

Second-Party Opinion

OCBC Sustainability Bond

Evaluation Summary

Sustainalytics is of the opinion that the OCBC Sustainability Bond Framework is credible and impactful, and aligns with the four core components of the ICMA Green Bond Principles 2018, the Social Bond Principles 2018, and the Sustainability Bond Guidelines 2018. This assessment is based on the following:



USE OF PROCEEDS The ten eligible use of proceeds categories are aligned with those recognized by the Green Bond Principles or the Social Bond Principles. Sustainalytics considers the range of eligible projects to have positive environmental or social impacts and to advance the UN Sustainable Development Agenda.



PROJECT EVALUATION / SELECTION OCBC's project selection involves a two-step process, with initial screening by the relevant business units and final validation by the Sustainability Council, which consists of members of the Management Committee. OCBC has outlined a comprehensive list of exclusions which serve to mitigate environmental or social risk associated with the eligibility criteria. This is in line with market practice.



MANAGEMENT OF PROCEEDS OCBC has committed to tracking the proceeds using its established internal information system, and to using a register to track the allocation of funds to eligible projects. Unallocated proceeds may be temporarily invested in cash, cash equivalent, or high-quality marketable instruments. This is in line with market practice.



REPORTING OCBC intends to report on an annual basis, providing the amounts allocated and impact information at the category level. In Sustainalytics' view, reporting on these metrics is in line with market practice.

Alignment with the ASEAN Green Bond Standards

The ASEAN Green Bond Standards provide guidance to issuers and communicate more specifically what an issuer should do to issue a credible green bond within Southeast Asia. Sustainalytics is of the opinion that the green criteria of the OCBC Sustainability Bond Framework align with the ASEAN Green Bond Standards.

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Issuer Location	Singapore

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¹ The original engagement period for this project was in October 2018. As such, some commentary within the SPO may reflect market norms of that time. This does not affect the overall opinion of Sustainalytics on the impact of the Sustainability Bond Framework.

Introduction

OCBC Bank (“OCBC”, or “the Bank”) is a financial services organization based in Singapore, with core businesses in banking, wealth management, and insurance in East and Southeast Asia, and over 600 branches in 18 countries worldwide. Founded in 1932, OCBC is Singapore’s oldest bank, and is the second largest bank in Southeast Asia by total assets.

OCBC has developed the OCBC Sustainability Bond Framework (the “Framework”) under which it is planning to issue green, social, and sustainability bonds and use the proceeds to finance or refinance, in whole or in part, existing and future projects with a range of environmental and social impacts that promote the 2030 Agenda for Sustainable Development.²

The Framework defines green eligibility criteria in seven areas:

1. Renewable Energy
2. Energy Efficiency
3. Pollution Prevention and Control
4. Clean Transportation
5. Sustainable Water and Wastewater Management
6. Climate Change Adaptation
7. Green Buildings

The Framework defines social eligibility criteria in three areas:

1. Access to Essential Services
2. Affordable Housing
3. Employment Generation

OCBC engaged Sustainalytics to review the OCBC Sustainability Bond Framework, dated November 2019, and provide a second-party opinion on the Framework’s environmental and social credentials, as well as its alignment with the International Capital Market Association’s (the “ICMA”) Green and Social Bond Principles 2018 (the “GBP” and “SBP”), the Sustainability Bond Guidelines 2018 (the “SBG”),³ and the ASEAN Capital Markets Forum’s ASEAN Green Bond Standards (“AGBS”).⁴ This Framework has been published in a separate document.⁵

As part of this engagement, Sustainalytics communicated with members of OCBC’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 OCBC’s sustainability bond. Sustainalytics also reviewed relevant public documents and non-public information.

This document contains Sustainalytics’ opinion of the OCBC Sustainability Bond Framework and should be read in conjunction with that framework.

² <https://sustainabledevelopment.un.org/post2015/transformingourworld>

³ ICMA’s Green Bond Principles 2018 <https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/June-2018/Green-Bond-Principles---June-2018-140618-WEB.pdf>; ICMA’s Social Bond Principles 2018 <https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/June-2018/Social-Bond-Principles---June-2018-140618-WEB.pdf>; ICMA’s Sustainability Bond Guidelines 2018 <https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/June-2018/Sustainability-Bond-Guidelines---June-2018-140618-WEB.pdf>

⁴ The ACMF has developed the ASEAN Green Bond Standards based on the ICMA’s GBP as they are internationally accepted and widely used for the development of national green bond guidelines or standards issued globally. ASEAN Green Bond Standards, dated November 2017, issued by the ASEAN Capital Markets Forum (ACMF): http://www.theacmf.org/ACMF/upload/ASEAN_Green_Bond_Standards

