## **Second-Party Opinion**

## China Vanke Co. Ltd. International Green Financing Framework



#### **Evaluation Summary**

Sustainalytics is of the opinion that the China Vanke Co. Ltd. International Green Financing Framework is credible and impactful and aligns with the four core components of the Green Bond Principles 2018 and the Green Loan Principles 2020. This assessment is based on the following:



**USE OF PROCEEDS** The eligible categories for the use of proceeds – Green Buildings, Renewable Energy, Pollution Prevention and Control and Sustainable Water and Wastewater Management – are aligned with those recognized by the Green Bond Principles 2018 and the Green Loan Principles 2020. Sustainalytics considers that the eligible categories will lead to positive environmental impacts and advance the UN Sustainable Development Goals, specifically SDG 6, 7, 11, 12.



**PROJECT EVALUATION / SELECTION** Vanke's ESG working group and Investment Banking Department will be responsible for reviewing and approving the preliminary list of Eligible Projects in accordance with the criteria outlined in the Framework. The Group's Chief Executive Officer (CEO) will have final approval of the list of Eligible Projects. Sustainalytics considers the project selection process in line with market practice.



**MANAGEMENT OF PROCEEDS** Vanke's Investment Banking Department will oversee the management of proceeds. Vanke will establish an internal register to record and manage the allocation of proceeds. Vanke expects to reach full allocation within 36 months after issuance. Pending full allocation, the proceeds will be held in accordance with Vanke's treasury or liquidity management policy. This is in line with market practice.



**REPORTING** Vanke intends to report on the allocation of proceeds, on an annual basis, and until full allocation. Allocation reporting will include a list of allocated eligible projects, a list of eligible project categories, project descriptions, construction progress, the amount of allocated proceeds and the amount of unallocated proceeds. In addition, Vanke is committed to reporting on relevant impact metrics, such as green building certifications obtained, or energy savings data. Sustainalytics views Vanke's allocation and impact reporting as aligned with market practice.

Evaluation date	March 29, 2021
Issuer Location	Shenzhen, China

#### **Report Sections**

Introduction2
Sustainalytics' Opinion3
Appendices8

## For inquiries, contact the Sustainable Finance Solutions project team:

#### **Evan Bruner (Amsterdam)**

Project Manager evan.bruner@sustainalytics.com (+31) 20 205 0027

#### Charles Cassaz (Amsterdam)

Project Lead charles.cassaz@sustainalytics.com (+31) 20 205 02 09

#### Aoife McCarthy (Amsterdam)

Project Support aoife.mccarthy@sustainalytics.com (+31) 20 299 4690

#### Cheryl Tay (Singapore)

Client Relations susfinance.apac@sustainalytics.com (+852) 3008 2391



### Introduction

China Vanke Co. Ltd ("Vanke", or the "Company") is a city and town developer and service provider in China, established in 1984 and headquartered in Shenzhen, China. While consolidating its residential property development and property service, Vanke's businesses have been expanded to areas such as commercial development, rental housing, logistics and warehousing services, hotel and resorts, and education.

Vanke has developed the China Vanke Co. Ltd. International Green Financing Framework (the "Framework") under which it intends to issue green financing instruments, including green bonds and loans, and use the proceeds to finance and refinance, in whole or in part, existing and future assets that improve the environmental performance of Vanke's operations while contributing to the sustainable development of China. The Framework defines eligibility criteria in four areas:

- 1. Green Buildings
- 2. Renewable Energy
- 3. Pollution Prevention and Control
- 4. Sustainable Water and Wastewater Management

Vanke engaged Sustainalytics to review the China Vanke Co. Ltd. International Green Financing Framework, dated March 2021, and provide a Second-Party Opinion on the Framework's environmental credentials and its alignment with the Green Bond Principles 2018 (GBP)<sup>1</sup> and the Green Loan Principles 2020 (GLP).<sup>2</sup> This Framework has been published in a separate document.<sup>3</sup>

#### Scope of work and limitations of Sustainalytics' Second-Party Opinion

Sustainalytics' Second-Party Opinion reflects Sustainalytics' independent<sup>4</sup> opinion on the alignment of the reviewed Framework with the current market standards and the extent to which the eligible project categories are credible and impactful.

As part of the Second-Party Opinion, Sustainalytics assessed the following:

- The Framework's alignment with the Green Bond Principles 2018, as administered by ICMA, and the Green Loan Principles 2020, as administered by LMA, APLMA and LSTA;<sup>5</sup>
- The credibility and anticipated positive impacts of the use of proceeds; and
- The alignment of the issuer's sustainability strategy and performance and sustainability risk management in relation to the use of proceeds.

For the use of proceeds assessment, Sustainalytics relied on its internal taxonomy, version 1.7.1, which is informed by market practice and Sustainalytics' expertise as an ESG research provider.

