



UOB Sustainability Bond Allocation and Impact Report

July 2022



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Introduction

United Overseas Bank Limited (UOB) is a leading bank in Asia with a global network of about 500 branches and offices in 19 countries and territories in Asia Pacific, Europe and North America. In Asia, UOB operates through the head office in Singapore and banking subsidiaries in China, Indonesia, Malaysia, Thailand and Vietnam, as well as branches and offices across the region.

UOB provides a wide range of financial services globally through our three core business segments – Group Retail, Group Wholesale Banking and Group Global Markets. Our offering includes consumer banking, private banking, commercial banking, transaction banking, investment banking and treasury services. Through our subsidiaries, we also provide asset management, private equity fund management and insurance services among others.

UOB's Sustainability Strategy

As one of Asia's largest banks, UOB has a duty to contribute to the region's long-term economic, social and environmental well-being. We believe in sustainable development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Our approach to sustainability is guided by five principles that act as a compass for how we address the material risks and opportunities which may impact our customers, colleagues, investors, suppliers and the communities in which we operate.

We also recognise that good corporate governance is essential for embedding sustainable business practices across the Group. This long-term, responsible approach is our heritage and is central to our business strategy and activities.

Our sustainability strategy mirrors our business approach of balancing growth with stability and is aligned with the United Nations Sustainable Development Goals (UN SDGs). The four pillars of UOB's sustainability strategy reflect our expertise, responsibilities and the role we can play for the long-term benefit of our key stakeholders. They are:

- **Drive Growth Sustainably**
- **Keep Customers at the Centre**
- **Develop Professionals of Principle**
- **Uphold Corporate Responsibility**

The Guiding Principles of Our Sustainability Approach

- 1 Forge a Sustainable Future with Our Customers**
Engage our customers proactively to influence their sustainability practices for greater long-term resilience
- 2 Aligned to Business Strategy and Stakeholder Interests**
Stay economically relevant by pursuing sustainable growth strategies
- 3 Pragmatic and Progressive**
Implement sustainability programmes to manage ESG risks and opportunities sensibly, in line with market and competitive realities
- 4 Regulatory Compliance as the Baseline**
Align our sustainability approach with ESG policies and guidelines of governments in our key markets
- 5 Values-driven**
Based on our longstanding and distinct values

UOB Sustainable Bond Framework

The [UOB Sustainable Bond Framework](#) (Framework) was developed with the objective of reinforcing UOB's capabilities in financing green and social projects, which contribute to the UN SDGs. Through this Framework, UOB aims to mobilise investors to contribute capital towards the realisation of the UN SDGs. The Framework is in line with:

- the International Capital Market Association Green Bond Principles, Social Bond Principles and the Sustainability Bond Guidelines; and
- the ASEAN Green Bond Standards, Social Bond Standards and Sustainability Bond Standards.

UOB obtained a Second Party Opinion from Sustainalytics to confirm the alignment of the Framework with the applicable market standards.

About This Report

This UOB Sustainability Bond Allocation and Impact Report (Report) provides details of UOB's US\$1.50 billion sustainability bond issued in April 2021 and outstanding as at 31 March 2022.

Ernst & Young LLP is the independent third-party attestation provider of this Report. Their review report is available at the end of this Report.