⁵ <https://www.ocbc.com/group/group-home.html>

Sustainalytics' Opinion

Section 1: Sustainalytics' Opinion on the OCBC Sustainability Bond Framework

Summary

Sustainalytics is of the opinion that the OCBC Sustainability Bond Framework is credible and impactful, and aligns with the four core components of the Green and Social Bond Principles 2018. Sustainalytics highlights the following elements of the Framework:

- The ten use of proceeds categories are recognized by the Green Bond Principles as having clear environmental benefits or the Social Bond Principles as having clear social benefits. Sustainalytics views OCBC's intended allocation of bond proceeds as environmentally and socially impactful. Additionally, the green use of proceeds categories are aligned with the ASEAN Green Bond Standards. For further information on impact, please see Section 3.
 - The Framework's criteria for green buildings⁶ is aligned with standards and certifications of recognized national and international organizations. For a comparison of the green building standards, please refer to Appendix 1: Comparison of Green Building Certification Schemes.
 - As part of the energy efficiency category, OCBC is considering directing proceeds to district cooling systems. These projects supply chilled water to buildings from a central source to meet air conditioning or industrial needs; while some facilities source cold water from natural water bodies, in warmer climates a centralized cooling plant is be used. These systems result in energy savings compared to individual cooling systems; OCBC has clarified that the projects they will finance rely on electricity from the local utility and do not directly rely on fossil fuels.
 - The eligibility criteria for the social use of proceeds categories are based on those of government agencies, such as the Singapore Ministry of Health, the Singapore Housing & Development Board, and the Singapore Ministry of Trade and Industry. Sustainalytics views positively the alignment of the sustainability bond framework with these official definitions.
 - The Framework's criteria for affordable housing contemplates the inclusion of lending through Singapore Housing & Development Board (HDB) programs. Sustainalytics considers that financing in support of HDB initiatives contributes to HDB's overall mandate of accessible and affordable housing for all Singaporeans.
 - The Framework's criteria for study loans under access to essential services contemplates the inclusion of lending for tuition fee, education and vocational training. Sustainalytics encourages OCBC to target its lending activities towards low-income and marginalized groups in order to maximize the social benefits.
 - OCBC has included specific exclusionary criteria, including fossil fuel power generation, nuclear energy, and large-scale hydro power generation, alcohol & tobacco products, slash & burn agriculture, and others which act as a way to mitigate potential environmental or social risks associated with the eligibility criteria, ensuring that the bond proceeds will have a net positive impact.
- OCBC's project selection process involves the screening for and initial selection of eligible projects by the Bank's various business units as part of their general credit evaluation, and subsequent validation of these assets by the OCBC Sustainability Council, which is made up of members of the Management Committee. All eligible projects will be added to OCBC's pool of Green/Social/Sustainability projects. This is in line with market practice.
 - OCBC does not indicate a lookback period in its sustainability bond framework. Though Sustainalytics acknowledges that the market may view the refinancing of older projects to reduce the additionality of the green bond, Sustainalytics positively views OCBC's efforts to transparently report on the portion of financing and refinancing projects and further encourages OCBC to indicate the completion year of its projects.
- OCBC intends to track the proceeds of the bond(s) via its internal information system, and will establish a register to record the allocation of the net proceeds to assets drawn from its pool of eligible projects.

⁶ Eligibility Criteria includes: Singapore Building and Construction Authority (BCA) Green Mark (Gold Plus and above), Malaysia Green Building Index (GBI) (Gold and above), Hong Kong BEAM Plus (Gold and above), China Three Star Green Building Evaluation Standard (Three Star rating and above), LEED (Gold and above), and in compliance with appropriate regulations.

Pending allocation, the Bank may, at its discretion, invest the proceeds in cash, cash equivalent, or high-quality marketable instruments. This is in line with market practice.

- OCBC has committed to reporting annually, as long as there are outstanding green, social, or sustainability bond proceeds. These reports will include the amounts allocated and impact information at the category level and the balance of unallocated proceeds. This is in line with market practice.

Alignment with Green and Social Bond Principles 2018 and the Sustainability Bond Guidelines 2018

Sustainalytics has determined that the OCBC Sustainability Bond Framework aligns to the four core components of the Green Bond Principles 2018, the Social Bond Principles 2018, and the Sustainability Bond Guidelines 2018. For detailed information please refer to Appendix 3: Sustainability Bond/Sustainability Bond Programme External Review Form.

Alignment with ASEAN Green Bond Standards

The ASEAN Green Bond Standards (“AGBS”) communicate more specifically what an issuer should do to issue a credible green bond within Southeast Asia. Sustainalytics has assessed the green criteria of the OCBC Sustainability Bond Framework, and is of the opinion that it is aligned with the AGBS. For detailed information please refer to Appendix 2: Alignment to the ASEAN Green Bond Standards.

