong Kong Mortgage Corporation Limited





ERM – Project Consultant

ERM is the world's largest advisory firm focused solely on sustainability, offering expertise across business and finance, operating in more than 70 jurisdictions with over 8,000 employees worldwide.

Our diverse global team of experts works with the world's leading organisations to help them set clear sustainability targets, measure progress, and operationalise strategy through deep implementation and business transformation.

Within its Sustainable Finance practice, ERM has evaluated over 300 financial instruments for sustainability, including green, social, and sustainable bonds, sustainable investment funds, and goal-linked instruments.

With more than 50 years of experience, our ability to integrate sustainability solutions and our depth and breadth of technical knowledge are why organisations choose to partner with us as their



AECOM – ERM's Technical Advisor

ERM has engaged AECOM as a sub-consultant to provide technical advisory on the topics of data center and water treatment and supply.

Standing at the forefront of water infrastructure, AECOM offers an extensive suite of services that covers wastewater treatment, water supply, desalination, and ecosystem management. Our expertise is demonstrated through the design and management of state-of-the-art water treatment facilities, where cutting-edge technologies such as membrane filtration and UV oxidation are implemented to advance water reuse, stormwater management, and flood resilience.

In the data center arena, AECOM delivers world-class, resilient, and efficient facility solutions tailored to the evolving demands of hyperscale, colocation, and telecommunication clients. Our comprehensive approach spans the entire project lifecycle – from meticulous site selection and innovative design through to construction and operational support. By integrating sustainable practices, we not only minimise energy consumption but also enhance operational efficiency and

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Abbreviations

CO ₂ e	Carbon Dioxide Equivalent
EF	Emission Factor
FWA	Fixed Wired Access
GEF	Grid Emission Factor
GHG	Greenhouse Gas
HKMC	The Hong Kong Mortgage Corporation Limited
ICMA	International Capital Market Association
ICT	Information and Communication Technology
ILBS	Infrastructure Loan-Backed Securities
Issuer	Bauhinia ILBS 3 Limited
OM	Operating Margin
PV	Photovoltaic
SEHK	The Stock Exchange of Hong Kong Limited
SPO	Second Party Opinion
SPV	Special Purpose Vehicle
UAE	United Arab Emirates

1. Introduction

1.1 About this Report

This report was prepared by Environmental Resources Management (S) Pte Ltd (“ERM”) to provide details of the notes to be issued by Bauhinia ILBS 3 Limited and the composition of its Sustainable Asset Portfolio as of the date of issuance, which comprises companies and projects from several countries that are eligible and in line with The Hong Kong Mortgage Corporation Limited’s (“HKMC”) Social, Green and Sustainability Financing Framework (“Framework”), which was first published by HKMC in September 2022 and further updated in August 2025, available [here](#).

The Bauhinia ILBS 3 issuance and its sustainability tranche are managed in accordance with the Framework, which is a structured approach that outlines how HKMC can utilise financial instruments like bonds or loans to support projects and initiatives that deliver social, environmental, and sustainability benefits. The Framework includes criteria for selecting eligible projects, guidelines for managing the proceeds, and methods for reporting on the impact and outcomes of these projects. Its purpose is to ensure that the proceeds raised are used in a transparent and accountable manner to achieve positive social and environmental impacts.

All asset-backed securities via public issuance and private placement issued under the Framework are referred to as Sustainable Financing Instruments. Both the Framework and the infrastructure loan-backed securities (ILBS) issuance have been externally reviewed by reputable ESG consultancy firms, that have issued a Second Party Opinion (SPO) to attest credibility and impact.

1.2 About The Hong Kong Mortgage Corporation Limited

The Hong Kong Mortgage Corporation Limited (“HKMC” or “The Group”), incorporated since March 1997, is wholly owned by the Government of the Hong Kong Special Administrative Region of the People’s Republic of China (the “HKSAR Government”) through the Exchange Fund. The Group has three wholly owned subsidiaries: HKMC Insurance Limited, HKMC Annuity Limited and HKMC Mortgage Management Limited. HKMC’s mission is to promote stability of the banking sector, wider home ownership, development of the local debt market and development of retirement planning market in Hong Kong.

The Group is committed to operating and carrying on business in a responsible and sustainable manner while applying high standards of corporate governance. This commitment is embedded in the way it operates, serves its customers, accounts for its stakeholders, cares for its staff, manages its impact on the environment and contributes to its community. To formulate and implement its ESG strategy, the Group has established the ESG Committee (ESGC) to lead the Group’s sustainability efforts and oversee ESG management as part of the Group’s overall business strategy. The ESGC is responsible for reviewing, approving, and updating the Group’s ESG strategy, policies, and plans, monitoring the ESG trends and issues that are material to the Group and overseeing the implementation of the Group’s ESG strategy. It will also evaluate the performance of the Group in achieving its ESG-related goals and targets.

2. Bauhinia ILBS 3 Limited's Structure

2.1 The HKMC's Social, Green and Sustainability Financing Framework

As a public sector entity and one of the major debt issuers in Hong Kong, the HKMC launched the Framework in September 2022 (updated in August 2025), as an extended effort for the HKMC to expand and implement its sustainability strategy as an integral part of its business strategy. HKMC uses the Framework as the basis to structure and issue green, social and/or sustainability bond(s) and asset-backed securities via public issuance and private placement, to support the growth of assets or projects with environmental and/or social benefits.

HKMC structured its Framework following the four components of the ICMA Principles, a set of guidelines developed by ICMA to promote the integrity and efficiency of the international capital markets. They include the following key guidelines:

- **Green Bond Principles (GBP)¹:** Guidelines for the issuance of green bonds, which are financial instruments intended to fund projects with clear environmental benefits.
- **Social Bond Principles (SBP)²:** Guidelines for the issuance of social bonds, which aim to finance projects with positive social outcomes, such as poverty reduction or public infrastructure improvements.
- **Sustainability Bond Guidelines (SBG)³:** Guidelines for the issuance of sustainability bonds, which combine both environmental and social benefits in their project funding.

These guidelines aim to provide transparency, disclosure, and reporting standards to support the credibility and comparability of green, social, and sustainability bonds. The key principles are:

- **Use of Proceeds:** This refers to how the funds raised from the bond issuance will be allocated. For green, social, or sustainability bonds, the proceeds must be dedicated to projects that provide clear environmental or social benefits, such as renewable energy projects, affordable housing, or healthcare facilities, or to corporate financing, pure players which derive at least 90% of revenue from eligible sustainable activities under the Framework.
- **Process for Project Evaluation and Selection:** This involves the criteria and methods used to identify and select eligible projects for funding.
- **Management of Proceeds:** This pertains to how the raised funds are tracked and managed to ensure they are used exclusively for their intended purposes.
- **Reporting:** This involves providing regular updates on the use of proceeds and the status of funded projects.

¹ [Green-Bond-Principles-GBP-June-2025.pdf](#)

² [Social-Bond-Principles-SBP-June-2025.pdf](#)

³ [Sustainability-Bond-Guidelines-June-2021-140621.pdf](#)

Exclusionary Criteria

In any case, the following assets shall not be eligible for the Use of Proceeds of HKMC's Sustainable Financing Instruments:

- Nuclear energy generation related assets and projects
- Weapons, gambling, and casinos
- Business activities which are prohibited by laws and regulations in HKSAR
- In addition, projects under the Infrastructure Financing and Securitisation Division will be further subject to IFS Division Environmental and Social Exclusion List, available at the website of the HKMC – IFS Division.

2.2 The Issuance

Bauhinia ILBS 3 Limited ("Issuer") is a Hong Kong-incorporated special purpose vehicle (SPV). The Issuer shall acquire a portfolio of loans, bonds and/or notes from HKMC and/or commercial banks and its notes will be listed on The Stock Exchange of Hong Kong Limited (SEHK).

