OCBC GREEN BOND REPORT 2022

INTRODUCTION

OCBC is the longest established Singapore bank, formed in 1932 from the merger of three local banks, the oldest of which was founded in 1912. We are the second largest financial services group in Southeast Asia by assets with one of the world's highest credit rating (Aa1 by Moody's and AA- by both Fitch and S&P).

Our Approach to Sustainability

A robust governance structure is the foundational building block for our sustainability strategy. The Board takes ultimate responsibility for and drives all aspects of sustainability at OCBC.

OCBC regularly reviews our governance structure in relation to sustainability and Environmental, Social and Governance (ESG) matters to achieve long-term sustainable growth.

Anchored by OCBC purpose and values, and bolstered by a robust sustainability governance structure, our sustainability strategy encompasses three sustainability pillars which align with ESG aspects. Please refer to the chart below and our Sustainability Report for further details on our approach to sustainability.

OCBC Sustainability Strategy

Purpose and Values

Sustainability Governance

Three Sustainability Pillars

Build a Low-Carbon Future	Create Positive Impact for Society	Act with Integrity
Taking climate action by managing climate change risks and seizing opportunities, as well as reducing our own environmental footprint.	Driving socio-economic initiatives to promote diversity, equity, inclusion and wellbeing for our customers, employees, communities and wider society.	Embedding responsible business practices to safeguard and protect the value for our stakeholders.
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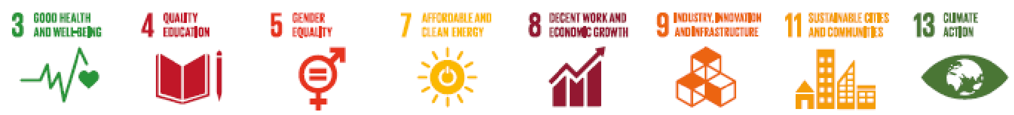
13 material ESG Factors

• Climate Action • Responsible Financing • Sustainable Financing and Investing	• Financial Inclusion • Employee Health, Safety and Wellbeing • Diversity, Equity and Inclusion • Talent Management • Community Development • Economic Contributions	• Strong Governance • Fair Dealing • Financial Crimes Prevention • Cyber Security

Support the Global Sustainable Development Agenda



See page 50

Source: OCBC Sustainability Report 2022

ABOUT THIS REPORT

OCBC, through its Sydney Branch, has issued green bonds in accordance with OCBC's Sustainability Bond Framework ("Framework")[1]. Under the Framework, OCBC will provide and publish an annual progress report where there are green, social or sustainability bonds outstanding.

As of 31 December 2022, the total outstanding green bonds was AUD 500 million. The green bonds were issued in August 2021 and will mature in August 2024.

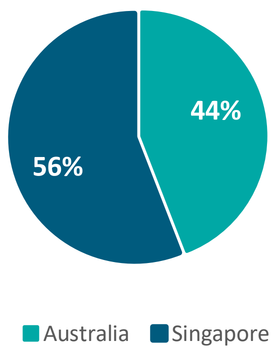
Morningstar Sustainalytics, a globally recognised provider of ESG services, has calculated the estimated environmental impact achieved or expected from the projects financed by the Green Bonds using ICMA's Harmonised Framework for Impact Reporting and recognised methodologies for greenhouse gas emissions calculation. Sustainalytics' impact report has been appended in this report.

PricewaterhouseCoopers LLP has provided independent limited assurance on the allocation of proceeds. Their review report is available at the end of this report.

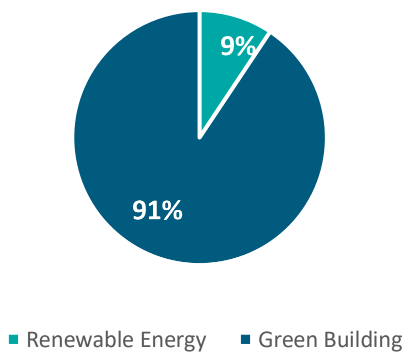
ALLOCATION OF PROCEEDS

100% of the green bonds proceeds have been allocated to AUD 633 million[2] of eligible assets as of 31 December 2022.

Allocation by Country



Allocation by Category



[1] The green bonds were issued under OCBC Sustainability Bond Framework dated March 2020, which has been updated in June 2023. Sustainalytics provided a Second Party Opinion on OCBC's updated Framework evaluating it as credible, impactful and aligned with the Green Bond Principles 2021, Social Bond Principles 2021 and Sustainability Bond Guidelines 2021.
[2] Rounded to the nearest millions.