Section 2: Sustainability Performance of the Issuer

Contribution of Framework to the Bank’s Sustainability Strategy

Sustainalytics has a positive view of the alignment of OCBC’s framework to the Bank’s broader sustainability efforts. Although OCBC has not set quantifiable targets, the Bank has demonstrated its commitment to sustainable practices through the following efforts:

- The publication of an inaugural sustainability report as part of its 2017 year-end corporate report,⁷ which the Bank intends to issue annually, as part of its “commitment towards being a sustainable and responsible organization.” The report identifies ten ESG factors for assessment and disclosure, in the areas of Responsible Business Practices, Corporate Citizenship, Employer of Choice, and Environment. The report was prepared in accordance with the Global Reporting Initiative (GRI) Standards Core Option, as well as GRI G4 Financial Services Sector Disclosures. The report provides quantitative sustainability results in various areas, as well as qualitative goals for future progress.
- A Responsible Financing Approach,⁸ in which OCBC commits to “not engage in or knowingly finance any activity where there is clear evidence of immitigable adverse impact to the environment, people or communities”. The policy also states that the Bank will conduct ESG risk assessment of its activities, and excludes activities related to certain sectors.
- The Bank’s Sustainability Governance Structure, which defines roles at the Board, Sustainability Council, and Working Group levels.
- OCBC has been a participant of the UN Global Compact⁹ since 2006 and is a gold-level member of the Singapore Compact,¹⁰ a national organization seeking to further corporate social responsibility in the country.

Sustainalytics is of the opinion that OCBC’s sustainability initiatives are indicative of the priority the Bank assigns to achieving positive environmental and social impacts. As such, Sustainalytics believes that OCBC’s Sustainability Bond Framework will support these efforts, and serve as an effective mechanism to raise funds dedicated to achieving sustainable goals.

⁷ https://www.ocbc.com/assets/pdf/annual%20reports/2017/ocbc_ar17_fullreport_english.pdf

⁸ <https://www.ocbc.com/group/who-we-are/responsible-financing.html>

⁹ <https://www.ocbc.com/group/who-we-are/sustainability-un-global-compact.html>

¹⁰ <http://www.csrsgap.org/c/about>

Well Positioned to Address Common Environmental and Social Risks Associated with the Projects

Sustainalytics recognizes that the use of proceeds will be directed towards projects that will have largely positive environmental and/or social impacts and contribute to sustainable development. However, Sustainalytics is aware that by offering lending and financial services, banks are exposed to risks associated with controversial companies and/or projects they may finance, and may also be exposed to the possibility of financing activities that have negative environmental or social impacts. OCBC has processes in place to mitigate such risks, including:

- A formalized approach to Risk Governance and Organisation, overseen by the Board Risk Management Committee (BRMC).¹¹ The Bank has “integrated ESG considerations into our credit and risk evaluation process for all new and existing corporate and institutional borrowers.”
- A “Three Lines of Defence” approach to client risk management, involving an ESG assessment by the relationship manager, reviews by approving officers, and internal assurance. The ESG assessments “reference standards and conventions from organisations such as the International Finance Corporation (IFC), United Nations (UN) and International Labour Organisation (ILO)”. Finally, an ESG rating is assigned to OCBC’s borrowers.¹²
- An exclusion list, banning involvement in activities which will impact UNESCO Heritage Sites, RAMSAR Wetlands of International Importance, and trade in wildlife prohibited by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).¹³
- Sector-specific lending policies for agriculture, forestry, energy, and other sectors which have been identified as having higher ESG risks. These procedures reference, as applicable IFC Industry Sector Guidelines, the Roundtable Sustainable Palm Oil (RSPO), the International Petroleum Industry Environmental Conservation Association (IPIECA), Equator Principles Association and others, as well as relevant local regulation.
- Identification of five stakeholder groups (customers, employees, investors, community, and regulators), and defining engagement methods for each.

Sustainalytics is of the opinion that OCBC’s internal processes and mechanisms to mitigate environmental and social risks associated with its project financing and lending activities are in line with market practice.

Section 3: Impact of Use of Proceeds

All ten use of proceeds categories of OCBC’s Sustainability Bond Framework are recognized as impactful by the Green Bond Principles or the Social Bond Principles. Sustainalytics has focused on several issue areas below where the impact is specifically relevant in the regions served by OCBC.

Importance of Water Management and Treatment in Singapore

Due to its geography, Singapore faces unique challenges in adequately meeting its water needs. According to the World Resource Institute, Singapore is one of the four most water-stressed countries in the world.¹⁴ Currently, water consumption is approximately 430 million gallons per day, and it is projected that this demand could double by 2060.¹⁵ To meet these needs, Singapore’s Public Utility Board (PUB) has embraced a strategy of “Four National Taps”: water captured from rainfall in the local catchment, water imported from neighbouring Malaysia, reclaimed water (NEWater), and desalinated water.¹⁶ NEWater currently supplies 40% of the local demand for water, it is the policy of the PUB to increase this amount to 55% by 2060. By specifying that water treatment programs of the PUB are eligible for green bond funds, OCBC’s sustainable water and wastewater management use of proceeds will contribute positively to this program and provide positive environmental and social impacts; Sustainalytics views favourably this category of OCBC’s framework.