As the sponsor of this transaction, HKMC sourced and constituted a loan portfolio comprising infrastructure projects across geographies and sectors, including renewable power generation, telecommunications, data centre portfolios and water supply infrastructure, primarily denominated in USD. As part of the issuance, the SPV is expecting to create a sustainability tranche backed by seven sustainable assets, all operational and aligned to the sponsor's Framework.

In addition, HKMC successfully completed two ILBS issuances in May 2023 and September 2024. Each issuance included a sustainability tranche backed by sustainable, green and social assets based on the Framework. Second-Party Opinions and Impact Reports have been issued by reputable ESG consultancy firms to attest to the credibility and positive impact of the sustainability tranches.

To provide information regarding the potential impact of the sustainable assets and enable investors to incorporate this impact data into their decision-making alongside other customary considerations, HKMC has commissioned ERM to assist with the Pre-issuance Impact Report for the Bauhinia ILBS 3 sustainability tranche. This will cover:

- **Impact metrics:** Selection and preparation of relevant impact metrics, establishing the baseline and methodology.
- **Standards:** Alignment with the market practices (as recommended by International Capital Market Association and/or any other standards widely adopted by sustainable bond investors).
- Provide **calculation methodologies** to the Issuer to compute the environmental impact of its green assets and the social impact of its social assets.

An overview of the selected green and social impact metrics is also provided in Table 1.

Table 1: Overview of the Sustainable Asset Portfolio and Key Impact Indicators, as of the Date of Issuance

Asset Type	Eligible Category	Borrower	Eligibility Portion	Asset (Sector)	% of Bauhinia 3 Sustainability Tranche	Location	Key Impact Indicators	Performance Results	UN SDG Alignment
Green	Renewable Energy	Renewable A	100%	Solar PV Power Generation	44.9%	UAE	(a) Installed renewable energy capacity (MW) (b) Estimated annual avoided emissions (tCO ₂ e)	(a) 200 MW (b) 271,992 tCO ₂ e	
		Renewable B	100%			Bangladesh		(a) 50 MW (b) 56,044 tCO ₂ e	
		Adani Hybrid Energy Jaisalmer Three Limited	100%	Solar/Wind Hybrid Power Generation	15.0%	India		(a) 300 MW Solar / 76 MW Wind (b) 982,362 tCO ₂ e	
	Green Buildings	Data Centre A	100%	Data Centre Portfolio	25.3%	Malaysia	Operational power usage effectiveness (PUE)	1.33	
		Data Centre B	97.1% ⁴			Europe		1.28	
Social	Access to Affordable Basic Infrastructure and Services	Ascend Telecom Infrastructure Private Limited	100%	Telecommunication Towers (ICT)	6.5%	India	(a) Tower density in underserved regions (b) Network uptime	(a) 1.24 towers/100,000 inhabitants (b) >99.9%	
Sustainable	Sustainable Water and Wastewater Management	Silver Dragon Water Supply Group Limited	100%	Water Supply and Sanitation Infrastructure	8.3%	China	(a) Power consumption (b) Non-revenue water ratio (c) Amount of clean water supplied	(a) 253 kWh/1,000m ³ (b) 14.10% (c) 1.5 billion m ³ /year	

While the aforementioned assets are expected to yield positive outcomes, our review of the sustainability reports – alongside due diligence documentation, risk assessments, ESG monitoring reports, and independent assurance statements – has not revealed any evidence indicating that these projects would cause significant harm to the environment or surrounding communities. Each project presents mitigation measures addressing environmental and social risks.

⁴ Prorated by MW (IT Capacity) – the portfolio comprises data centres that are fully operational, ramping up, under construction and under planning. Certain data centres in the portfolio were not included in the eligible portion of the loan.

3. Use of Proceeds

The following sections showcase examples of the projects financed by the issuance, provide details on the methodology used to estimate the impact of the Issuer’s underlying green and social assets, and present the respective performance results.

3.1 Renewable Energy Assets

The Issuer committed around **USD 89 million** on financing three renewable energy projects.

Note on the selected impact metric, according to ERM methodology: Avoided GHG Emissions

Renewable energy generation is a low GHG emissions energy source and has an environmental benefit in replacing energy generated from fossil fuel-based power generation. Energy generated from renewable sources increases clean-source electricity supply, which will displace fossil fuel sources and reduce the emissions intensity of the electricity grid. Therefore, avoided GHG emissions are the most material environmental impact of renewable energy projects.

For an operational renewable energy project, the annual avoided GHG emissions are estimated using the total power output multiplied by a consolidated operating margin (OM) electricity emission factor (EF) specific to each project's geographical location. These estimates assume that the energy generated by the projects replaces an equivalent capacity generated by the existing local power plants (with most of which are fossil fuel-powered), thus offsetting the associated GHG emissions. For the calculation of the indicator, the power grid's energy mix of the country of each project was considered.

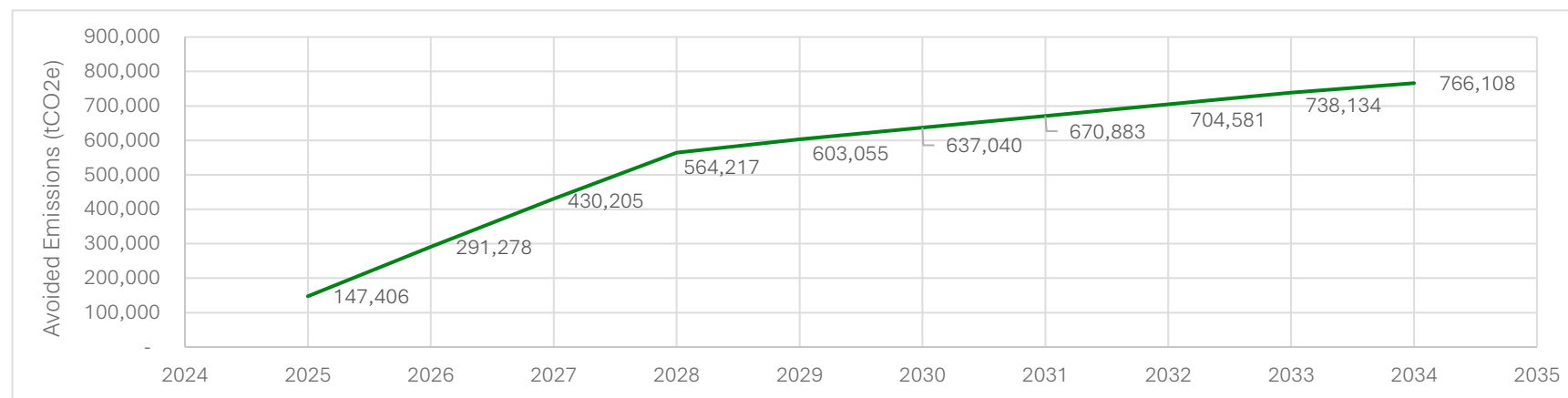
As the Issuer is not the sole lender in these assets, an attribution factor was applied to the total avoided emissions to determine the Issuer’s share of avoided emissions. The attribution factor is measured in terms of the Issuer's percentage share of total debt and equity financing. The major data inputs needed to calculate the avoided GHG emissions are summarised in the Appendix document.

Table 2 below details the main characteristics and information of the renewable energy assets.