Allocation of Proceeds

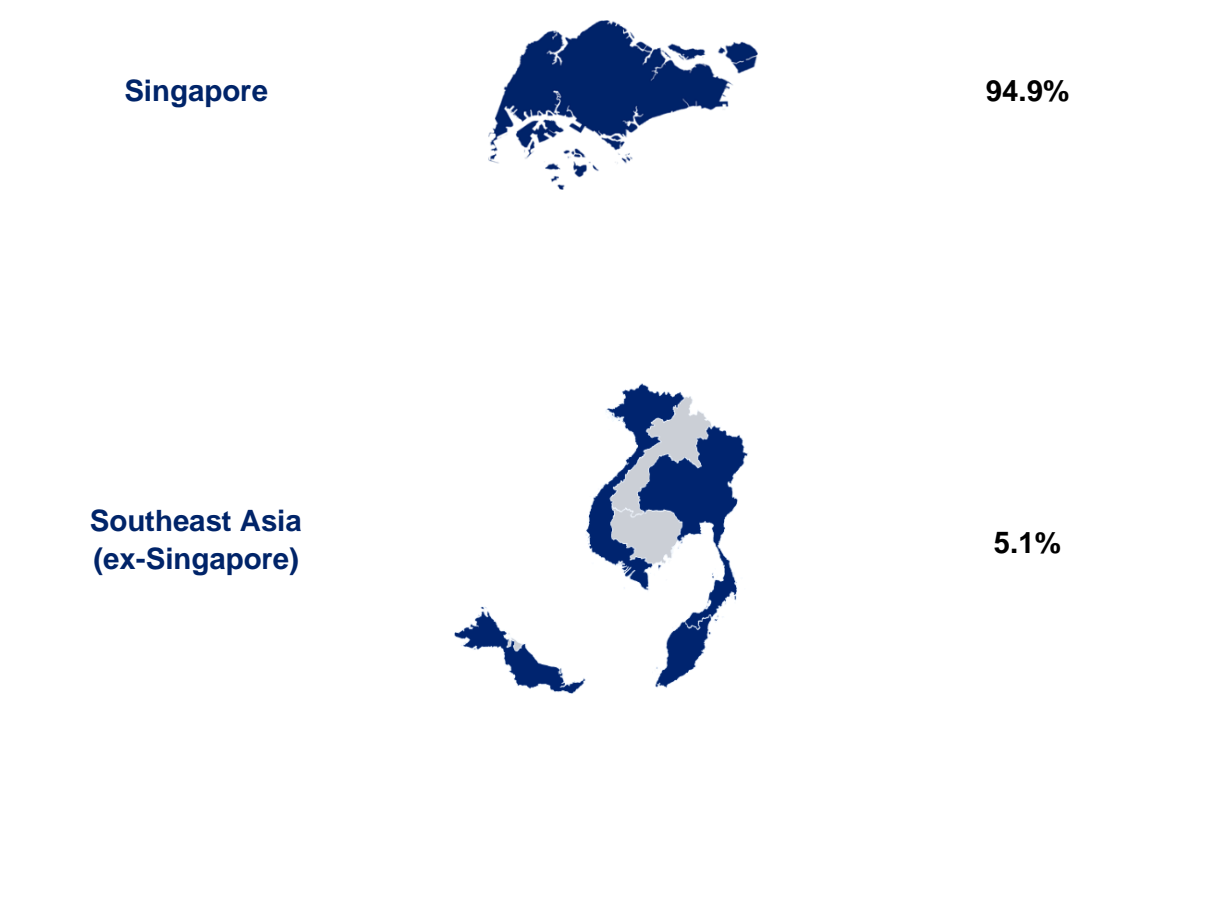
- **83%** allocated as at 31 March 2022¹
- **S\$2,003 million** of assets meeting the Eligibility Criteria for Use of Proceeds as set out in the Framework
- **6.6%** in new financing and **93.4%** in refinancing
- **S\$397 million** in balance of unallocated proceeds

Summary of Sustainability Bond Asset Portfolio

As at 31 March 2022

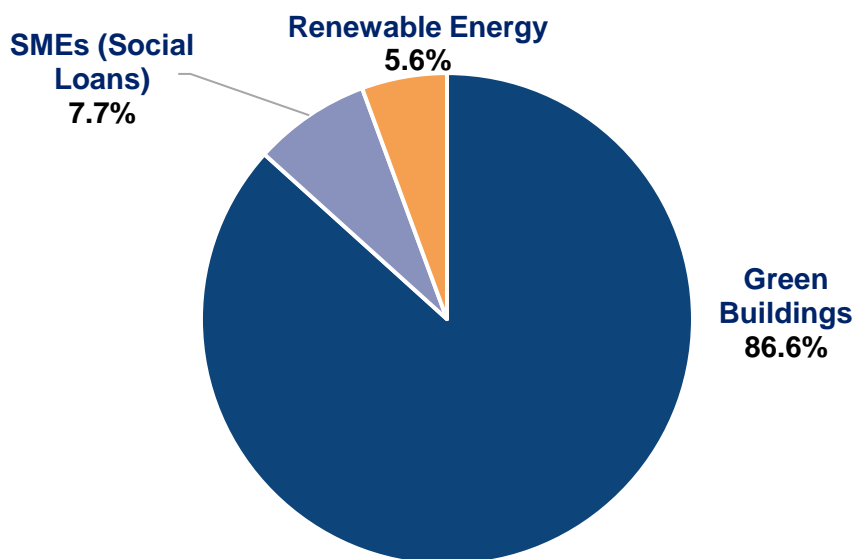
Distribution by Geography

Small- and medium-sized enterprises (SMEs) are the backbone of regional economies. UOB sees ourselves as an enabler, with a market-leading ASEAN SME franchise to raise awareness and promote sustainable SME lending.