¹¹ https://www.ocbc.com/assets/pdf/annual%20reports/2017/ocbc_ar17_fullreport_english.pdf

¹² <https://www.ocbc.com/group/who-we-are/responsible-financing.html>

¹³ <https://www.ocbc.com/group/who-we-are/responsible-financing.html>

¹⁴ <http://wriorg.s3.amazonaws.com/s3fs-public/aqueduct-water-stress-country-rankings-technical-note.pdf>

¹⁵ <https://www.pub.gov.sg/watersupply/singaporewatertaps>

¹⁶ <https://www.pub.gov.sg/watersupply/fournationaltaps>

Climate Monitoring

Singapore and Southeast Asia are vulnerable to the effect of climate change. According to the IPCC's Fifth Assessment Report¹⁷ warming, occurrences of extreme temperatures, water scarcity, sea level rise, and other extreme climate events are all likely to increase. According to Singapore's National Climate Change Secretariat, sea level rise, biodiversity loss, public health impacts, urban heat island effects, and food security are the most likely risks facing the country.¹⁸ Singapore, as an equatorial nation, is generally not susceptible to tropical cyclones or typhoons; Typhoon Vamei, which brought extensive flooding and 140 km per hour winds to Singapore and neighbouring Malaysia in 2001, is an exception that shows how damaging rare climate events can be.¹⁹ The IPCC states that although the influence of climate change is likely to impact the frequency, intensity, and storm track of cyclones, there is low confidence in region-specific projections. In this context, ongoing investments in research and monitoring will provide valuable risk mitigation and adaptation information. Singapore has taken steps to position itself as a regional leader in climate risk assessment.²⁰ OCBC's Climate Change Adaptation use of proceeds category will support investment in climate monitoring and observation, such as hydrometeorology studies and the expansion of Synthetic Aperture Radar systems. Sustainalytics views efforts in these areas as effective ways to mitigate the impacts of climate change, in particular in a region subject to sea level rise, increased precipitation, and variable and uncertain storm events.

The Impact of Green Buildings in the Context of Rapid Urbanization

Singapore is among the most urbanized nations on earth.²¹ OCBC's key markets, which include Singapore, Malaysia, Indonesia, and Greater China, had a combined urban population of over 962 million people in 2016, an increase of more than 2.5% over the preceding year.²² In this context, addressing the environmental impact of the built environment can be considered extremely impactful. OCBC's green buildings use of proceeds category will have clear positive environmental benefits. Sustainalytics views favourably this category of OCBC's framework, and in particular, its alignment with nationally and internationally recognized standards, and high certification levels. Additionally, by selecting evaluation schemes tailored to local conditions (notably BCA Green Mark, the Green Building Index, and HK BEAM Plus), the certifications will be relevant to the local context.

Access to Education

UNESCO describes education in Southeast Asia as being characterized by "a combination of generally high-performing systems and systems where substantial improvement may be needed" and identified considerable levels of private expenditures on education as one of its key themes for educational policy in the region, stating that this "may [...] have serious implications for equity".²³ Levels of private spending on education in Southeast Asia were estimated to be \$60 billion in 2016.²⁴ In Malaysia, Indonesia and Singapore, which are key markets for OCBC, net enrolment in secondary education varied from 68.5% to 99.5%.²⁵ In this context, expanding access to quality secondary education will provide clear and tangible social benefits. As part of the Access to Essential Services category of its framework, OCBC intends to devote proceeds to study loans, enabling students to meet tuition fees and other expenses. Although Sustainalytics recognizes that privately-funded education by its nature may negatively impact equity, by offering loans to students who may otherwise be unable to access secondary or tertiary educational systems, overall access may improve. Sustainalytics encourages OCBC to target its lending activities towards low-income and marginalized groups in order to maximize the social benefits.

¹⁷ http://www.ipcc.ch/pdf/assessment-report/ar5/wg2/WGIIAR5-Chap24_FINAL.pdf

¹⁸ <https://www.nccs.gov.sg/climate-change-and-singapore/national-circumstances/impact-of-climate-change-on-singapore>

¹⁹ <http://www.sciencemag.org/news/2003/04/rarest-typhoon>

²⁰ <https://www.nccs.gov.sg/climate-change-and-singapore/green-growth-opportunities/climate-risk-management>

²¹ https://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS?year_high_desc=true

²² https://data.worldbank.org/indicator/SP.URB.TOTL?year_high_desc=true

²³ <http://unesdoc.unesco.org/images/0022/002267/226757E.pdf>

²⁴ http://cdn.ey.com/parthenon/pdf/perspectives/Parthenon-EY_SE-Asia_Paper_final_092016_singles.pdf