Table 2: Main Characteristics and Performance Results of the Renewable Energy Assets Financed by the Issuer

Borrower	Type	Country	Status	Installed Capacity (MW)	Annual Production (MWh)	Grid Emission Factor (tCO ₂ e/MWh)	Estimated Annual Avoided Emissions (tCO ₂ e)	Attribution Factor (%)	Avoided Emissions attributed to the Issuer (tCO ₂ e)
Renewable A	Solar	UAE	Operational	200 MW	489,194 (April 2024 – March 2025)	0.556 (2021)	271,992	17.33%	47,136
Renewable B	Solar	Bangladesh	Operational	50 MW	90,393 (April 2024 – March 2025)	0.62 (2021-2022)	56,044	20.28%	11,366
Adani Hybrid Energy Jaisalmer Three Limited	Solar/Wind Hybrid	India	Operational	300 MW Solar / 76 MW Wind	1,021,166 (April 2024 – March 2025)	0.962 ⁵ (2023-2024)	982,362	9.05%	88,904
TOTAL					1,600,753		1,310,398		147,406

Figure 1 shows the projected cumulative avoided emissions of the renewable energy assets in the sustainability tranche attributed to the Issuer, estimated until loan maturity.

Figure 1: Projected Cumulative Avoided Emissions Attributed to the Issuer⁶

⁵ In line with the approach recommended by the Partnership for Carbon Accounting Financials (PCAF), the **operating margin grid emission factor** (including cross-border power transfers) has been adopted in this impact report. It should be noted that the Borrower may use the weighted average emission factor of the Indian grid to estimate avoided emissions in its own disclosure of ESG information.

⁶ The projection is estimated by the Issuer. A constant attribution factor has been adopted in calculating the cumulative avoided emissions. When the debt amortises, assuming that the equity value remains constant, the attribution factor might decrease, leading to a lower avoided emission value. Nevertheless, due to the lack of data in estimating future equity values, a constant attribution factor is used in the calculations.

CASE STUDY 1 – Overview of Renewable Energy Projects

Solar Photovoltaic Plant of Renewable A

The Project is a 200 MW greenfield solar photovoltaic Independent Power Project (IPP), in United Arab Emirates (UAE). **The initiative aimed to expand the region’s renewable energy capacity while setting new benchmarks for cost efficiency in utility-scale solar power. Utilising fixed-tilt solar technology, the plant was designed to optimise performance under UAE’s climatic conditions.**

The project reached commercial operation in 2017 and was successfully connected to the national grid, delivering clean energy to consumers. At the time of commissioning, Renewable A achieved a record-breaking tariff, positioning it as the world’s most cost-competitive utility-scale solar IPP. This milestone not only demonstrated the viability of low-cost solar energy in the region but also set a precedent for future renewable energy projects globally.

The project supports the UAE’s long-term energy strategy. By 2030, the country plans to triple its renewable capacity and reach 36% clean energy, with a strong focus on solar and wind. These efforts are part of a broader commitment to achieve net-zero emissions by 2050, with clean sources expected to make up half of the total energy supply.

Environmental and Social Mitigation Programmes:

- Noise reduction by limiting construction to daytime hours and using low-noise equipment.
- Waste management plan including segregation, recycling, and disposal via licensed contractors.
- Soil and water protection through safe storage of hazardous materials and spill response protocols.
- Biodiversity preservation by minimising vegetation clearance and monitoring wildlife presence.
- Community engagement through regular updates and a grievance mechanism for local stakeholders.
- Worker welfare ensured by compliance with UAE labor laws and international standards.
- Implementation of an Environmental and Social Management Plan (ESMP) to monitor mitigation efforts with regular audits and reporting to ensure adherence to the municipality regulations and international best practices.

Key Metrics:

- 200 MW capacity solar PV plant
- Commercial operation started in 2017
- Estimated annual GHG emissions avoided by the project: 271,992 tCO₂e/year

3.2 Data Centre Assets

The Issuer committed around **USD 37.5 million** on financing two data centres projects.

Note on the selected impact metric, according to ERM methodology: Operational PUE (Power Usage Effectiveness)

PUE measures data centre energy efficiency by comparing total facility energy use to IT equipment energy consumption. A lower PUE signifies higher efficiency, indicating more energy is used for computing rather than supporting systems. The equation for calculating the PUE of a Data Centre is summarised below, with the perfect score being 1.0:

$$\text{PUE} = \text{Total Facility Energy Consumption} / \text{IT Equipment Energy Consumption}$$

The inputs necessary to calculate the Impact Indicators for the Data Centre’s assets are reflected in the Appendix document. Table 3 details the main characteristics and information of the two assets.

Table 3: Main Characteristics and Performance of the Data Centres’ Assets

Borrower	Location	IT Capacity (MW)	2025 Operational PUE ⁷ (Weighted average)	PUE Local / Regional Requirements	PUE Industry / Policy Targets (for Reference)	Renewable Energy Usage (%)
			By Portfolio			
Data Centre A	Malaysia	351 MW (operational)	1.33	1.5 (by 2024)	-	-
		416 MW (under planning / construction)				
Data Centre B	Pan European region	229.1 MW (operational)	1.28 ⁸	Relevant jurisdictions’ operational PUE requirements including specific target dates and/or design thresholds related to permit issuance	EU Climate Neutral Data Centre Pact – 1.3 (new DCs fully in operation by 2025, or existing DCs by 2030)	98% ⁸
		16 MW (under initial operation)				
		247.1 MW (under construction)				

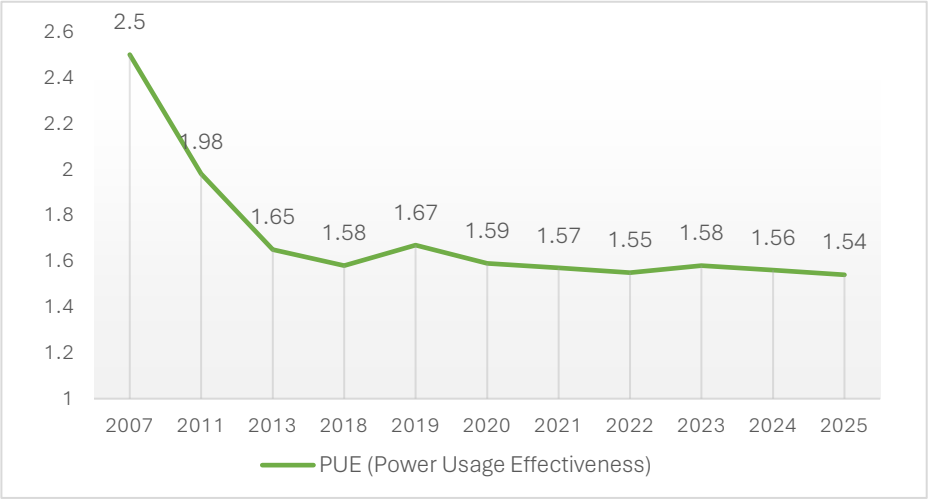
⁷ Operational PUE is a rolling average, typically over 12 months, of the ratio between total facility energy and IT equipment energy, calculated only during periods when the data centre operates above a defined utilisation threshold, ensuring it reflects real-world efficiency under meaningful load conditions. This distinguishes it from design PUE, which is a static, theoretical value based on engineering design assumptions.

⁸ The numbers presented in the 2024 Independent Assurance covers the full portfolio of the loan, while the investment portfolio covers 97.1% of the projects analysed in the document.

The **first Green Building asset** in the sustainability tranche is **Data Centre A**, a data centre owner/operator in Malaysia. Malaysia is emerging as a regional data centre hub for Southeast Asia, supported by its strategic location, strong connectivity, and skilled workforce. Government initiatives, such as **Malaysia Digital, Kulai Fast Lane Programme, and Guideline for Sustainable Development of Data Centre**, aim to incentivise investment, streamline operations, and uphold technical standards for sustainable growth. The **second asset** is a loan provided to **Data Centre B** that will finance/refinance operating or construction stage data centres. The sustainable tranche portfolio is located across several countries, mostly concentrated in the key Pan European DC connectivity markets.