¹ Based on 120% of the bond issuance amount to create a buffer for foreign exchange fluctuations, early repayments or redemptions, and other factors that may cause the eligible loan amount to decrease unexpectedly.

Distribution by Sector



Eligible Project Category	Number of Loans	Allocated Amount (S\$ million)	Geographical Distribution (SG / Rest of Southeast Asia ²)	Total Installed Renewable Energy Capacity (Megawatt-peak) (UOB's Share) ³	Greenhouse Gas (GHG) Emissions Avoided (tCO ₂ e/year)
Green Buildings	12	1,735.6	97.4% / 2.6%		8,824
Renewable Energy	39	112.9	49.4% / 50.6%	150.54	70,672
Employment Generation	910	154.8	100.0% / 0%		
Total	961	2003.3	94.9% / 5.1%	150.54	79,496

Impact



Green Buildings

- Four BCA Green Mark Platinum buildings, five BCA⁴ Green Mark Gold^{PLUS} buildings, two EDGE-certified buildings and one LEED-certified building⁵
- 8,824 tCO₂e of avoided GHG emissions per year⁵



² Includes Malaysia, Thailand and Vietnam.

³ Only includes projects that are operational.

⁴ Singapore's Building and Construction Authority

⁵ Two buildings that are undergoing certification are excluded from avoided emissions calculations.



- 149,456 megawatt-hours (MWh) of solar energy generated per year
- 70,672 tCO₂e of avoided GHG emissions per year



- S\$155 million in loans to SMEs
- 829 businesses supported⁶



Green Loan Impact Reporting Methodology

For solar projects, we recorded the annual energy generation through actual production figures (where available) or based on estimates using completed capacity financed by UOB as at 31 March 2022. By multiplying completed capacity with an assumption of 3.5 sun hours per day and a performance ratio assumption of 80%, the estimated energy output in kilowatt-hours (kWh) per day is calculated. This is multiplied by 365 to calculate the estimated annual energy output⁷.

The figure is then multiplied by the latest country-specific grid emissions factors for electricity and heat generation (CO₂, CH₄, N₂O) sourced from the International Energy Agency Emissions Factors 2021 data package in order to obtain the avoided emissions.

Projects under construction are excluded from annual avoided emissions calculations.

In estimating our post-certification carbon emissions savings for our real estate lending exposures to certified green buildings in Singapore, we adopted the gross floor area (GFA) data from Singapore's Building and Construction Authority (BCA) and other sources (where BCA data is unavailable) for BCA Green Mark Gold^{PLUS} and Green Mark Platinum-certified buildings in our loan portfolio. Building types include residential, industrial, hotels, offices, data centres and mixed developments.

⁶ In February 2022, the Ministry of Finance Singapore published [a report](#) which detailed the impact of the Temporary Bridging Loan (TBL) Programme.

⁷ Annual electricity generated (MWh) = completed capacity (approximately 150MWp) x sun hours (3.5 hours/day) x performance ratio (80%) x 365 days

The post-certification emissions, i.e. green building emissions, are estimated for each green building by multiplying its GFA with the estimated energy use intensity (sourced from BCA) and with Singapore's grid emission factors. We then estimate the pre-green building certification emissions by assuming that pre-certification emissions are 25% higher than post-certification emissions⁸. The absolute carbon emissions savings is the estimated difference between post and pre-certification emissions.

The avoided emissions of green buildings projects are adjusted by the percentage share financed by UOB. It is apportioned by taking the original deal size amount and dividing it by the total deal size amount if the facility is a syndicated loan or club loan.

Social Loan Programme

Understanding the distinct challenges that SMEs would face when navigating the disruptions caused by the pandemic, UOB acted swiftly at the onset of the COVID-19 pandemic to provide them with financial support. In February 2020, UOB announced a S\$3 billion relief assistance programme for our SME clients. UOB was also the first in setting up a dedicated restructuring task force that has been actively engaging clients to understand their challenges and to provide support in reworking their financial needs.