²⁵ http://asean.org/storage/2018/01/ASYB_2017-rev.pdf

The Role of Affordable Housing in Singapore

Housing in Singapore is dominated by the Housing Development Board (HDB), a government-controlled public housing authority. As of 2017, 82% of Singaporeans live in HDB-built units; the agency currently manages over 1,017 thousand units, of which approximately 94% are owned and 6% are leased.^{26,27} Singapore’s public housing model is different than social housing programs in most jurisdictions worldwide, which are generally geared primarily to serving low-income or otherwise disadvantaged groups. In contrast, HDB seeks to achieve the goal of widely accessible housing. Although certain aspects of the Singaporean system have been critiqued,²⁸ the system is generally considered a success, and has been proposed as a model for other countries to emulate in various ways.²⁹ To ensure this widespread accessibility, HDB has implemented a number of schemes providing support in the form of grants or access priority to various groups, such as orphans, the elderly, and newly married couples,³⁰ as well as establishing income ceilings for individuals and families to qualify to purchase HDB units.³¹

OCBC’s affordable housing use of proceeds criteria allow for the lending through HDB home ownership programs. Aligning these lending practices with HDB criteria ensures that OCBC’s affordable housing initiatives support the HDB mission to “provide affordable homes of quality and value”. Although, as mentioned above, HDB’s qualifying thresholds do not restrict program access to only vulnerable groups, by supporting a society-wide system of affordable housing, Sustainalytics is of the opinion that the sustainability bond will contribute to positive housing outcomes for individuals of all social and economic strata.

SME Lending in Southeast Asia

Small and medium enterprises (SMEs) make up 97-99% of all firms in ASEAN member states,³² create 61-97% of employment, and contribute 16-61% of GDP.³³ According to the IFC, as of 2017 44% of SMEs in East Asia and Pacific were financially constrained.³⁴ The UN Economic and Social Commission for Asia and the Pacific identified “the importance of sufficient and smooth cash flow” as one of the four most integral issues for the development of the sector.³⁵ As part of the use of proceeds category, “Employment generation including through the potential effect of SME financing and microfinance”, OCBC has included loans to small and medium enterprises, as defined by the Singapore Ministry of Trade and Industry.³⁶ Sustainalytics views positively the expansion of SME lending in the markets in which OCBC operates, and considers these activities to have a positive social impact.

Alignment with/contribution to SDGs

The Sustainable Development Goals (SDGs) were set in September 2015 and form an agenda for achieving sustainable development by the year 2030. This green bond advances the following SDG goals and targets:

Use of Proceeds	SDG	SDG target
Renewable Energy	7. Affordable and Clean Energy	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix
Energy Efficiency	7. Affordable and Clean Energy	7.3 By 2030, double the global rate of improvement in energy efficiency
Pollution Prevention and Control	9. Industry Innovation and Infrastructure 12. Responsible Consumption and Production	9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities

²⁶ <http://www10.hdb.gov.sg/ebook/AR2017/key-statistics.html>

²⁷ “Owned” units managed by the HDB are technically long-term (99-year) leases which can be re-sold on the market, subject to certain restrictions and approvals.

²⁸ <https://www.economist.com/asia/2017/07/06/why-80-of-singaporeans-live-in-government-built-flats>

²⁹ <http://blogs.worldbank.org/sustainablecities/what-about-singapore-lessons-best-public-housing-program-world>

³⁰ <https://www.hdb.gov.sg/cs/infoweb/residential/buying-a-flat/new/eligibility/priority-schemes>

³¹ <https://www.hdb.gov.sg/cs/infoweb/residential/buying-a-flat/new/eligibility&rendermode=preview>

³² With the exception of Myanmar (87%)

³³ https://www.oecd.org/southeast-asia/events/regional-forum/SME_policies_role_in_fostering_Inclusive_ASEAN.pdf

³⁴ <https://www.ifc.org/wps/wcm/connect/a2aef7a2-6d46-433c-ab02-06cd00591cea/121264-WP-PUBLIC-MSMEREportFINAL.pdf?MOD=AJPERES>

³⁵ http://www.unescap.org/sites/default/files/0%20-%20Full%20Report_7.pdf

³⁶ The definition encompasses companies with fewer than 200 employees or less than S\$100 million in annual sales.

		12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse
Clean Transportation	11. Sustainable Cities and Communities	11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons
Sustainable Water and Wastewater Management	6. Clean Water and Sanitation	6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally
Climate Change Adaptation	13 Climate Action	13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning
Green Buildings	11. Sustainable Cities and Communities	11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries
Access to Essential Services	3. Good Health and Wellbeing 8. Decent Work and Economic Growth 9. Industry Innovation and Infrastructure	3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all 8.6 By 2020, substantially reduce the proportion of youth not in employment, education or training 9.3 Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets
Affordable Housing	11. Sustainable Cities and Communities	11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums
Employment Generation and SME Lending	8. Decent Work and Economic Growth	8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services

Conclusion

OCBC has developed the OCBC Sustainability Bond Framework for issuing green, social, and sustainability bonds to finance projects that advance the UN Sustainable Development 2030 Agenda.