Given the anticipated growth in demand in the global data centre market, it is essential to assess and promote low-emission solutions. **In 2022, data centre energy consumption accounted for 1-1.5% of global electricity consumption.** Key performance indicators such as PUE, which measures the efficiency with which energy is used for computing purposes, and the percentage of renewable energy utilised, which can significantly reduce emissions associated with this sector, are particularly noteworthy. Regulatory frameworks are being established on a global scale to mandate minimum efficiency standards, thereby establishing maximum acceptable PUE values on a regional basis. As a reference, Figure 2 shows the evolution of the annual average PUE value of data centres worldwide from 2007 to 2025. The reduction over the years is due to a combination of factors, including improved cooling systems (such as cold plate cooling, rear door heat exchangers, immersion cooling, direct-to-chip liquid cooling, free cooling and AI-driven cooling optimisation), more efficient IT equipment, advanced power distribution, free cooling and waste heat recovery.

Figure 2: Data Centre Average Annual Power Usage Effectiveness (PUE) Worldwide from 2007 to 2025



Source: [Uptime Institute Statista 2025](#)

CASE STUDY 2 - Overview of Data Centre Projects

Data Centre B’s Data Centre Portfolio

Data Centre B is a well-known data centre provider with a substantial number of data centres in operation or under development globally. The use of proceeds of the eligible portion of sustainability tranche will be directed to refinance/finance operating or construction stage data centres located across the Pan European region.

With the increasing need for data centres globally to support the digital age, Data Centre B commits to exploring and deploying clean power, high energy and water efficiency, and innovative cooling solutions. These include purchase of renewable energy, adoption of high-density liquid cooling solutions, and a series of sustainability related commitments, certifications and accolades.

Notable commitments and practices or innovative strategies at the corporate level:

- 24x7 carbon-free energy study
- SBTi-validated science-based targets

Key metrics of the full portfolio of the loan (as of 31 December 2024):

- PUE: 1.28
- % Renewable Energy: 98%

3.3 Information and Communications Technology Assets

The Issuer committed around **USD 9.6 million** on financing one Information and Communications Technology (ICT) project.

Notes on the selected impact metrics, according to ERM methodology: Tower Density in Underserved Regions, Network Uptime

Tower density, defined as the number of telecom towers per 100,000 inhabitants, is a key indicator of mobile network accessibility. In India, where fixed broadband remains limited, tower density plays a vital role in promoting digital inclusion. Higher density generally leads to better coverage and connectivity, enabling access to essential services like education, finance, healthcare, and employment. Equally important is **network uptime**, which measures the reliability and availability of the telecom infrastructure. High uptime ensures consistent service delivery, especially in underserved regions, reinforcing the social and economic benefits of expanded mobile infrastructure.

Table 4 details the main characteristics and information of the ICT asset.

Table 4: Main Characteristics and Performance Results of the ICT Asset Financed by the Issuer

Company	Country	Region	Towers ⁹	Tower Distribution	Network Uptime (%)	Total Population (2025 estimate)	Total Area (km ²)	Tower Density (Towers/100,000 inhabitants)	Population Density (Pop. / km ²)
Ascend + Acquired Company	India	Telecom Circle Category A	5,728	32.7%	>99.9% ¹⁰	417,241,000	1,096,324	1.37	380.6
		Telecom Circle Category B	6,435	36.7%		634,680,000	1,315,656	1.01	482.4
		Telecom Circle Category C	4,424	25.3%		291,812,000	921,712	1.52	316.6
		Metros	930	5.3%		69,592,000	9,678	1.34	7,190.7

The ICT asset in the sustainability tranche is a secondary loan transaction to a telecommunication tower owner and operator in India, Ascend Telecom Infrastructure Private Limited (Ascend), to acquire another independent telecom tower company. Corporate loans are eligible in the case of pure play companies whose revenue is at least 90% derived from eligible activities. Ascend falls within this criterion.

⁹ FY2023 figures are presented. The number of telecom towers was amounted to 19,249 as of 31 December 2024.

¹⁰ [Sustainability-Report-2024.pdf](#)

Growth in Broadband Speeds

India has witnessed a rapid expansion in broadband connectivity in recent years. According to the Indian Government¹¹ and Ookla's Speedtest Global Index, **mobile broadband download speeds** surged from **10.71 Mbps in 2019** to **100.78 Mbps** in November 2024. Despite the growth, **India ranked #99 out of 153 countries**¹² in terms of fixed broadband connection (July 2025), with **download speed of 58.79 Mbps**, significantly lower than the **global median of 103.39 Mbps**.

Mobile-First Digital Infrastructure

India's internet ecosystem is predominantly mobile driven¹³. The country has over **1.15 billion mobile connections**, with more than **95% of internet subscriptions relying on wireless mobile networks**. In contrast, **fixed broadband** accounts for only **~4%** of total subscriptions, highlighting the limited reach of wired infrastructure. Fixed broadband is primarily delivered through **fiber-to-the-home (FTTH)** and **legacy DSL** (copper telephone lines), with some cable broadband availability in urban centres. Nationwide, there are approximately **45 million wired broadband connections**, mostly concentrated in urban and semi-urban areas. As of **October 2024**, wireline connections represented only **3.2%** of total telephone subscriptions. For reference, fixed broadband penetration is **highest in Europe** (37.2 subscriptions per 100 inhabitants), followed by the Americas (26.6), and the Commonwealth of Independent States (CIS) region (25.3)¹⁴.

Telecom Circles and Regional Disparities

India's telecom sector is organised into **22 Telecom Circles**, or **Licensed Service Areas (LSAs)**, categorised based on revenue potential and state boundaries. These are grouped into four categories:

- **Metro Circles:** Include major cities like Delhi, Mumbai, and Kolkata, with high population density and economic activity.
- **Category A:** Cover economically prosperous states with large populations.
- **Category B:** Represent regions with moderate economic activity.
- **Category C:** Include less economically developed areas.

Category B and C circles face significant challenges due to difficult terrain and lower population density, resulting in **higher infrastructure costs** and **lower revenue potential**. Consequently, internet service coverage and quality in these regions tend to be less developed compared to Metro and Category A circles.

¹¹ [NBM 2-0 Vision Document_Final.pdf](#)

¹² [Speedtest Global Index – Internet Speed around the world – Speedtest Global Index](#)

¹³ [IBEF Presentation](#)

¹⁴ [Fixed broadband internet penetration by region 2015-2024| Statista / Fixed broadband subscriptions \(per 100 people\) | Data](#)

Thus, it was decided to estimate the **density of towers in India's telecom circles**, considering that wireless and wireline tele-density is lower in B and C regions, with wireline tele-density being extremely low in all regions, both rural and urban. This analysis aligns with India's mission to achieve a fixed broadband download speed of 70 Mbps by 2026. Currently, this speed falls short of the target, particularly in regions B and C. Selecting this impact metric as the primary performance indicator for evaluating the project's social impact directly reflects the necessity of enhancing network coverage and speed, especially wireline, in India's Category B and C telecom circles. In this context, fiberisation and FWA offer scalable and efficient solutions to improve last-mile connectivity and accelerate broadband deployment.