As part of this engagement, Sustainalytics held conversations with various members of Vanke's management team to understand the sustainability impact of their business processes and planned use of proceeds, as well as management of proceeds and reporting aspects of the Framework. Vanke representatives have confirmed (1) they understand it is the sole responsibility of Vanke to ensure that the information provided is complete, accurate or up to date; (2) that they have provided Sustainalytics with all relevant information and (3) that any provided material information has been duly disclosed in a timely manner. Sustainalytics also reviewed relevant public documents and non-public information.

This document contains Sustainalytics' opinion of the Framework and should be read in conjunction with that Framework.

<sup>&</sup>lt;sup>1</sup> The Green Bond Principles are administered by the International Capital Market Association and are available at <a href="https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/">https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/</a>.

<sup>&</sup>lt;sup>2</sup> The Green Loan Principles are administered by the Loan Market Association, Asia Pacific Loan Market Association and Loan Syndications & Trading Association and are available at <a href="https://www.lsta.org/content/green-loan-principles/">https://www.lsta.org/content/green-loan-principles/</a>

<sup>&</sup>lt;sup>3</sup> The China Vanke Co. Ltd. International Green Financing Framework is available on China Vanke Co.'s website at: https://www.vanke.com/

<sup>&</sup>lt;sup>4</sup> When operating multiple lines of business that serve a variety of client types, objective research is a cornerstone of Sustainalytics and ensuring analyst independence is paramount to producing objective, actionable research. Sustainalytics has therefore put in place a robust conflict management framework that specifically addresses the need for analyst independence, consistency of process, structural separation of commercial and research (and engagement) teams, data protection and systems separation. Last but not the least, analyst compensation is not directly tied to specific commercial outcomes. One of Sustainalytics' hallmarks is integrity, another is transparency.

<sup>&</sup>lt;sup>5</sup> In addition to the Loan Markets Association, the GLP are also administered by the Asia Pacific Loan Market Association and the Loan Syndications & Trading Association



Any update of the present Second-Party Opinion will be conducted according to the agreed engagement conditions between Sustainalytics and Vanke.

Sustainalytics' Second-Party Opinion, while reflecting on the alignment of the Framework with market standards, is no guarantee of alignment nor warrants any alignment with future versions of relevant market standards. Furthermore, Sustainalytics' Second-Party Opinion addresses the anticipated impacts of eligible projects expected to be financed with bond and loan proceeds but does not measure the actual impact. The measurement and reporting of the impact achieved through projects financed under the Framework is the responsibility of the Framework owner.

In addition, the Second-Party Opinion opines on the potential allocation of proceeds but does not guarantee the realised allocation of the bond and loan proceeds towards eligible activities.

No information provided by Sustainalytics under the present Second-Party Opinion shall be considered as being a statement, representation, warrant or argument, either in favour or against, the truthfulness, reliability or completeness of any facts or statements and related surrounding circumstances that Vanke has made available to Sustainalytics for the purpose of this Second-Party Opinion.

## Sustainalytics' Opinion

# Section 1: Sustainalytics' Opinion on the China Vanke Co. Ltd. International Green Financing Framework

Sustainalytics is of the opinion that the China Vanke Co. Ltd. International Green Financing Framework is credible and impactful and aligns with the four core components of the GBP and GLP. Sustainalytics highlights the following elements of Vanke's Green Financing Framework:

- Use of Proceeds:
  - The eligible categories Green Buildings, Renewable Energy, Pollution Prevention and Control and Sustainable Water and Wastewater Management are aligned with those recognized by the GBP and GLP. Sustainalytics notes that the proceeds of the green financing instruments issued under the Framework can be expected to improve the environmental performance of Vanke's operations while contributing to the sustainable development of China.
  - While Vanke does not indicate a look-back period for refinancing previous investments in the Green Financing Framework, Vanke has confirmed that the Company intends to prioritize its most recent projects and current investments for allocation of proceeds on each transaction.
  - Under the Green Buildings category, the Company intends to finance and/or refinance the construction of commercial and residential buildings, which have received or are expected to receive recognized third-party green building certifications with the following minimum levels: China Green Building Evaluation Label ('2 Star'), BREEAM ('Excellent'), LEED ('Gold'), or other green building labels with the equivalent standard or above. Sustainalytics considers the selected minimum certifications standards credible. Please refer to Appendix 1 for Sustainalytics' assessment of the green building certifications. Under the same category, the Company may finance energy-efficient equipment and systems that result in a 10% energy consumption reduction, such as LED lighting, air conditioners, and windows and doors. Sustainalytics views positively the Framework's inclusion of a defined energy efficiency threshold on a portfolio basis for the installations of energy-efficient systems, equipment, and technologies.
  - Within the Renewable Energy category, the Company may finance the installation of renewable energy systems, including solar and wind power generation, in commercial and residential buildings or other facilities.
  - Under the Pollution Prevention and Control category, the Company may finance the following activities:
    - The installation of solid waste treatment facilities that support waste classification, recycling or recovery. The Company has confirmed that investments in this category follow the waste hierarchy by enabling the segregation of waste before recovery.