Impact Report for Bonds

OCBC Sustainability Bond Framework

SUSTAINALYTICS
a Morningstar company
IMPACT REPORTING

Impact Summary

Evaluation Date September 13, 2023

Issuer Location Singapore

Sustainalytics has calculated the estimated impact achieved from the projects financed by the green bond issued by OCBC Bank in August 2021. The green bond outstanding as of 31 December 2022 is AUD 500 million. OCBC has allocated AUD 633 million to projects in Australia and Singapore in the categories Renewable Energy and Green Buildings. For a representative year during the bond's term to maturity, Sustainalytics has calculated 61.6 kilotonnes of carbon dioxide equivalents in avoided GHG emissions.

A$ 633M
Allocated to green projects

61.6
Annual GHG emissions avoided ($ktCO_2e$)

6
Projects

Emissions avoided equivalent to:

15.9K
Cars driven for one year

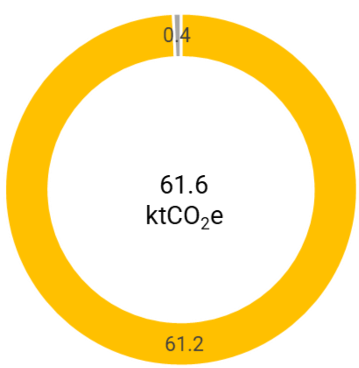
=

4.1M
Trees, yearly sequestration

=

142.6K
Barrels of oil equivalent

Avoided GHG emissions by Use of Proceeds Category and Number of Projects by Country



■ Renewable Energy ■ Green Buildings

6 Projects Total

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Introduction

OCBC is the longest established Singapore bank, formed in 1932 from the merger of three local banks, the oldest of which was founded in 1912. It is the second largest financial services group in Southeast Asia by assets, with more than 420 branches and representative offices in 19 countries and regions. Sustainalytics provided a Second-Party Opinion on the Sustainability Bond Framework proposed by OCBC, evaluating it as credible, impactful and aligned with the Green Bond Principles 2018 (GBP).[1] In 2023 Sustainalytics provided a Second-Party Opinion on OCBC's updated Framework evaluating it as credible, impactful and aligned with the Green Bond Principles 2021, Social Bond Principles 2021 and Sustainability Bond Guidelines 2021.

OCBC engaged Sustainalytics to quantify the environmental benefits of the projects financed with the proceeds from OCBC's Sustainability Bond Framework. This report covers proceeds raised from the green bond of AUD 500 million issued in August 2021.[2] Using established methodologies, Sustainalytics has estimated avoided emissions from OCBC's Renewable Energy and Green Buildings projects. This report presents the details of our findings, including a description of the methodology used to calculate the impacts.

Scope of Work and Limitations

OCBC has engaged Sustainalytics to calculate the environmental impacts of the projects financed through the green bonds issued. For this work, Sustainalytics relied on the data provided by OCBC on the amounts allocated and the available technical data on the financed projects. Where necessary, Sustainalytics has supplemented technical data provided by OCBC with data from publicly available databases.

Sustainalytics' impact reporting is aligned with ICMA's Harmonised Framework for Impact Reporting of June 2023.[3] The methodology used and the assumptions made for the impact calculation are outlined in the methodology section below.

As part of this engagement, Sustainalytics exchanged information with various members of OCBC's team to understand the sustainability impact of its projects. Through these exchanges, OCBC's representatives have confirmed that:

(1) They understand it is the sole responsibility of OCBC to ensure that the information provided by them is complete, accurate and up to date;

(2) They have provided Sustainalytics with all materially relevant information;

(3) Any provided material information has been duly disclosed in a timely manner.

Sustainalytics also reviewed relevant public documents and non-public information.

[1] The Green Bond Principles are administered by the International Capital Market Association and are available at https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/

[2] While the total issuance of the green bond amount to AUD 500 million, the total amount allocated is AUD 633 million to ensure there are sufficient green assets to cover the size of the bonds.