Urban-Rural Divide in Internet Access

Roughly half of the rural population is either offline or not actively using the internet. According to the **2023 Economic Survey** by India’s Ministry of Finance¹⁵, **65% of the population** reside in rural areas with inadequate internet access. In many small towns and rural regions, **DSL services** provide connectivity. However, DSL speeds are limited, typically ranging from **4-10 Mbps** and up to **24 Mbps** on the best lines. Service quality is often inconsistent due to infrastructure limitations such as line length and maintenance issues¹⁶. In remote or hilly areas, fixed broadband may be entirely unavailable, leaving residents dependent on **mobile or satellite internet**¹⁷. The difference in access to wireless and wireline internet in urban and rural areas is highlighted by the Indian Telecom Services Yearly Performance Indicator 2024-2025¹⁸ through the tele-density indicator (number of telephone connections per 100 inhabitants) as shown in Table 5 below:

Table 5: Wireless and Wireline Tele-Density in India's Telecom Circles

Telecom Circle	Rural	Urban	Total	Rural	Urban	Total
	Wireline Tele-Density			Wireless Tele-Density		
A	0.7%	7.7%	4.1%	68.6%	120.5%	94.0%
B	0.7%	4.4%	1.7%	49.9%	112.0%	74.8%
C	0.1%	5.0%	1.0%	52.5%	132.9%	66.1%
Metro	-	-	8.8%	-	-	140.9%
India	0.6%	5.6%	2.6%	56.2%	119.2%	81.9%

The data shows lower tele-density in rural areas compared to urban areas in all telecom circles except Metro. There is also a higher density of wireless internet, with more than half of rural areas having access. Finally, telecom circles B and C have lower total density compared to A and Metro.

¹⁵ [Press Release: Press Information Bureau](#)
¹⁶ [Bridging the digital divide: unlocking reliable broadband for all | Opensignal](#)
¹⁷ [Internet Access in India: A Comprehensive Guide for Residents and Tourists](#)
¹⁸ [The Indian Telecom Services Yearly Performance Indicators 2024-2025.pdf](#)

Government Initiatives and Strategic Goals

To address connectivity gaps, the Indian Government launched the **National Broadband Mission 2.0** ¹⁹, aiming to provide **high-speed and meaningful broadband access for all**. Enhanced fixed broadband speeds are essential for improving experiences in video conferencing, remote work, online education, e-health, and cloud services, thereby contributing to **productivity and economic growth**. The annual implementation plan for fixed broadband is presented in Table 6:

Table 6: Indian Annual Implementation Plan for Fixed Broadband Speed

KPI	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Availability of Fixed broadband download Speeds - National Average as per Ookla's Global Index (in Mbps)	70	75	80	90	100

The most recent measurement provided by Ookla is **58.79 Mbps**²⁰. The average fixed broadband download speed data by Telecom Circle is presented by Opensignal 2025 Report ²¹ and summarised in Table 7 by category.

Ascend Infrastructure for Fixed Broadband

Ascend towers are equipped with advanced battery banks, diesel generator cooling systems and fibre access, enabling them to host wireline and FTTX networks nodes and hubs²². Around 30% of the towers are currently fiberised, according to Ascend. Also, FWA supports fixed broadband connections by using radio waves to transmit internet data between a base station and a customer's location, eliminating the need for physical cables or fiber. FWA provides high-speed internet to homes and businesses by establishing a wireless connection, offering a viable alternative to traditional wired broadband in various locations²³.

Network Reliability (Network Uptime)

Ensuring high reliability and uptime of telecom infrastructure is vital. Regular maintenance, timely upgrades, and quick responses to technical issues are necessary to upkeep network reliability. In accordance with **Ascend's Sustainability Report 2023-2024**²², the Ascend towers have achieved an impressive 99.95% uptime, ensuring reliability of internet connection to enable uninterrupted internet access.

¹⁹ [NBM 2-0 Vision Document_Final.pdf](#)
²⁰ [India's Mobile and Broadband Internet Speeds - Speedtest Global Index](#) (accessed on August 21, 2025)
²¹ [India, August 2025, Fixed Broadband Experience Report | Opensignal](#)
²² [Sustainability-Report-2024.pdf](#)
²³ [What is fixed wireless access? A connectivity guide](#)

The main results of the performance indicator for this Indian ICT Asset are summarised in Table 7. The steps followed and all assumptions and premises considered are detailed in Section 3 of the Appendix document.

Table 7: Main Performance Results for the Indian ICT Asset

Circle Category	National Broadband Mission's target for fixed broadband download speed	India's Fixed Broadband Download Performance	Wireline Download Speed (Mbps) ²⁴ (Feb-May 2025)	Total Wireline Tele-Density (%)	Total Number of Towers Owned by Ascend + Acquired Company	Total Population of the Circle Category Region (2025)	Tower Density (towers/100,000 inhabitants)	Network Uptime
A	70 Mbps (for FY 2025-2026)	58.79 Mbps (July 2025)	44.63	4.1%	5,728	417,241,000	1.37	>99.9%
B			35.27	1.7%	6,435	634,680,000	1.01	
C			35.60	1.0%	4,424	291,812,000	1.52	
Metros			56.61	8.8%	930	69,592,000	1.34	

The inputs used to calculate this impact indicator for the Indian ICT asset are reflected in the Appendix Document.

Aligned with the target population definition provided in the HKMC Framework and based on the data presented in the Ookla's and Indian Telecom Services reports, the download speed for fixed broadband in India was 58.79 Mbps, a value below the target of 70 Mbps established by the National Broadband Mission for 2026. Thus, all regions analysed could be considered underserved in terms of connectivity and wireline performance. In this scenario, the weighted average wireline tele-density – calculated by adjusting the tele-density of each Telecom Circle according to its population – and download speed can be used as another reference benchmark, this time to classify each Telecom Circle category region as underserved in terms of access and speed of fixed broadband.

²⁴ Calculated based using the weighted average based on the market share of the service providers.

3.4 Water Supply and Sanitation Infrastructure

The Issuer committed around **USD 12.3 million** on financing one Water Supply and Sanitation Infrastructure project.

Note on the selected impact metrics, according to ERM methodology: Power Consumption, Non-Revenue Water (NRW) Ratio and Total Clean Water Supplied

Power consumption reflects the energy required to operate the company’s infrastructure, and reduction in power consumption contributes to both cost efficiency and environmental sustainability. The NRW ratio measures the proportion of water that is produced but not billed due to leaks, theft, or metering inaccuracies – highlighting system inefficiencies and potential financial losses. Meanwhile, total clean water supplied indicates the volume of treated, potable water delivered to the network, serving as a benchmark for the company’s capacity to meet demand responsibly. Together, these metrics provide a comprehensive view of operational efficiency, resource conservation, and service reliability.

Table 8 details the main characteristics and information of the asset.

Table 8: Main Characteristics and Performance Results of the Water Supply Asset Financed by the Issuer

Borrower	Country	Power Consumption (kWh /1,000m³)	Power Consumption - China Water Industry Status (kWh /1,000m³)	Non- Revenue Water Ratio	Non-Revenue Water Ratio – China Water Industry Status	Total Water Supplied (m³/year)
Silver Dragon Water Supply Group Limited	China	253	300 ²⁵	14.10%	23.22% ²⁵	1.5 billion m³/year

Silver Dragon Water Supply Group Limited was established in Bermuda in 2021 as a wholly owned subsidiary of China Water Affairs Group Limited. Silver Dragon was established as a new entity to hold all mainland China water supply and direct drinking water-related companies of the group, creating a twin-driver business portfolio of water supply and direct drinking water.

²⁵ Extracted from Urban Water Supply Statistic Yearbook (2019) of China Urban Water Association.

Industry Overview

China faces a significant water supply challenge due to uneven distribution, with most resources in the south and a growing scarcity in the north, exacerbated by climate change and pollution. Around 80% of people living under water stress lived in Asia; in particular, northeast China, as well as India and Pakistan²⁶. While China has made strides in improving its water infrastructure and coverage, over 80% of its surface water is unsuitable for drinking, and many cities experience water shortages. Despite being home to nearly one-fifth of the global population, **China possesses only about 6% of the world’s freshwater resources**. The country ranked 104th out of 179 nations in terms of per capita water availability²⁷. In 2023, **China’s per capita water resources** were reported at **1,827.6 m³** per person per year²⁸. This figure is well below the **global average** of approximately **3,776 m³**, and only about one-fifth of the U.S. average of 9,459 m³.