- The procurement of recycled materials as an input, with the objective of reducing nonrecyclable materials consumption during buildings' construction and development.
- The installation of facilities, systems, and equipment to mitigate air, noize, and water
  pollution during the construction and/or operation of buildings. Sustainalytics notes
  that the projects must go beyond regulatory requirements
- As for the Sustainable Water and Wastewater Management category, the Company may finance wastewater treatment facilities and facilities or systems that may enhance water saving, efficiency, or recycling. Examples of water-saving and efficiency projects include water-efficient devices to guarantee the buildings' performance in water conservation and sewage discharge throughout the whole life cycle. Water recycling activities may include rainwater garden design, green roof, and rainwater recycling system to collect, filter, and disinfect rainwater. Sustainalytics notes that the projects are well-placed for inclusion in green bonds/loans and are expected to increase water saving, efficiency, and recycling.

#### Project Evaluation and Selection:

- Vanke's ESG working group and Investment Banking Department (i.e. Vanke's offshore financing team) will be responsible for reviewing and approving the preliminary list of Eligible Projects in accordance with the criteria outlined in the Framework. The Group's CEO will have final approval of the Eligible Projects. Eligible projects will be reviewed annually until full allocation of the proceeds. Any additions or replacements will be reviewed by the ESG working group and the Investment Banking Department as necessary, ensuring the proceeds are allocated to eligible projects.
- Based on these elements, Sustainalytics considers this process to be in line with market practice.

#### · Management of Proceeds:

- Vanke will establish a formal register to record and manage the allocation of proceeds from each issuance to assets. The Investment Banking Department will oversee the management of proceeds and expects to allocate proceeds raised by the green bonds and loans within 36 months. Pending full allocation, the green bond or loan proceeds will be held in accordance with Vanke's treasury or liquidity management policy.
- Based on these elements Sustainalytics considers this process to be in line with market practice.

#### Reporting:

- The Group has committed to allocation reporting of its green bonds and loans on an annual basis. Allocation reporting will be made available either in Vanke's annual Corporate Social Responsibility Report or in a standalone Green Financing Report and will be posted on its website. Allocation reporting will include a list of allocated eligible projects, a list of project categories, project descriptions, construction progress, the amount of allocated proceeds and the amount of unallocated proceeds.
- Vanke has also committed impact reporting of its green bonds and loans where feasible and will disclose either within the annual Corporate Social Responsibility Report or in a standalone Green Financing Report. Impact metrics reported may include green building certification obtained, energy savings data, amount of carbon dioxide emissions avoided and the relevant calculation methodologies.
- Based on these elements, Sustainalytics considers this process to be in line with market practice.

#### Alignment with Green Bond Principles 2018 and Green Loan Principles 2020

Sustainalytics has determined that the China Vanke Co. Ltd. International Green Financing Framework aligns to the four core components of the GBP and GLP. For detailed information please refer to Appendix 2: Green Bond/Green Bond Programme External Review Form.

### Section 2: Sustainability Strategy of Vanke

#### Contribution of framework to China's sustainability strategy

Sustainalytics is of the opinion that Vanke demonstrates a commitment to improving its sustainability performance with a focus on (i) resource and energy management, (ii) waste management, and (iii) technology innovation. Vanke focuses on environmental protection through materials procurement and energy saving technologies in the construction process.



In line with its approach of 'green development', Vanke has publicly disclosed its energy, carbon, water and waste consumption data for 2019, including scope 1 and 2 emissions. <sup>6</sup> Vanke implements energy conservation and emission reduction measures, including smart energy systems and reclaimed water and rainwater systems. Regarding energy consumption, Vanke aims at implementing energy efficiency measures <sup>7</sup> and report on energy consumption on a monthly basis.

A key pillar of Vanke's sustainability strategy is the promotion of the 'zero waste' model, both through waste minimization in real estate development and through the promotion of decentralized community waste management. Through multiple community initiatives, Vanke has promoted zero waste management in school campuses, offices and throughout urban and rural communities. At the end of 2019, Vanke has implemented waste classification across 52 cities in China, covering 378 residential compounds, 263 office buildings 52 zero-waste office projects.<sup>6</sup> Additionally, in line with the Framework, Vanke Group launched the "China's Real Estate Industry Green Supply Chain Action" together with industry peers to enhance environmental protection in the supply chain through green procurement standards, to demand the reduction of adverse environmental impact in raw material procurement, production and processing.<sup>6</sup>

Sustainalytics is of the opinion that the China Vanke Co. Ltd. International Green Financing Framework is aligned with the Company's overall sustainability strategy and initiatives and will further the Company's action on its key environmental priorities. Sustainalytics encourages the Company to develop quantitative time-bound targets for the three environmental-related areas mentioned above.