For many SMEs, access to credit is a critical lifeline to tide them through COVID-19. To help more SMEs during the pandemic in April 2020, the MAS, in partnership with Enterprise Singapore, launched financing schemes, including the Temporary Bridging Loan (TBL) Programme to support lending to SMEs. UOB is a participating bank to the TBL Programme, aimed at helping SMEs manage their immediate cash flow needs. UOB supports the policy intent which is to ensure that businesses continue to have access to financing so that they can upgrade their operations, build new business capabilities, pivot to new business models and grow sustainably.

As at 31 March 2022, UOB allocated \$155 million of our sustainability bond proceeds to TBL. In granting these loans, UOB ascertained the borrowers' requirements and suitability, including factors such as purpose and length of business. The TBL borrowers are small businesses domiciled in Singapore with average turnover of below S\$30 million.

In February 2022, the Ministry of Finance Singapore published the [Assessment of the Impact of Key COVID-19 Budget Measures](#), a report that detailed the impact of the TBL Programme:

“Results from an MTI⁹ study on the financing schemes that are focused on providing working capital loans (i.e., TBL and EFS-WCL¹⁰) showed that the schemes supported firms during the pandemic. In particular, the TBL, which is the main financing scheme, helped to alleviate financial distress across firms of all sizes and supported employment in smaller firms with 50 or fewer employees.”

- Page 40, Paragraph 5.6

⁸ BCA states that there should be at least 25% savings in annual energy consumption for Green Mark Gold^{PLUS} buildings. Source: BCA, “Energy Modeling”, <https://bca.gov.sg/GreenMark/energymod.html>

⁹ Ministry of Trade and Industry Singapore

¹⁰ Enhanced Enterprise Financing Scheme – Working Capital Loan

In addition to relief support, we are helping our SME clients transform their business digitally, seize cross-border opportunities and advance responsibly for long-term growth. As at the end of 2021, UOB helped more than 20,000 SMEs across the region keep their businesses running, standing right by them to help them weather the crisis.

In recognition of our deep regional connectivity, expertise and continued support of SMEs to enable post-pandemic recovery and growth, UOB was named the World's and Asia's Best Bank for SMEs at the *Euromoney* Global Awards for Excellence 2021. Our accolades also include Best SME Bank in the World, Asia Pacific and Singapore at *Global Finance* Best SME Bank Awards 2022, as well as Best SME Bank in Asia Pacific and Singapore at *The Asian Banker* Excellence in Retail Financial Services International Awards 2021.

Case Studies: Use of Proceeds of the UOB Sustainability Bond

Green Loan to Ophir-Rochor Commercial Pte Ltd (Singapore)



Image provided by Gaw Capital Partners

In 2019, UOB participated in a S\$945 million syndicated green loan to Ophir-Rochor Commercial Pte Ltd, a joint venture of Allianz Real Estate and Gaw Capital Partners, to support the joint acquisition of DUO Tower and DUO Galleria in Singapore.

Both DUO Tower and DUO Galleria have held the BCA Green Mark Platinum certification since 2013 in recognition of the mixed-office and retail development's green features. These include double-glazed low-emissivity glass exterior, energy-efficient chillers and a rainwater harvesting system. The development's estimated avoided GHG emissions is 1,075 tCO₂e per annum.

The green loan was structured in accordance with Ophir-Rochor Commercial's green loan framework, which is aligned with the Green Loan Principles issued by the Loan Market Association in 2018. KPMG in Singapore provided independent limited assurance on Ophir-Rochor Commercial's green loan framework.

UOB acted as one of the green loan advisers, joint mandated lead arrangers, underwriters and bookrunners to Ophir-Rochor Commercial. UOB was also the facility and security agent to the syndicated green loan.

Reference:

[UOB, DBS and Standard Chartered provide S\\$945 million green loan to finance Allianz and Gaw Capital's acquisition of DUO Tower and DUO Galleria, 16 December 2019](#)

Green loan to Berkeley Energy Commercial Industrial Solutions (Thailand)



Image provided by BECIS-Symbior

In 2020, UOB Thailand provided a 1.26 billion baht green project finance loan to Berkeley Energy Commercial Industrial Solutions (BECIS) (formerly known as BECIS-Symbior) to finance its portfolio of on-site solar PV projects. The deal, which funded installed capacity of up to 75 megawatt-peak (MWp), remains one of the largest portfolio financing in Thailand's commercial and industrial solar sector to-date.