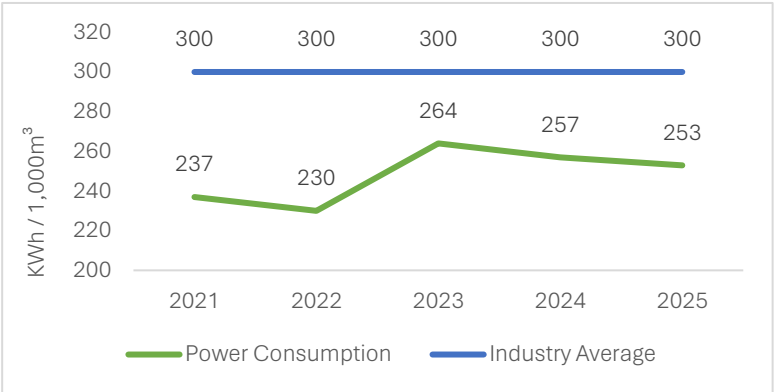
Company Performance

As of March 2025, Silver Dragon had²⁹ :

- 168 water plants, with a total **designed daily water supply capacity of 14.19 million m³**
- total length of water pipelines under operation and maintenance: 151,000 km
- total length of drainage pipelines under entrusted operation: over 1,150 km
- estimated population covered by the city water supply business: 30 million
- estimated **population served by the pipeline direct drinking water business: 12 million**

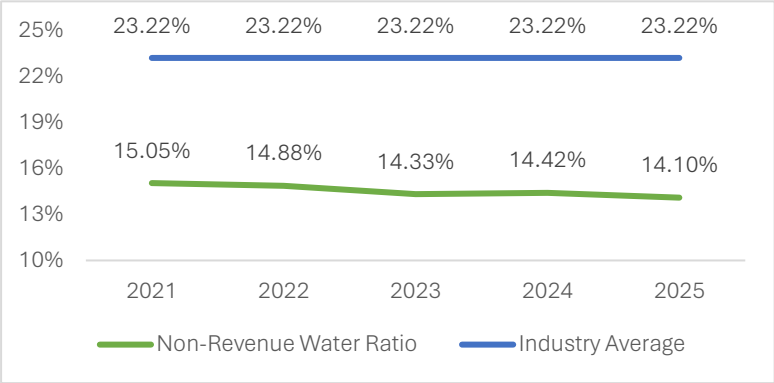
The performance of the main indicators over the last years is presented in Figures 3 and 4. It is apparent that, over the past five years, the company has consistently reported power consumption and non-revenue water ratio³⁰ results that fall below the national average

Figure 3: Power Consumption per unit of Water Supply



Source: CWA 2024-2025 ESG Report

Figure 4: Non-Revenue Water Ratio



Source: CWA 2024-2025 ESG Report

²⁶ [The United Nations world water development report 2023](#)
²⁷ [Renewable freshwater resources per capita](#)
²⁸ [China Water Resource Per Capita | Economic Indicators | CEIC](#)
²⁹ [China Water Affairs Group Limited 2024-25 ESG Report; non-revenue water includes water loss through leaks.](#)
³⁰ This ratio includes other forms of non-revenue use of water.

benchmark for its sector. Furthermore, the company is aligned with the EU Taxonomy technical screening criterion for energy efficiency in water supply systems³¹, maintaining a net average energy consumption of just 0.253 kWh per cubic meter produced – well below the 0.5 kWh/m³ threshold.

ESG Commitments

China Water Affairs Group Limited's Carbon Peaking Implementation Plan aims to peak carbon emissions by 2030 and **achieve net-zero emissions by 2050**, aligning with national climate goals. This will be executed through a Green Operation Plan focused on expanding clean energy, enhancing energy efficiency, reducing leakage rates, and promoting green construction. Complementing these efforts, the company is committed to water conservation, maintaining a self-use ratio below 2%, ensuring pollution control with emissions meeting national standards, and advancing biodiversity protection and ecological restoration across its operations.



Water Quality

The water quality processes and technologies described in CWA ESG report are in line with international standards for safe drinking water treatment. The company adheres to China's national standards – GB 5749-2022 for drinking water – which are comparable to international benchmarks such as those set by the World Health Organization³² (WHO). These standards cover 97 water quality parameters including turbidity, residual chlorine, microbial content, and chemical pollutants.

Moreover, the use of advanced treatment technologies such as ozone + activated carbon, ultrafiltration + nanofiltration, and UV + ozone disinfection aligns with best practices globally. These methods are recognised for their effectiveness in removing contaminants and ensuring microbiological safety. The implementation of real-time monitoring, multi-tier testing systems, and Grade I and II laboratories³³ further reflects a robust quality assurance framework, consistent with international norms for operational transparency and public health protection.

³¹ [EUR-Lex - C\(2021\)2800 - EN - EUR-Lex](#)

³² [Guidelines for drinking-water quality: fourth edition incorporating the first and second addenda](#)

³³ Grade I laboratory water is ultrapure and used for highly sensitive analytical procedures, while Grade II water is pure and suitable for general laboratory applications.

CASE STUDY 3 - Overview of Water Supply and Sanitation Infrastructure Projects

Silver Dragon Water Supply Group Limited

Silver Dragon, a subsidiary of China Water Affairs Group Limited, focuses on municipal water supply services across China, including tap water supply and pipeline direct drinking water.

With growing water stress on safe, reliable water in China, Silver Dragon's operations ensure access to clean and stable water supply by both urban and rural communities by integrating smart solutions into its operations. These solutions allow Silver Dragon to pinpoint and fix issues quickly, cutting water leakage and improving pressure stability. Where practicable, on-site distributed solar photovoltaics are installed to reduce energy consumption.

Notable commitments and practices or innovative strategies:

- Integrating AI, Geographic Information System, Supervisory Control and Data Acquisition, District Metered Area leak detection, real-time sensors, and digital work orders to minimise leakage and maximise water distribution efficiency.
- “Fingertip Water” is China Water Affairs’ self-service app for managing accounts, bills, and service requests. It also integrates data analytics to deliver abnormal-consumption warnings, which are insightful for social care programs such as flagging unusual non-use that may indicate elderly residents requiring assistance.



Source: China Water Affairs 2025 ESG Report

Key Metrics:

- Power consumption per unit of water supply: 253 kWh/1000m³ (outperforms the industry average)
- Non-revenue water ratio (including leakage): 14.10% (outperforms the industry average)
- Annual supply of clean water: 1.5 billion m³

4. Appendix

The appendix with more detailed information on the calculations and analyses is in a separate document. It can be accessed via the Bauhinia ILBS 3 webpage.