The Framework identifies eligible categories in seven green and three social categories; Sustainalytics is of the opinion that the use of proceeds in these areas will result in positive environmental and social impacts. Furthermore, taking into consideration OCBC's sustainability policies and focus on ESG issues, Sustainalytics believes that the Framework will support the achievement of OCBC's ongoing commitment to sustainability.

By adhering to strong eligibility criteria, demonstrating a structured and transparent project selection and management of proceeds process, and reporting on both the allocation of funds and key social and environmental impacts, Sustainalytics considers the Framework to be fully aligned with the Green Bond Principles 2018, the Social Bond Principles 2018, and the Sustainability Bond Guidelines 2018, and the green criteria to be aligned with the ASEAN Green Bond Standards.

Appendices

Appendix 1: Comparison of Green Building Certification Schemes

	Singapore BCA Green Mark	Malaysia Green Building Index	Hong Kong BEAM Plus	China Three Star	LEED
Background	The BCA Green Mark Scheme provides real estate certifications in Singapore to promote sustainability in the built environment during project conceptualisation and design, as well as during construction.	The Green Building Index (GBI) is a Malaysian industry-recognized green rating tool, developed specifically for the tropical climate and development & cultural context of Malaysia.	BEAM Plus is a green building assessment tool tailor-made for the high-rise, high density-built environment of sub-tropical climate in Hong Kong. BEAM Society Limited (BSL), owner of the Building Environmental Assessment Method (BEAM), is a public body established in 2010.	The Chinese 3-Star Green Building Standard 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.
Certification levels	Certified Gold Gold Plus Platinum	Certified Silver Gold Platinum	Bronze Silver Gold Platinum	1-Star 2-Star 3-Star	Certified Silver Gold Platinum
Areas of Assessment	<ul style="list-style-type: none"> Climate Responsive Design Building Energy Performance Resource Stewardship Smart and Healthy Buildings Advanced Green Efforts 	<ul style="list-style-type: none"> Energy Efficiency Indoor Environment Quality Materials & resources Sustainable Site Planning & Management Water Efficiency Innovation 	<ul style="list-style-type: none"> Site Aspects Materials Aspects Energy Use Water Use Indoor Environmental Quality (IEQ) 	<ul style="list-style-type: none"> Land savings and outdoor environment Energy savings and utilisation Water savings and utilisation Material savings and utilisation Indoor environment Operations and management 	<ul style="list-style-type: none"> Energy and atmosphere Sustainable Sites Location and Transportation Materials and resources Water efficiency Indoor environmental quality Innovation in Design Regional Priority
Requirements	Prerequisites (independent of level of certification) and point score. Prerequisites for each performance area to demonstrate minimum criteria met.	Point score only. Points are awarded based on various sub-criteria within each area assessed. These points are then added together to obtain the GBI level of certification.	Prerequisites (independent of level of certification) and point score. For every performance area BEAM prescribes different prerequisites. Every applicable prerequisite in every BEAM category must	Prerequisites only. 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	Prerequisites (independent of level of certification) and point score. Buildings must meet minimum requirements in a number of categories. Each category assessed has

	<p>Numerical scores achieved in accordance with the criteria in each performance area. Performance Areas have different weights.</p> <p>Depending on the level of building performance and numerical score achieved in performance area, building's level of certification is determined.</p> <p>Assessment of compliance with Green Mark criteria is done by the Singapore Building and Construction Authority (BCA).</p>	<p>Depending on the development type the weighting is adjusted, changing the total number of points available in that category.</p> <p>Assessment is conducted by an assessor certified by the GBI Accreditation Panel at the design and completion stages.</p>	<p>be achieved for the project to be assessed.</p> <p>Credits are allocated for each performance area, and every area is weighted as per international consensus. The Overall Assessment Grade is determined by the percentage (%) of the applicable credits gained under each performance category and its weighting factor.</p> <p>Verification of compliance with BEAM criteria is done by an independent BEAM Assessor.</p>	<p>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 importance on urban land saving and outdoor environments.</p>	<p>certain point score. These points are then added together to obtain the LEED level of certification</p> <p>There are several different rating systems within LEED. Each rating system is designed to apply to a specific sector (e.g. New Construction, Major Renovation, Core and Shell Development, Schools-/Retail-/Healthcare New Construction and Major Renovations, Existing Buildings: Operation and Maintenance).</p>
<p>Performance display</p>					