BECIS is a leading energy-as-a-service provider to high quality commercial and industrial (C&I) customers. Established in 2019 and headquartered in Singapore, BECIS benefits from an aligned and strategically beneficial shareholding group including Berkeley Energy, FMO, Siemens and Norfund-KLP. It currently delivers, operates and maintains distributed energy solutions in eight countries (Thailand, India, Indonesia, Malaysia, China, Philippines, Vietnam and Cambodia).

BECIS' PV projects, when at peak production, help reduce up to an estimated 41,000 tonnes of GHG emissions per annum. In addition to supporting the shift to solar power, UOB's green project finance loan also enabled BECIS to expand its ongoing efforts in promoting the adoption of clean energy solutions and providing more affordable and energy-as-a-service solutions for C&I customers.

The green loan to BECIS was extended under UOB's U-Solar programme, Asia's first integrated solar power platform across the Bank's key Southeast Asian markets. U-Solar is part of the UOB Smart City Sustainable Finance Framework, which guides the Bank's financing efforts to support the development of smart and sustainable cities across the region.

Reference:

[BECIS-Symbior Secures 1.26 Billion Baht Green Project Finance Loan from UOB Thailand, Thailand's Largest Green Loan in the Commercial and Industrial Solar Sector, 2 December 2020](#)

Green loans to ATAD and Phan Vu Investment (Vietnam)



Image provided by ATAD



Image provided by PVI

In 2021, UOB Vietnam provided two green loan facilities totalling VND143 billion under the UOB Smart City Sustainable Finance Framework to two local companies, ATAD and Phan Vu Investment (PVI). Both companies will use the loan proceeds to construct and operate their own solar PV systems, each with a capacity of about 8,000 kWh, on their factory rooftops.

With the green loans, the companies were able to make the change from using traditional sources of electricity to renewable energy, thus saving on their electricity bills. Beyond their own consumption, ATAD and PVI are able to sell any excess electricity generated to Vietnam Electricity (EVN)'s grid and they can use the revenue to offset their electricity costs.

The companies can also contribute to the Vietnamese government's environmental protection efforts to have at least 21% of the country's electricity consumption to be powered by renewable energy by 2030. The two solar power projects from ATAD and PVI are expected to generate an aggregate of 18,600 MWh of electricity per annum, translating to an estimated reduction of 8,420 tonnes of GHG emissions per annum.

Reference:

[UOB Vietnam extends green loan facilities to local companies for their adoption of solar power, 15 January 2021](#)



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Independent Limited Assurance Report to the Management of United Overseas Bank Limited (“UOB”)

Scope

With reference to the Engagement Letter dated 26 April 2022 as well as the associated addendum, we have been engaged by UOB to perform a ‘limited assurance engagement’, as defined by International Standards on Assurance Engagements, here after referred to as “the engagement”, to report on the Subject Matter and Criteria section below for the financial year(s) ending 31 March 2022 (“the Report”).

Subject Matter and Criteria

The Subject Matter and associated Criteria for this limited assurance engagement are set out in the table below:

Subject matter	Criteria
<p>Conduct limited assurance for UOB’s Sustainable Bond Framework that was published in March 2021, that sets out policies and procedures relating to the:</p> <ul style="list-style-type: none"> ▶ Proposed use of proceeds ▶ Process for project evaluation and selection ▶ Management of proceeds ▶ Reporting on the use of proceeds and eligible green and social project performance 	<ul style="list-style-type: none"> ▶ ICMA Green Bond Principles’ (June 2021), Social Bond Principles’ (June 2021) and Sustainability Bond Guidelines’ (June 2021) requirements on: <ul style="list-style-type: none"> ○ Use of proceeds ○ Process for project evaluation and selection ○ Management of proceeds ○ Reporting
Subject matter	Criteria
<p>Post-issuance process for UOB’s inaugural Sustainability Bond, as described in UOB’s Sustainable Bond Framework and the relevant documentation, that sets out policies and procedures relating to the:</p> <ul style="list-style-type: none"> ▶ Management of proceeds ▶ Allocation reporting ▶ Reporting on the use of proceeds and the performance of the following eligible green and social assets: <ul style="list-style-type: none"> ○ Green Buildings ○ Renewable Energy (Solar) ○ Employment Generation 	<ul style="list-style-type: none"> ▶ UOB Sustainable Bond Framework ▶ ICMA Green Bond Principles’ (June 2021), Social Bond Principles’ (June 2021) and Sustainability Bond Guidelines’ (June 2021) requirements on: <ul style="list-style-type: none"> ○ Use of proceeds ○ Process for project evaluation and selection ○ Management of proceeds ○ Reporting

UOB Management's responsibilities

UOB Management is responsible for selecting Criteria, and for presenting the Subject Matter in accordance with that Criteria, in all material respects. This responsibility includes establishing and maintaining internal controls, maintaining adequate records, and making estimates that are relevant to the preparation of the Subject Matter Information, such that it is free from material misstatement, whether due to fraud or error.