Bauhinia

ILBS 3 Limited

Pre-issuance Impact Report – Appendix

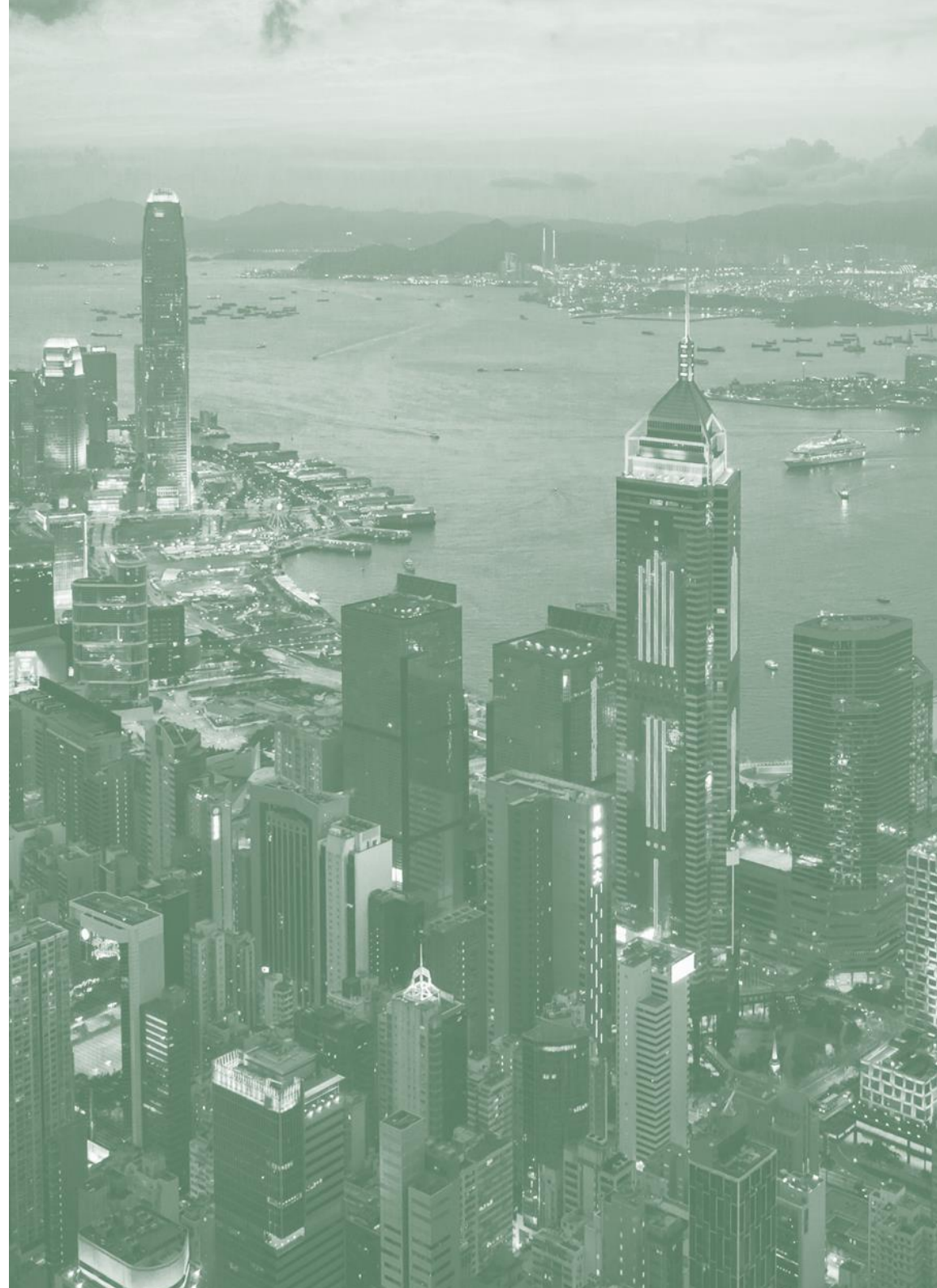
For the sustainable assets included in the Sustainability Tranche
of the Bauhinia ILBS 3 Limited Note issuance

Final Impact Assessment Dated 17 October 2025

Elaborated for



香港按揭證券有限公司
The Hong Kong Mortgage Corporation Limited





About ERM

ERM is the world's largest advisory firm focused solely on sustainability, offering expertise across business and finance, operating in more than 70 jurisdictions with over 8,000 employees worldwide.

Our diverse global team of experts works with the world's leading organisations to help them set clear sustainability targets, measure progress, and operationalise strategy through deep implementation and business transformation. Within its Sustainable Finance practice, ERM has evaluated over 300 financial instruments for sustainability, including green, social, and sustainable bonds, sustainable investment funds, and goal-linked instruments.

With more than 50 years of experience, our ability to integrate sustainability solutions and our depth and breadth of technical knowledge are why organisations choose to partner with us as their trusted advisor.

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Appendix

1. Inputs to Calculate the Avoided GHG Emissions

Table 1: Input Factors for Calculating Avoided Emissions for Renewable Energy Assets

Input	Unit	Description	Source
Annual Production	MWh	Quantity of electricity generated by renewable energy assets.	Borrowers' Operational Record
Grid Emission Factor	tCO ₂ e/MWh	Operating margin is the CO₂e emission factor associated with each unit of electricity provided by an electricity system in each geographic region. That refers to the amount of CO₂e emissions produced per unit of electricity generated and supplied in a specific area. This factor is a measure of the GHG emissions resulting from the production of electricity and includes not only CO₂ but also other greenhouse gases like methane and nitrous oxide, converted to their CO₂ equivalent. This emission factor varies by region due to differences in the energy mix used to generate electricity. For example, a region that relies heavily on coal-fired power plants will have a higher grid emission factor compared to a region that uses more renewable energy sources like wind or solar power. - The fuel mix of the Indian grid in 2024: 49.23% Coal, 32.5% Renewable Energy Sources, 10.62% Hydro, 5.67% Gas, 0.13% Diesel and 1.85% Nuclear. - The fuel mix of the UAE grid in 2022: 64.6% Natural Gas, 26.9% Oil, 6.4% Nuclear, 1.2% Coal and 0.9% Renewables. - The fuel mix of Bangladesh grid in 2022: 5.51% Coal, 26.03% Oil, 52.7% Natural Gas, 15.47% Biofuels and Waste, 0.14% Hydro and 0.15% Wind and Solar.	India: Government of India, Ministry of Power – Central Electricity Authority Bangladesh: Department of Environment.pdf Bangladesh - Countries & Regions - IEA UAE: Reaching Net Zero Carbon in the United Arab Emirates United Arab Emirates - Countries & Regions - IEA
Attribution Factor	%	The loan outstanding due to the Issuer over total debt and equity of a borrower (or enterprise value if the borrower is a public company).	Calculated based on the financial data provided by HKMC

The equation for calculating the financed avoided emissions of the renewable energy assets (p) is summarised below:

$$FAEp = EGp \times GEFc \times AFp$$

Where:

$FAEp$ is the financed avoided emissions by the Issuer for the renewable energy asset p (tCO₂e)

EGp is the annual electricity generated by the renewable energy asset p (MWh)

$GEFc$ is the grid emission factor of country c where the renewable energy asset p is located (tCO₂e/MWh)

AFp is the attribution factor for the renewable energy asset p (%)

2. Inputs to Calculate the Impact Indicators for the Data Centre’s Assets

Table 2: Input Factors to Calculate PUE and Renewable Energy Usage

Input	Description	Source
PUE (Power Usage Effectiveness)	PUE measures data center energy efficiency by comparing total facility energy use to IT equipment energy consumption. A lower PUE signifies higher efficiency, indicating more energy is used for computing rather than supporting systems.	Data Centre A: HKMC information (Investment Memorandum) Data Centre B: Operational Report
PUE Requirements by Region	Regulations in each region regarding maximum PUE values vary greatly. The European Union does not have a single set of regulations. To obtain specific values for each region, we searched for specific policies and requirements by location.	Malaysia: Technical Code - Specification for Green Data Centres (First Revision) Europe: Climate Neutral Data Centre Pact
Renewable Energy Usage	The amount of renewable energy used is directly tied to the facility's level of pollution, with data centres contributing significantly to emissions due to their substantial energy consumption.	Data Centre B: 2024 Independent Assurance Statement

3. Details on Methodology - ICT Assets

To analyse the level of wireless and wireline internet access in rural and urban areas in each Telecom Circle in India, we used data from the Telecom Regulatory Authority of India (TRAI), specifically from The Indian Telecom Services Yearly Performance Indicators 2024-2025. In addition, we determined the weighted average wireline download speed for each Telecom Circle, considering the speed of each service provider in each Telecom Circle, presented in the Opensignal 2025 Report¹, and their respective market shares of wireline subscribers in India. Table 3 shows the final weighted result, while Table 4 shows the market share of each service provider.