Appendix 2: Alignment to the ASEAN Green Bond Standards

ASEAN Green Bond Standards' Criteria	Alignment with ASEAN GBS	Sustainalytics' comments on alignment with the ASEAN Green Bond Standards. ³⁷
Eligibility	Yes	The AGBS requires that issuers must be located in or that the proceeds be directed to assets in an ASEAN country. As a Singapore-based institution, OCBC qualifies.
Use of Proceeds	Yes	The AGBS offers specific clarification that fossil fuel power generation projects are excluded; OCBC has included criteria in the Framework to this effect.
Process for Project Evaluation and Selection	Yes	The AGBS specifies information that must be clearly communicated to investors before issuance regarding project selection. Within its framework, OCBC has described a process by which business units originating projects will conduct an initial screen for potential qualifying assets, with the OCBC Sustainability Council responsible for validation and final selection.
Management of Proceeds	Yes	The AGBS mandates that proceeds must be appropriately tracked and that temporary investments be disclosed. Within its framework, OCBC has described the creation of a register to track the proceeds and described the temporary investments in which it will hold unallocated funds.
Reporting	Yes	The AGBS requires annual reporting on the allocation of funds and the expected impacts. OCBC has committed to providing an annual report as long as there are bonds outstanding.
Annual Review	Yes	The AGBS encourages, but does not require, annual reviews. The OCBC framework commits to engaging an external assurance provider at pre-issuance stage and in subsequent years to verify the management of proceeds.

³⁷ For detailed comments on alignment with ICMA SBG, please see [Appendix](#).

Appendix 3: Sustainability Bond / Sustainability Bond Programme - External Review Form

Section 1. Basic Information

Issuer name:	OCBC
Sustainability Bond ISIN or Issuer Sustainability Bond Framework Name, if applicable: <i>[specify as appropriate]</i>	OCBC Sustainability Bond Framework
Review provider's name:	Sustainalytics
Completion date of this form:	January, 2019
Publication date of review publication: <i>[where appropriate, specify if it is an update and add reference to earlier relevant review]</i>	

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 GBPs and SBPs:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Use of Proceeds | <input checked="" type="checkbox"/> Process for Project Evaluation and Selection |
| <input checked="" type="checkbox"/> Management of Proceeds | <input checked="" type="checkbox"/> Reporting |

ROLE(S) OF REVIEW PROVIDER

- | | |
|---|--|
| <input checked="" type="checkbox"/> Consultancy (incl. 2 nd opinion) | <input type="checkbox"/> Certification |
| <input type="checkbox"/> Verification | <input type="checkbox"/> Rating |
| <input type="checkbox"/> Other <i>(please specify)</i> : | |

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 Executive 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 ten eligible category for the use of proceeds categories are aligned with those recognized by the Green Bond Principles or the Social Bond Principles. Sustainalytics considers the range of eligible projects to have positive environmental or social impacts and to advance the UN Sustainable Development Agenda.

Use of proceeds categories as per GBP:

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

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

Use of proceeds categories as per SBP:

- | | |
|--|--|
| <input type="checkbox"/> Affordable basic infrastructure | <input checked="" type="checkbox"/> Access to essential services |
| <input checked="" type="checkbox"/> Affordable housing | <input checked="" type="checkbox"/> Employment generation (through SME financing and microfinance) |
| <input type="checkbox"/> Food security | <input type="checkbox"/> Socioeconomic advancement and empowerment |
| <input type="checkbox"/> Unknown at issuance but currently expected to conform with SBP categories, or other eligible areas not yet stated in SBPs | <input type="checkbox"/> Other (please specify): |

If applicable please specify the social taxonomy, if other than SBPs:

2. PROCESS FOR PROJECT EVALUATION AND SELECTION

Overall comment on section (if applicable):

OCBC's project selection involves a two-step process, with initial screening by the relevant business units and final validation by the Sustainability Council, which consists of members of the Management Committee. OCBC has outlined a comprehensive list of exclusions which serve to mitigate environmental or social risk associated with the eligibility criteria. This is in line with market practice.

Evaluation and selection

- | | |
|---|---|
| <input checked="" type="checkbox"/> Credentials on the issuer's social and green objectives | <input checked="" type="checkbox"/> Documented process to determine that projects fit within defined categories |
| <input checked="" type="checkbox"/> Defined and transparent criteria for projects eligible for Sustainability Bond proceeds | <input checked="" type="checkbox"/> Documented process to identify and manage potential ESG risks associated with the project |
| <input type="checkbox"/> Summary criteria for project evaluation and selection publicly available | <input type="checkbox"/> Other (<i>please specify</i>): |

Information on Responsibilities and Accountability

- | | |
|--|---|
| <input checked="" type="checkbox"/> Evaluation / Selection criteria subject to external advice or verification | <input checked="" type="checkbox"/> In-house assessment |
| <input type="checkbox"/> Other (<i>please specify</i>): | |

3. MANAGEMENT OF PROCEEDS

Overall comment on section (*if applicable*):

OCBC has committed to tracking the proceeds using its established internal information system, and to using a register to track the allocation of funds to eligible projects. Unallocated proceeds may be temporarily invested in marketable instruments. This is in line with market practice.