[3] ICMA, Handbook - Harmonised Framework for Impact Reporting (2023), at: https://www.icmagroup.org/assets/documents/Sustainable-finance/2023-updates/Handbook-Harmonised-framework-for-impact-reporting-June-2023-220623.pdf

Impact Findings

For reporting, Sustainalytics follows the ICMA Harmonised Framework for Impact Reporting[4], which synthesizes market expectations and outlines recommendations for impact reporting to create a standardized reporting structure and to enhance the understanding of the impact to all stakeholders including investors.

Table 1 below provides a summary of the impacts at the portfolio level which Sustainalytics calculated from the allocation of proceeds from OCBC's green bond. Tables 2-3 show the impact calculated for the projects financed under this bond. These metrics correspond to a representative year during the bond's term to maturity and are based on the share of project financing.

Table 1: Summary of impact - portfolio level[5]

Use of proceeds	Allocated amount	Bond tenor	Financed emissions avoided	Financed emissions avoided/AUD million
	AUD (million)	Years	tCO_2e/year	tCO_2e/year/AUD million
Renewable Energy	59	3	61,169	1,031
Green Buildings	574[6]	3	436	0.76
Total	633	3	61,605	97.34

Table 2: Impact of renewable energy projects by technology

Country	Technology type	Allocated amount	Financed generation	Financed capacity	Financed emissions avoided	Financed emissions avoided/AUD million
		AUD (million)	MWh	MW	tCO_2e/year	tCO_2e/year/AUD million
Australia	Wind	59	72,047	23	61,169	1,031

Table 3: Impact of green buildings projects by building type

Country	Building type	Allocated amount	Gross Building area	Financed energy reduction		Financed emissions avoided	Financed emissions avoided/AUD million
		AUD (million)	m^2	MWh	%[7]	tCO_2e/year	tCO_2e/year/AUD million
Australia	Mixed development	60	85,762	156	1.66	94	1.58
Australia	Office	160	122,586	468	3.58	281	1.75
Singapore	Office	354	110,761	196	1.18	61	0.17

[4] ICMA, Handbook - Harmonised Framework for Impact Reporting (2023), at: https://www.icmagroup.org/assets/documents/Sustainable-finance/2023-updates/Handbook-Harmonised-framework-for-impact-reporting-June-2023-220623.pdf
[5] Tables 1 – 3 summarize projects by Use of Proceeds that have been rounded to the nearest integer and may be subject to rounding errors.
[6] For buildings based in Singapore, data on allocation was provided in SGD. For consistent reporting, these values were converted to AUD based on the AUD/SGD conversation rate provided by OCBC, which was 0.9108 as of 31 December 2022.
[7] This represents the percentage reduction of financed energy consumption compared to the baseline energy consumption for each building type.

Methodology

Sustainalytics developed its own methodologies for quantifying GHG avoidance and other metrics, including leveraging publicly available best-in-class methodologies, protocols and frameworks that are currently industry best practice. Our estimation practices and general principles rely on the GHG Protocol.[8] Our methodologies are based on guidance provided by the International Financial Institutions[9] on calculation methodology and global emissions. In addition, we rely on the Partnership for Carbon Accounting Financials' Global Accounting Standard[10] for guidance on estimation where data is not readily available and assumptions must be made. Finally, the UN's Clean Development Mechanism[11] provides guidance and information, serving as the foundation for these and other methodologies, including those implemented in this report.

Renewable Energy

It is assumed that energy generated by the projects crowd out a mix of current and upcoming planned generation capacity, and therefore associated emissions. The approach taken to derive the greenhouse gas emissions avoidance uses:

a) The emissions of the renewable energy projects, which is often (but not always) zero; and
b) The baseline emissions or emissions occurring in the absence of the project. For electricity generation, these emissions are based on the energy mix used to supply electricity to the local grid.
c) Financed project avoided emissions are calculated by using the share of project financing of the total project emissions avoided from the above calculations.