To determine the average value of each indicator across the four categories, we calculated the weighted average of each region's tele-density and wireline download speed, accounting for their respective populations. The population projection for 2025 was based on India’s Report of the Technical Group On Population Projections² and Population Census Data³.

¹ <https://www.opensignal.com/reports/2025/08/india/fixed-broadband-experience>
² https://mohfw.gov.in/sites/default/files/Population%20Projection%20Report%202011-2036%20-%20upload_compressed_0.pdf
³ <https://www.census2011.co.in/>

Table 3: Average Regional Data on Rural and Urban Tele-Density

Telecom Circle	Circle Category	Area (km ²)	Population (2025 Estimate)	Wireline Average Download Speed (Mbps)	Rural	Urban	Total	Rural	Urban	Total
					Wireline Tele-Density			Wireless Tele-Density		
Andhra Pradesh	A	272,282	91,978,000	43.29	1.5	8.3	4.4	76.3	107.2	89.5
Gujarat	A	196,627	74,675,000	37.16	0.5	4.5	2.5	66.6	108.0	87.5
Karnataka	A	191,791	68,538,000	53.68	0.6	11.1	5.4	69.4	135.9	99.6
Maharashtra	A	305,087	103,013,000	40.40	0.2	8.1	4.1	63.7	129.3	96.1
Tamil Nādu	A	130,537	79,037,000	51.20	0.6	6.7	4.0	67.1	122.9	97.8
Haryana	B	44,212	30,936,000	35.20	1.0	4.2	2.4	67.0	107.1	84.4
Kerala	B	38,895	36,132,000	37.01	8.5	3.9	4.8	Not available	Not available	114.3
Madhya Pradesh	B	443,192	119,508,000	35.27	0.1	5.4	1.7	45.0	122.5	67.4
Punjab	B	50,476	32,377,000	38.80	1.9	9.8	5.4	64.3	155.3	105.1
Rajasthan	B	342,239	82,770,000	36.82	0.1	4.8	1.4	58.4	131.4	78.0
Uttar Pradesh (East)	B	240,928	240,468,000	35.30	0.1	3.4	0.9	50.0	111.5	65.4
Uttar Pradesh (West)	B	53,484	11,874,000	40.68	0.1	3.4	0.9	50.0	111.6	65.4
West Bengal	B	102,230	80,615,000	30.89	0.2	4.0	1.6	57.8	113.0	78.6
Assam	C	78,438	36,382,000	37.59	0.1	6.1	1.0	56.3	158.0	72.4
Bihar	C	173,877	170,890,000	35.36	0.1	4.0	0.7	44.9	117.2	56.3
Himachal Pradesh	C	55,673	7,542,000	36.67	1.1	13.1	2.4	85.3	394.7	117.4
Jammu & Kashmir	C	281,372	14,102,000	31.41	0.3	8.9	2.9	62.8	138.4	86.3
North-East	C	176,645	16,039,000	35.50	0.5	3.8	1.7	65.7	102.2	78.8
Odisha (Orissa)	C	155,707	46,857,000	36.09	0.2	5.6	1.2	64.3	137.2	78.4
Delhi	Metros	1,483	22,146,000	62.79	Not Available	Not available	21.3	Not available	Not available	253.0
Kolkata	Metros	1,867	20,534,000	41.59	0.2	4.0	1.6	57.8	113.0	78.6
Mumbai	Metros	6,328	26,912,000	57.70	0.2	8.1	4.1	63.7	129.3	96.1

Table 4: India’s Wireline Market Share⁴

Service Provider	Market Share (%)
Jio	31.4
Airtel	21.8
BSNL	15.9
ACT	23.1
Others	7.8

The only location data available for Ascend’s towers is the number of towers owned by the company aggregated by the 22 main Telecom Circles of India. There is no public data breaking down the locations of the towers by city or province, as telecom companies consider this information sensitive due to security and infrastructure protection concerns. Given this limitation, it is assumed that all towers owned by Ascend are evenly distributed through the respective Telecom Circle. The total number of towers in each Telecom Circle was then aggregated by circle category (A, B, C or Metros), to match the maximum level of aggregation available for the data regarding the Acquired Company, as described next.

As for the Acquired Company, there is no public data on the number of towers in each of the 22 telecom circles, since the company does not publish any official reports on its operation. The best available data is the estimate on the total number of towers owned by the Acquired Company (9,297 as of September 2023⁵), as well as the geographical distribution of the towers by each Telecom Circle category (A, B, C or Metros), provided by HKMC through the project’s Investment Memorandum: 10% in Metros, 30% in Circle A, 41% in Circle B and 19% in Circle C category. It is assumed that this distribution is still valid, and that all towers owned by the Acquired Company are evenly distributed through the respective Telecom Circles.

Therefore, the data extracted from the TRAI report was aggregated by Telecom Circle Category, as well as crossed and combined with additional information on the respective categories as shown in Table 5 below:

⁴ [Microsoft Word - Press Release of Telecom Subscription Data-June_25_English Final](#)

⁵ [Rating Rationale](#)

Table 5: Main Data by Telecom Circle of India

Circle Category	Area (km ²)	Population (2025 Estimate)	Population Density (Pop. / km ²)	Ascend's Towers	Acquired Company's Towers	Ascend + Acquired Company's Towers	Tower Density	Wireline Download Speed (Mbps)	Rural	Urban	Total	Rural	Urban	Total
									Wireline Tele-Density (%)			Wireless Tele-Density (%)		
A	1,096,324	417,241,000	380.6	2,939	2,789	5,728	1.37	44.63	0.7	7.7	4.1	68.6	120.5	94.0
B	1,315,656	634,680,000	482.4	2,623	3,812	6,435	1.01	35.27	0.7	4.4	1.7	49.9	112.0	74.8
C	921,712	291,812,000	316.6	2,658	1,766	4,424	1.52	35.60	0.1	5.0	1.0	52.5	132.9	66.1
Metros	9,678	69,592,000	7,190.7	-	930	930	1.34	56.61	-	-	8.8	-	-	140.9

Also, the inputs used to calculate this impact indicator for the Indian ICT asset are reflected in the following Table 6.

Table 6: Input Factors for Calculating Tower Density in Rural Regions of India

Inputs	Inputs	Description	Sources
1 - Number of towers owned by Ascend and the Acquired Company in the telecom circles of the country	Number of towers owned by Ascend and the Acquired Company in each telecom circle of the country	Number of towers operated by Ascend and the Acquired Company (both owned and managed sites) across the 22 telecom circles of India.	Ascend's 2024 Sustainability Report; Acquired Company's company and financial statements overview 2022; HKMC's Investment Memorandum.
	Telecom circles analysis in terms of fixed broadband connectivity	Comparison between the country's fixed broadband download speed and the reference target of 70 Mbps, as established by India's National Broadband Mission. The country does not meet the 2025-26 fixed broadband download speed target, while all regions present a low wireline tele-density, especially B and C circles. Wireline Download Speeds per Category calculated using the Opensignal Report and the market share of the Indian service providers.	National Broadband Mission 2.0; The Indian Telecom Services Yearly Performance Indicators 2024-2025; Fixed Broadband Experience – Opensignal Report ⁶ ; Telecom Regulatory Authority of India ⁷ .
2 - Total population in the telecom circles of the country	Total population in each telecom circle of India	Referring to the total population living in the telecom circles.	Ministry of Health and Family Welfare ⁸ ; Population Census Data ⁹ .

⁶ India, August 2025, Fixed Broadband Experience Report | Opensignal

⁷ Microsoft Word - Press Release of Telecom Subscription Data-June_25_English Final

⁸ Population Projection Report 2011-2036.pdf

⁹ <https://www.census2011.co.in/>