Tracking of proceeds:

- Sustainability Bond proceeds segregated or tracked by the issuer in an appropriate manner
- Disclosure of intended types of temporary investment instruments for unallocated proceeds
- Other (*please specify*):

Additional disclosure:

- | | |
|--|---|
| <input type="checkbox"/> Allocations to future investments only | <input checked="" type="checkbox"/> Allocations to both existing and future investments |
| <input type="checkbox"/> Allocation to individual disbursements | <input checked="" type="checkbox"/> Allocation to a portfolio of disbursements |
| <input type="checkbox"/> Disclosure of portfolio balance of unallocated proceeds | <input type="checkbox"/> Other (<i>please specify</i>): |

4. REPORTING

Overall comment on section (if applicable):

OCBC intends to report on an annual basis, providing allocation and impact information at the category level. In Sustainalytics' view, reporting on these metrics is in line with market practice.

Use of proceeds reporting:

- | | |
|--|---|
| <input type="checkbox"/> Project-by-project | <input checked="" type="checkbox"/> On a project portfolio basis |
| <input type="checkbox"/> Linkage to individual bond(s) | <input checked="" type="checkbox"/> Other (<i>please specify</i>): Category basis |

Information reported:

- | | |
|---|---|
| <input checked="" type="checkbox"/> Allocated amounts | <input type="checkbox"/> Sustainability Bond financed share of total investment |
| <input type="checkbox"/> Other (<i>please specify</i>): | |

Frequency:

- | | |
|--|--------------------------------------|
| <input checked="" type="checkbox"/> Annual | <input type="checkbox"/> Semi-annual |
| <input type="checkbox"/> Other (please specify): | |

Impact reporting:

- | | |
|--|--|
| <input type="checkbox"/> Project-by-project | <input checked="" type="checkbox"/> On a project portfolio basis |
| <input type="checkbox"/> Linkage to individual bond(s) | <input type="checkbox"/> Other (please specify): |

Frequency:

- | | |
|--|--------------------------------------|
| <input checked="" type="checkbox"/> Annual | <input type="checkbox"/> Semi-annual |
| <input type="checkbox"/> Other (please specify): | |

Information reported (expected or ex-post):

- | | |
|---|---|
| <input checked="" type="checkbox"/> GHG Emissions / Savings | <input checked="" type="checkbox"/> Energy Savings |
| <input type="checkbox"/> Decrease in water use | <input checked="" type="checkbox"/> Number of beneficiaries |
| <input checked="" type="checkbox"/> Target populations | <input checked="" type="checkbox"/> Other ESG indicators (please specify): amount of loans disbursed. |

Means of Disclosure

- | | |
|---|--|
| <input type="checkbox"/> Information published in financial report | <input type="checkbox"/> Information published in sustainability report |
| <input type="checkbox"/> Information published in ad hoc documents | <input checked="" type="checkbox"/> Other (please specify): OCBC website |
| <input type="checkbox"/> 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.)

SPECIFY OTHER EXTERNAL REVIEWS AVAILABLE, IF APPROPRIATE

Type(s) of Review provided:

- | | |
|--|--|
| <input type="checkbox"/> Consultancy (incl. 2 nd opinion) | <input type="checkbox"/> Certification |
| <input type="checkbox"/> Verification / Audit | <input type="checkbox"/> Rating |
| <input type="checkbox"/> Other (<i>please specify</i>): | |

Review provider(s):

Date of publication:

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

- i. Consultant Review: An issuer can seek advice from consultants and/or institutions with recognized expertise in environmental and social sustainability or other aspects of the issuance of a Sustainability Bond, such as the establishment/review of an issuer's Sustainability Bond framework. "Second Party Opinions" may fall into this category.
- ii. Verification: An issuer can have its Sustainability Bond, associated Sustainability Bond framework, or underlying assets independently verified by qualified parties, such as auditors. In contrast to certification, verification may focus on alignment with internal standards or claims made by the issuer. Evaluation of the environmentally and socially sustainable features of underlying assets may be termed verification and may reference external criteria.
- iii. Certification: An issuer can have its Sustainability Bond or associated Sustainability Bond framework or Use of Proceeds certified against an external green and social assessment standard. An assessment standard defines criteria, and alignment with such criteria is tested by qualified third parties / certifiers.
- iv. Rating: An issuer can have its Sustainability Bond or associated Sustainability Bond framework rated by qualified third parties, such as specialised research providers or rating agencies. Sustainability Bond ratings are separate from an issuer's ESG rating as they typically apply to individual securities or Sustainability Bond frameworks / programmes.

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For more information, visit www.sustainalytics.com

Or contact us info@sustainalytics.com