Data Sources and Assumptions

- For the projects included in this report, data on the energy generation (MWh) and capacity (MW) was provided by OCBC.
- The emissions for projects generating energy from wind are assumed to be 0 g CO_2e per unit of generation.
- The baseline emission factors for the countries where projects are located were sourced from IFI.[12] To account for emissions from upstream activities, Sustainalytics applies an additional, indirect emissions factor.[13]

[8] Greenhouse Gas Protocol, About Us, at: https://ghgprotocol.org/
[9] International Financial Institutions, "Members of the International Financial Institutions on Greenhouse Gas Accounting", at: https://unfccc.int/sites/default/files/resource/IFIs membership for UNFCCC %27white pages%27_0.pdf
[10] Partnership for Carbon Accounting Financials, About, at: https://carbonaccountingfinancials.com/
[11] UNFCCC, CDM Methodology Booklet, (2022), at: https://cdm.unfccc.int/methodologies/documentation/index.html
[12] UNFCCC, The IFI Dataset of Default Grid Factors, at: https://unfccc.int/sites/default/files/resource/Harmonized_IFI_Default_Grid_Factors_2021_v3.2_0.xlsx
[13] Government of the UK, Department for Business, Energy & Industrial strategy, "Government conversion factors for company reporting of greenhouse gas emissions", at: https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting

Green Buildings

It is assumed that new buildings consume less energy than a mix of existing buildings and new construction. The avoidance of greenhouse gas emissions is calculated using:

a) The emissions of the green building projects. To the extent available, the reporting is based on metered energy consumption. If such information is not available, estimates for the relevant projects are based on the building certificates, standards or country-level averages.
b) The baseline emissions, or emissions occurring in the absence of the projects. This figure is based on the estimated energy intensity of comparable buildings, or in the case of refurbishments, the prior emissions.
c) Financed project avoided emissions are calculated by using the share of project financing of the total project emissions avoided from the above calculations.

Data Sources and Assumptions

- For the projects included in this report, building data including gross building area, location and green building certificates were provided by OCBC and used as inputs for the calculations.
- Sustainalytics has performed calculations based on the most recent available green building certificates or energy performance certificates for each property.
- In the absence of data on building energy use intensity (EUI), it is assumed that a building has an intensity equal to that of the maximum permissible EUI under the same green building certification scheme and rating.[14]
- Based on location and building characteristics such as type and size, the EUI of a baseline building is estimated using a combination of country averages and publicly available statistical models.[15]
- The emissions factors for the project and baseline properties are based on the average energy mix for buildings in the relevant country.
- The grid emissions factors for the countries in which the projects are located were sourced from IFI.[12] To account for emissions from upstream activities, Sustainalytics applies an additional, indirect emissions factor.[13]

[14] Singapore Building and Construction Authority – Energy Efficiency 2021, at: https://www1.bca.gov.sg/docs/default-source/docs-corp-buildsg/sustainability/20211027_energy_simplified_ver1.pdf
[15] IFC's EDGE model is used for statistical modelling of buildings.

Appendix 1: Infographic conversion table

Financed Emissions Avoided (tCO_2e)	Number of cars driven for one year[16]	Number of trees, annual sequestration[17]	Barrels of oil equivalent[18]
61,605	15,920	4,065,930	142,629

[16] Based on the annual average mileage per car in Singapore. https://datamall.lta.gov.sg/content/datamall/en/static-data.html

[17] Based on the average CO_2 uptake of 15.2 kg per mature tree, based on the US EPA estimation for carbon sequestration by trees in an average US forest. https://www.epa.gov/energy/greenhouse-gases-equivalencies-calculator-calculations-and-references#pineforests

[18] The combustion of 1 barrel of oil emits approximately 0.43 tCO_2e. https://www.epa.gov/energy/greenhouse-gases-equivalencies-calculator-calculations-and-references#oil

Disclaimer

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. For more than 30 years, the firm has been at the forefront of developing high-quality, innovative solutions to meet the evolving needs of global investors. Today, Sustainalytics 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. Sustainalytics also works with hundreds of companies and their financial intermediaries to help them consider sustainability in policies, practices and capital projects. With 17 offices globally, Sustainalytics has more than 1500 staff members, including more than 500 analysts with varied multidisciplinary expertise across more than 40 industry groups.

For more information, visit www.sustainalytics.com

Or contact us contact@sustainalytics.com

INDEPENDENT PRACTITIONER'S LIMITED ASSURANCE REPORT ON THE ALLOCATION OF PROCEEDS AS AT 31 DECEMBER 2022 RAISED THROUGH THE ISSUANCE OF THE OCBC GREEN BOND AS SET OUT IN THE OCBC GREEN BOND REPORT

To the Board of Directors of Oversea-Chinese Banking Corporation Limited

We have been engaged by Oversea-Chinese Banking Corporation Limited ("OCBC") to undertake a limited assurance engagement in respect of the allocation of proceeds as at 31 December 2022 raised through the issuance of the OCBC Green Bond as set out on page 3 of the OCBC Green Bond Report ("the Selected Information").