#### Well-positioned to address common environmental and social risks associated with the projects

While Sustainalytics recognizes that the net proceeds from the bonds and/or loans issued under the Framework will be contributed towards eligible projects that are recognized by the GBP and GLP to have positive environmental impact, Sustainalytics is aware that such eligible projects could also lead to negative environmental and social outcomes. Some key environmental and social risks associated with the eligible projects, could include occupational health and safety, stakeholder participation, land use and biodiversity issues associated with construction, emissions, effluents, and waste generated in construction.

Sustainalytics is of the opinion that Vanke is able to manage and/or mitigate potential risks through implementation of the following:

- To ensure worker health and safety, Vanke aligns with the safety and hygiene management requirement of the OHSAS 18000 Occupational Health and Safety Management Certification.<sup>8</sup> Additionally, the Company has several health and safety management systems for construction, including the Traffic Light Mechanism for Work Safety of Projects under Construction, Traffic Light Mechanism for Work Safety of Projects under Construction, Bottom-line Inspection Standards for the Safety and Quality of Projects under Construction, Work Safety and Quality Incident Management Regulation, and carries out full-cycle safety management for construction projects.<sup>8</sup> The Group also arranges annual mandatory special trainings on project safety management for personnel and managers.<sup>8</sup>
- Regarding supply chain management, Vanke has an 'environmental protection principle' for supplier management, which intends to reduce the environmental impacts and improve resource efficiency generated by raw material procurement, production, processing and end-user consumption.<sup>8</sup> Vanke strictly abides by national and industry-wide supplier management measures, such as the Regulation on Strengthening the Safety Control at Construction Sites of Dangerous and Major Projects issued by the Ministry of Housing and Urban-Rural Development, and have developed internal policies such as Supplier Management Measures, Sky-Net Action Management Measures, and Sunshine Cooperation Agreement. By clarifying the supplier selection process, Vanke strives to identify and reduce potential environmental, social, and safety hazards. In addition, Vanke intends to improve its suppliers' product quality and service capabilities and establish a standardized, fair, and unified supplier management system.<sup>8</sup>
- To manage indoor air quality, Vanke limits key indicators such as formaldehyde and TVOC emissions
  to strict thresholds in the sourcing of raw materials and the delivery of housing projects. Vanke goes
  beyond requirement, the Code for Indoor Environmental Pollution Control of Civil Building
  Engineering (GB50325) for floors, cabinetry and wallpapers by limiting formaldehyde emissions to
  less than 0.050mg/m³ for floors, 0.080mg/m³ for cabintary, and limiting hazardous substances to
  less than 12mg/kg for wallpapers.8

<sup>&</sup>lt;sup>6</sup> China Vanke Co. Ltd., "Corporate Social Responsibility Report", (2019), at: <u>iis.quamnet.com/media/IRAnnouncement/2202/EN\_US/9321158-0.PDF</u>

<sup>&</sup>lt;sup>7</sup> Energy efficiency measures include the installation of time-control and light-control devices and human motion monitoring sensors.

<sup>&</sup>lt;sup>8</sup> China Vanke Co. Ltd., "Corporate Social Responsibility Report", (2019), at: 9c80bc40-a7df-4515-a54b-33ba88c02951.pdf (vanke.com)



- To enhance waste management during construction, not only does Vanke strictly follow government regulations but also promotes waste classification and decentralized treatment of perishable waste, to minimize waste transportation to landfills and incineration.<sup>8</sup>
- As part of China's Environmental Impact Assessment Act, all projects related to construction, reconstruction, expansion and/or refurnishing are obliged to conduct an environmental risk assessment during the initial phase of project design and feasibility analysis. The act stipulates that the assessment must identify the main risk factors related to air, water, soil pollution or human health. According to the Chinese law, all companies are required to undergo an assessment by an independent and certified environmental impact assessment.<sup>9</sup>

Based on these policies, standards and assessments, Sustainalytics is of the opinion that Vanke has implemented adequate measures and is well-positioned to manage and mitigate environmental and social risks commonly associated with the eligible categories.

#### Section 3: Impact of Use of Proceeds

All four use of proceeds categories are aligned with those recognized by the GBP and GLP. Sustainalytics has focused on the below where the impact is specifically relevant in the local context.