EY's responsibilities

Our responsibility is to express a limited assurance conclusion on the Subject Matter based on the procedures we performed and evidence we obtained.

We conducted our limited assurance engagement in accordance with International Standard on Assurance Engagements 3000 ("ISAE 3000") issued by the International Auditing and Assurance Standards Board, and the terms of reference for this engagement as agreed with UOB on 26 April 2022 as well as the associated addendum. Those standards require that we plan and perform our engagement to obtain limited assurance about whether, in all material respects, the Subject Matter is presented in accordance with the Criteria, and to issue a report. The nature, timing, and extent of the procedures selected depend on our judgment, including assessment of the risk of material misstatement, whether due to fraud or error.

We believe that the evidence obtained is sufficient and appropriate to provide a basis for our limited assurance conclusions.

Our independence and quality control

We have maintained our independence and confirm that we have met the 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.

EY also applies Singapore Standard on Quality Control 1, Quality Control for Firms that Perform Audits and Reviews of Financial Statements, and Other Assurance and Related Services Engagements, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Description of procedures performed

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. Our procedures were designed to obtain a limited level of assurance on which to base our conclusion and do not provide all the evidence that would be required to provide a reasonable level of assurance.

Although we considered the effectiveness of management's internal controls when determining the nature and extent of our procedures, our assurance engagement was not designed to provide assurance on internal controls. Our procedures did not include testing controls or performing procedures relating to checking aggregation or calculation of data within IT systems.

A limited assurance engagement consists of making enquiries, primarily of persons responsible for preparing the Subject Matter and related information, and applying analytical and other appropriate procedures.

Our procedures included:

1. Reviewing UOB's Sustainable Bond Framework to understand policies and procedures, and in assessing alignment with requirements of the ICMA Green Bond Principles, Social Bond Principles and Sustainable Bond Guidelines (June 2021).
2. Virtual meetings with UOB's data stakeholders and management.
3. Process walk-through of systems and processes for data aggregation and reporting, with relevant personnel to understand the quality of checks and control mechanisms in relation to the Subject Matter in the Report.
4. Interviews with employees and management in UOB (Corporate Sustainability Office, Central Treasury Team, Group Finance and Group Wholesale Banking) to understand key Sustainability Bond issues related to the select eligible assets and processes for the collection and accurate reporting of impact information.
5. Obtain documentation through sampling methods to verify computations made with regards to assumptions and estimations by management in relation to the Subject Matter in the Report.
6. Checking that data and statements had been correctly transcribed from corporate systems and / or supporting evidence, into the Report.
7. Obtain various certifications, facility agreements and financial statement report in relation to the Subject Matter in the Report.

We also performed such other procedures as we considered necessary in the circumstances.

Other matters

As part of our scope of limited assurance, we have conducted the verification of the accuracy of impact figures reported, as well as the classification in terms set out by the Criteria. Our scope of limited assurance did not include the verification of the appropriateness of methodology used in estimating the impact figures.

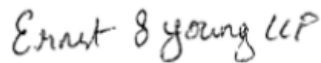
Conclusion

Based on our limited assurance procedures, as described in this statement as of 13 July 2022, we are not aware of any material modifications that need to be made to the proposed use of proceeds, process for project evaluation and selection, management of proceeds, reporting on the use of proceeds, allocation and eligible green and social project performance in relation to UOB's Sustainability Bond issuance does not meet the criteria outlined in the UOB Sustainable Bond Framework (March 2021) and requirements of the ICMA Green Bond Principles, Social Bond Principles and Sustainability Bond Guidelines (June 2021).

Restricted use

This report is intended solely for the information and use of the Management of UOB and is not intended to be and should not be used by anyone other than those specified parties.

Ernst & Young LLP



Signed for Ernst & Young LLP by
Praveen Tekchandani
Partner, Climate Change and Sustainability Services
Singapore
13 July 2022