Our assurance engagement was with respect to the Selected Information as at 31 December 2022. We have not performed any procedures with respect to (i) earlier periods and (ii) any other elements included in the OCBC Green Bond Report, and in the website and other publications, and therefore do not express any conclusion thereon.

Reporting Criteria

The Selected Information has been assessed against the OCBC Sustainability Bond Framework (June 2023)[1] ("the Framework").

Management's Responsibility

Management of OCBC is responsible for the preparation of the Selected Information in accordance with the Framework. The responsibility includes designing, implementing and maintaining internal controls relevant to the preparation of the Selected Information that is free from material misstatement, whether due to fraud or error.

Practitioner's Independence and Quality Management

We have complied with the independence and other ethical requirements of the Accounting and Corporate Regulatory Authority (ACRA) Code of Professional Conduct and Ethics for Public Accountants and Accounting Entities (ACRA Code), which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

Our firm applies Singapore Standard on Quality Management 1 which requires the firm to design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Practitioner's Responsibility

Our responsibility is to express a limited assurance conclusion on the Selected Information based on the procedures we have performed and the evidence we have obtained. We performed our limited assurance engagement in accordance with Singapore Standard on Assurance Engagements 3000 (Revised) – Assurance Engagements other than Audits or Reviews of Historical Financial Information ("Standard"). This Standard requires that we plan and perform our work to form the conclusion about whether the Selected Information is free from material misstatement. The extent of our procedures depends on our professional judgment and our assessment of the engagement risk.

A limited assurance engagement involves assessing the suitability in the circumstances of OCBC's use of the Framework as the basis for the preparation of the Selected Information, assessing the risks of material misstatement of the Selected Information whether due to fraud or error, responding to the assessed risks as necessary in the circumstances, and evaluating the overall presentation of the Selected Information. A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in relation to both

[1] The OCBC Sustainability Bond Framework (June 2023) can be found on the OCBC website at: https://www.ocbc.com/group/investors/green-bonds

the risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks.

The procedures selected included inquiries, observation of processes performed, inspection of documents and agreeing or reconciling with underlying records. Given the circumstances of the engagement, we also performed the following:

- interviewed management and personnel in relation to the Selected Information;
- obtained an understanding of how the Selected Information is gathered, collated and aggregated internally;
- performed limited substantive testing, on a selective basis, of the Selected Information to check that data had been appropriately measured, recorded, collated and reported, to the extent we considered necessary and appropriate to provide sufficient evidence for our conclusion; and
- considered the disclosure and presentation of the Selected Information.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed. Accordingly, we do not express a reasonable assurance opinion about whether the Selected Information has been prepared, in all material respects, in accordance with the Framework.

Inherent Limitations

In designing these procedures, we considered the system of internal controls in relation to the Selected Information and reliance has been placed on internal controls where appropriate. Because of the inherent limitations in any accounting and internal control system, errors and irregularities may nevertheless occur and not be detected.

Conclusion

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the Selected Information as at 31 December 2022 is not prepared, in all material respects, in accordance with the Framework.

Purpose and Restriction on Distribution and Use

Without modifying our conclusion, we draw attention to the fact that the Selected Information was prepared for inclusion in the OCBC Green Bond Report by the management of OCBC as required by the Framework ("Purpose"). As a result, the Selected Information may not be suitable for another purpose.

Our report is intended solely for the Purpose set forth in the paragraph above and should not be used for any other purpose. Save for the disclosure of our report in the OCBC Green Bond Report and on OCBC's website, neither this report nor its contents or any part thereof may be distributed to, discussed with or otherwise disclosed to any third party without our prior written consent. OCBC is responsible for information other than our report and our report does not cover this other information, and we do not express any form of assurance conclusion thereon. To the fullest extent permitted by law, we do not accept any liability or assume any responsibility to anyone else other than OCBC for our work or this report except where terms are expressly agreed between us in writing. Any reliance placed on this report by any third party is entirely at its own risk. OCBC is responsible for its website and that we do not accept responsibility for any changes that may have occurred to the Selected Information or Framework since the publication of our report in the OCBC Green Bond Report.

Yours faithfully

PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP
Public Accountants and Chartered Accountants
Singapore
20 September 2023