#### Importance of green buildings in China

In 2017, total energy consumption of China's buildings accounted for 18.35% of the national final energy consumption and a total of 580 Mtce. <sup>10</sup> In 2020, President Xi Jinping announced the intention to scale up China's Nationally Determined Contribution (NDC) to address climate change by "adopting more policies and measures in an effort to peak CO<sub>2</sub> emissions before 2030 and reach carbon neutrality before 2060". <sup>11</sup> To achieve these goals, considerable effort is required across all industries before 2030. In 2016, buildings and the construction sector were responsible for over one-third of global final energy consumption and nearly 40% of total direct and indirect CO<sub>2</sub> emissions, thus there is ample potential for the Chinese building sector to contribute towards China's NDC. <sup>12</sup> According to the United National Environment Program (UNEP), the buildings sector has the potential to avoid 50% of the projected growth in global energy consumption. The buildings sector should achieve this through either highly energy efficient buildings or net-zero in newly constructed buildings, together with retrofitting the existing building stock by 2030. <sup>12</sup>

The Government has developed two complementary national policies aimed at promoting and regulating green buildings: (i) 13th Five Year Plan for Building Energy Efficiency and Green Building Development, and the (ii) Strategic Action Plan for Energy Development (2014-2020). These plans include a 50% requirement for all new urban buildings to be certified green buildings. Additionally, the National Development and Reform Commission published the 13th Five Year Plan for Energy Development (2016-2020) aimed at advancing energy consumption management, to achieve reductions per unit of GDP by 15% compared to 2015. As a result of these policies, China is making significant strides towards energy efficiency improvement. Without the current energy efficiency improvements in place since 2010, China would have used 25% more energy in 2018. Sustainalytics notes that projects financed under the Framework are expected to improve energy efficiency in buildings in China.

The opportunities for energy efficiency improvements in the green building industry in China are significant and particularly impactful considering the climate reduction goals of China. Sustainalytics expects that China Vanke's Financing for green buildings and energy efficiency projects will have a positive environmental impact by reducing GHG emissions from the built environment.

<sup>&</sup>lt;sup>9</sup> Zhengzhou Foreign-funded Enterprise Service Center, "Environmental Impact Assessment Law of the People's Republic of China", at: https://www.waizi.org.cn/law/11686.html.

<sup>&</sup>lt;sup>10</sup> International Energy Charter, "China Energy Efficiency Report", (2018), at: <u>EER-China\_ENG.pdf (energycharter.org)</u>

<sup>11</sup> WRI, "4 Questions About China's New Climate Commitments", (2020), at <u>4 Questions About China's New Climate Commitments | World Resources Institute (wri.org)</u>

<sup>&</sup>lt;sup>12</sup> Global Alliance for Buildings and Construction, "Towards zero-emission efficient and resilient buildings: Global Status Report", (2016), at: <u>GABC\_Global\_Status\_Report\_V09\_november\_FINAL.pdf</u> (worldgbc.org)

<sup>&</sup>lt;sup>13</sup> World Economic Forum, "China's clean, green buildings of the future", (2017), at: <u>China's clean, green buildings of the future | World Economic Forum (weforum.org)</u>

<sup>&</sup>lt;sup>14</sup> Energy Charter Secretariat, "China Energy Efficiency Report", (2018), at: EER-China\_ENG.pdf (energycharter.org)

<sup>15</sup> International Energy Agency "Energy Efficiency in China" (2021), at: E4 Country Profile: Energy Efficiency in China – Analysis - IEA



#### Alignment with/contribution to SDGs

The Sustainable Development Goals (SDGs) were set in September 2015 by the United Nations General Assembly and form an agenda for achieving sustainable development by the year 2030. The bond(s) and loan(s) issued under the China Vanke Co. Ltd. International Green Financing Framework advances the following SDGs and targets:

Use of Proceeds Category	SDG	SDG target
Green Buildings	11. Sustainable Cities and Communities	11.6 By 2030, reduce the adverse per capita environmental impact of cities, including paying special attention to air quality and municipal and other waste management
Renewable Energy	7. Affordable and Clean Energy	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix.
Pollution Prevention and Control	12. Responsible Consumption and Production	12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.
Sustainable Water and Wastewater Management	6. Clean Water and Sanitation	6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.

#### Conclusion

Vanke has developed the China Vanke Co. Ltd. International Green Financing Framework under which it intends to issue green financing instruments, including green bonds and loans, and use the proceeds to finance and/or refinance green buildings, renewable power generation, pollution prevention and control activities and wastewater treatment facilities. Sustainalytics considers that the assets funded by the proceeds are expected to improve the environmental performance of Vanke's operations while contributing to the sustainable development of China.

The China Vanke Co. Ltd. International Green Financing Framework outlines a process by which proceeds will be tracked, allocated, and managed, and commitments have been made for reporting on the allocation and impact of the use of proceeds. Furthermore, Sustainalytics believes that China Vanke Co. Ltd. International Green Financing Framework is aligned with the overall sustainability strategy of the Company and that the use of proceeds categories will contribute to the advancement of the UN Sustainable Development Goals 6, 7, 11, and 12. Additionally, Sustainalytics is of the opinion that Vanke has adequate measures to identify, manage and mitigate environmental and social risks commonly associated with the eligible projects funded by the use of proceeds.

Based on the above, Sustainalytics is confident that Vanke is well-positioned to issue green, social, and sustainability bonds and that the China Vanke Co. Ltd. International Green Financing Framework is robust, transparent, and in alignment with the four core components of the GBP and GLP.



## **Appendices**

## Appendix 1: Sustainalytics Assessment of Certification Schemes

	Chinese Green Building Evaluation Label (China Three Star)	LEED	BREEAM
Background	The Chinese Green Building Evaluation Label is a Certification System used in China for residential and public buildings (including commercial, hotel and government-owned) that was introduced in 2006 by MOHURD (Ministry of Housing and Urban-Rural Development).	Leadership in Energy and Environmental Design (LEED) is a US Certification System for residential and commercial buildings used worldwide. LEED was developed by the non-profit U.S. Green Building Council (USGBC) and covers the design, construction, maintenance and operation of buildings.	BREEAM (Building Research Establishment Environmental Assessment Method) was first published by the Building Research Establishment (BRE) in 1990. Based in the UK. Used for new, refurbished and extension of existing buildings.
Certification levels	1-Star 2-Star 3-Star	Certified Silver Gold Platinum	Pass Good Very Good Excellent Outstanding
Areas of Assessment: Environmental Performance of the Building	<ul> <li>Land savings and outdoor environment;</li> <li>Energy savings and utilisation;</li> <li>Water savings and utilisation;</li> <li>Material savings and utilisation;</li> <li>Indoor environment;</li> <li>Operations and management.</li> </ul>	<ul> <li>Energy and atmosphere</li> <li>Sustainable Sites</li> <li>Location and Transportation</li> <li>Materials and resources</li> <li>Water efficiency</li> <li>Indoor environmental quality</li> <li>Innovation in Design</li> <li>Regional Priority</li> </ul>	<ul> <li>Energy</li> <li>Land Use and Ecology</li> <li>Pollution</li> <li>Transport</li> <li>Materials</li> <li>Water</li> <li>Waste</li> <li>Health and Wellbeing</li> <li>Innovation</li> </ul>
Requirements	Prerequisites:  The system functions on a checklist basis, with 1-Star buildings meeting 26 criteria, 2-Star an additional 43 items, and 3-Star on a further 14 items. Criteria and weighting differ for public and residential buildings. In public buildings, more weight is given to energy and material savings, while the standard for residential buildings places greater	Prerequisites (independent of level of certification) + Credits with associated points  These points are then added together to obtain the LEED level of certification  There are several different rating systems within LEED. Each rating system is designed to apply to a specific sector (e.g.	Prerequisites depending on the levels of certification + Credits with associated points  This number of points is then weighted by item <sup>16</sup> and gives a BREEAM level of certification, which is based on the overall score obtained (expressed as a percentage). Majority of BREEAM issues are flexible, meaning that the client can choose which to comply with to build their

<sup>&</sup>lt;sup>16</sup> BREEAM weighting: Management 12%, Health and wellbeing 15%, Energy 19%, Transport 8%, Water 6%, Materials 12.5%, Waste 7.5%, Land Use and ecology 10%, Pollution 10% and Innovation 10%. One point scored in the Energy item is therefore worth twice as much in the overall score as one point scored in the Pollution item.

8



	importance on urban land saving and outdoor environments.	New Construction, Major Renovation, Core and Shell Development, Schools-/Retail- /Healthcare New Construction and Major Renovations, Existing Buildings: Operation and Maintenance).	BREEAM performance score.  BREEAM has two stages/ audit reports: a 'BREEAM Design Stage' and a 'Post Construction Stage', with different assessment criteria.
Performance display			Pas Cadarding

## Appendix 2: Green Bond / Green Bond Programme - External Review Form

#### Section 1. Basic Information

Issuer name:	Vanke Real Estate (Hong Kong) Company Limited
Green Bond ISIN or Issuer Green Bond Framework Name, if applicable:	China Vanke Co. Ltd. International Green Financing Framework
Review provider's name:	Sustainalytics
Completion date of this form:	March 29, 2021
Publication date of review publication:	

### Section 2. Review overview

#### SCOPE OF REVIEW

The following may be used or adapted, where appropriate, to summarise the scope of the review.

The review assessed the following elements and confirmed their alignment with the GBP:

	view deceased the renowing elements and commi		on anguirient with the ODI .
$\boxtimes$	Use of Proceeds	$\boxtimes$	Process for Project Evaluation and Selection
$\boxtimes$	Management of Proceeds	$\boxtimes$	Reporting
ROLE(	S) OF REVIEW PROVIDER		
$\boxtimes$	Consultancy (incl. 2 <sup>nd</sup> opinion)		Certification
	Verification		Rating
	Other (please specify):		

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	)
--	--------------------------------------------------------	----------------	---

Please refer to Evaluation Summary above.		

#### Section 3. Detailed review

Reviewers are encouraged to provide the information below to the extent possible and use the comment section to explain the scope of their review.

#### 1. USE OF PROCEEDS

Overall comment on section (if applicable):

The eligible categories for the use of proceeds - Green Buildings, Renewable Energy, Pollution Prevention and Control and Sustainable Water and Wastewater Management – are aligned with those recognized by the Green Bond Principles 2018 and the Green Loan Principles 2020. Sustainalytics considers that the eligible categories will lead to positive environmental impacts and advance the UN Sustainable Development Goals, specifically SDG 6, 7, 11, 12

#### Use of proceeds categories as per GBP:

$\boxtimes$	Renewable energy	Energy efficiency
	Pollution prevention and control	Environmentally sustainable management of living natural resources and land use
	Terrestrial and aquatic biodiversity conservation	Clean transportation
$\boxtimes$	Sustainable water and wastewater management	Climate change adaptation
	Eco-efficient and/or circular economy adapted products, production technologies and processes	Green buildings
	Unknown at issuance but currently expected to conform with GBP categories, or other eligible areas not yet stated in GBP	Other (please specify):

If applicable please specify the environmental taxonomy, if other than GBP:

#### 2. PROCESS FOR PROJECT EVALUATION AND SELECTION

Overall comment on section (if applicable):

Vanke's ESG working group and Investment Banking Department will be responsible for reviewing and approving the preliminary list of Eligible Projects in accordance with the criteria outlined in the Framework. The Group's Chief Executive Officer (CEO) will have final approval of projects. Sustainalytics considers the project selection process in line with market practice



Eval	Evaluation and selection						
	Credentials on the issuer's environmental sustainability objectives	$\boxtimes$	Documented process to determine that projects fit within defined categories				
	Defined and transparent criteria for projects eligible for Green Bond proceeds		Documented process to identify and manage potential ESG risks associated with the project				
	Summary criteria for project evaluation and selection publicly available		Other (please specify):				
Info	rmation on Responsibilities and Accountability						
	Evaluation / Selection criteria subject to external advice or verification		In-house assessment				
	Other (please specify):						
3. M	ANAGEMENT OF PROCEEDS						
Over	rall comment on section (if applicable):						
inter 36 r	nal register to record and manage the allocation	n of p n, the	ne management of proceeds. Vanke will establish an proceeds. Vanke expects to reach full allocation within a proceeds will be held in accordance with Vanke's with market practice.				
Trac	king of proceeds:						
$\boxtimes$	Green Bond proceeds segregated or tracked b	y the	e issuer in an appropriate manner				
	Disclosure of intended types of temporary inv proceeds	estm	nent instruments for unallocated				
	Other (please specify):						
Addi	itional disclosure:						
	Allocations to future investments only		Allocations to both existing and future investments				
	Allocation to individual disbursements		Allocation to a portfolio of disbursements				

Other (please specify):

#### 4. REPORTING

Overall comment on section (if applicable):

Disclosure of portfolio balance of unallocated proceeds



Vanke intends to report on the allocation of proceeds, on an annual basis, and until full allocation. Allocation reporting will include a list of allocated eligible projects, a list of eligible project categories, project descriptions, construction progress, the amount of allocated proceeds and the amount of unallocated proceeds. In addition, Vanke is committed to reporting on relevant impact metrics, such as green building certifications obtained, or energy savings data. Sustainalytics views Vanke's allocation and impact reporting as aligned with market practice.

Use	of proceeds re	eport	ing:			
	Project-by-p	rojed	et	$\boxtimes$	On a proj	ect portfolio basis
	Linkage to ir	Linkage to individual bond(s)  Information reported:			Other (pl	lease specify):
			Allocated amounts			Green Bond financed share of total investment
			Other (please specify): list allocated eligible projects, of eligible project categori project descriptions, construction progress, and amount of unallocated pro	, a list ies, d the		
	Frequency:					
		$\boxtimes$	Annual			Semi-annual
			Other (please specify):			
Impa	ct reporting:					
	Project-by-p	rojec	et	$\boxtimes$	On a pro	ject portfolio basis
	Linkage to ir	ndivi	dual bond(s)		Other (p	lease specify):
	Information reported (expected		or ex- <sub>l</sub>	oost):		
			GHG Emissions / Savings			Energy Savings
			Decrease in water use			Other ESG indicators (please specify): green building certifications obtained, energy savings data, amount of carbon dioxide emissions avoided, and the relevant calculation methodologies
		Freq	uency			
		$\boxtimes$	Annual			Semi-annual
			Other (please specify):			



Means of Disclosure			
	Information published in financial report		Information published in sustainability report
	Information published in ad hoc documents		Other (please specify): annual Corporate Social Responsibility or standalone Green Financing Report
	Reporting reviewed (if yes, please specify which parts of the reporting are subject to external review):		
Where appropriate, please specify name and date of publication in the useful links section.			
USEFUL LINKS (e.g. to review provider methodology or credentials, to issuer's documentation, etc.)			
https://www.vanke.com/en/			
SPECIFY OTHER EXTERNAL REVIEWS AVAILABLE, IF APPROPRIATE			
Type(s) of Review provided:			
	Consultancy (incl. 2 <sup>nd</sup> opinion)		Certification
	Verification / Audit		Rating
	Other (please specify):		
Review provider(s): Dat			e of publication:

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

- i. Second-Party Opinion: An institution with environmental expertise, that is independent from the issuer may issue a Second-Party Opinion. The institution should be independent from the issuer's adviser for its Green Bond framework, or appropriate procedures, such as information barriers, will have been implemented within the institution to ensure the independence of the Second-Party Opinion. It normally entails an assessment of the alignment with the Green Bond Principles. In particular, it can include an assessment of the issuer's overarching objectives, strategy, policy and/or processes relating to environmental sustainability, and an evaluation of the environmental features of the type of projects intended for the Use of Proceeds.
- ii. Verification: An issuer can obtain independent verification against a designated set of criteria, typically pertaining to business processes and/or environmental criteria. Verification may focus on alignment with internal or external standards or claims made by the issuer. Also, evaluation of the environmentally sustainable features of underlying assets may be termed verification and may reference external criteria. Assurance or attestation regarding an issuer's internal tracking method for use of proceeds, allocation of funds from Green Bond proceeds, statement of environmental impact or alignment of reporting with the GBP, may also be termed verification.
- iii. Certification: An issuer can have its Green Bond or associated Green Bond framework or Use of Proceeds certified against a recognised external green standard or label. A standard or label defines specific criteria, and alignment with such criteria is normally tested by qualified, accredited third parties, which may verify consistency with the certification criteria.
- iv. Green Bond Scoring/Rating: An issuer can have its Green Bond, associated Green Bond framework or a key feature such as Use of Proceeds evaluated or assessed by qualified third parties, such as specialised research providers or rating agencies, according to an established scoring/rating methodology. The output may include a focus on environmental performance data, the process relative to the GBP, or another benchmark, such as a 2-degree climate change scenario. Such scoring/rating is distinct from credit ratings, which may nonetheless reflect material environmental risks.



### Disclaimer

#### Copyright ©2021 Sustainalytics. All rights reserved.

The information, methodologies and opinions contained or reflected herein are proprietary of Sustainalytics and/or its third party suppliers (Third Party Data), and may be made available to third parties only in the form and format disclosed by Sustainalytics, or provided that appropriate citation and acknowledgement is ensured. They are provided for informational purposes only and (1) do not constitute an endorsement of any product or project; (2) do not constitute investment advice, financial advice or a prospectus; (3) cannot be interpreted as an offer or indication to buy or sell securities, to select a project or make any kind of business transactions; (4) do not represent an assessment of the issuer's economic performance, financial obligations nor of its creditworthiness; and/or (5) have not and cannot be incorporated into any offering disclosure.

These are based on information made available by the issuer and therefore are not warranted as to their merchantability, completeness, accuracy, up-to-dateness or fitness for a particular purpose. The information and data are provided "as is" and reflect Sustainalytics` opinion at the date of their elaboration and publication. Sustainalytics accepts no liability for damage arising from the use of the information, data or opinions contained herein, in any manner whatsoever, except where explicitly required by law. Any reference to third party names or Third Party Data is for appropriate acknowledgement of their ownership and does not constitute a sponsorship or endorsement by such owner. A list of our third-party data providers and their of respective terms use is available on our website. For more visit http://www.sustainalytics.com/legal-disclaimers.

The issuer is fully responsible for certifying and ensuring the compliance with its commitments, for their implementation and monitoring.

In case of discrepancies between the English language and translated versions, the English language version shall prevail.



## About Sustainalytics, a Morningstar Company

Sustainalytics, a Morningstar Company, is a leading ESG research, ratings and data firm that supports investors around the world with the development and implementation of responsible investment strategies. The firm works with hundreds of the world's leading asset managers and pension funds who incorporate ESG and corporate governance information and assessments into their investment processes. The world's foremost issuers, from multinational corporations to financial institutions to governments, also rely on Sustainalytics for credible second-party opinions on green, social and sustainable bond frameworks. In 2020, Climate Bonds Initiative named Sustainalytics the "Largest Approved Verifier for Certified Climate Bonds" for the third consecutive year. The firm was also recognized by Environmental Finance as the "Largest External Reviewer" in 2020 for the second consecutive year. For more information, visit <a href="https://www.sustainalytics.com">www.sustainalytics.com</a>.







#### Named

2015: Best SRI or Green Bond Research or Rating Firm 2017, 2018, 2019: Most Impressive Second Opinion Provider

