

Accelerating the Transition to a Net-Zero Future

Climate Action: Our Net-Zero Commitment



Shipping

Ships carry 90% of the world's trade,⁽¹⁷⁾ with global freight demand expected to triple by 2050.⁽¹⁸⁾ The shipping sector contributes around 3% of all global GHG emissions,⁽¹⁹⁾ with 99% of energy demand from the sector still met by oil products today.⁽²⁰⁾

Most significantly in 2023, the International Maritime Organisation (IMO) revised its GHG reduction strategy in July,⁽²¹⁾ aiming to reduce the GHG emissions levels to net zero by or around 2050, which is aligned with the well-below 2°C scenario of the Paris Agreement. The updated strategy expands the scope of the GHG emissions reduction target, to well-to-wake emissions,⁽²²⁾ and introduced a new target to increase the uptake of zero or near-zero GHG emissions fuels. This move was welcomed by PP signatories, among whom OCBC remains the only Singapore bank.

In 2022, our portfolio outperformed the initial trajectory. While the revised trajectory reflects the industry's ambition to achieve net zero, in our first assessment, we are pleased to share that we are one of the top four signatories globally in terms of alignment and the top in Asia.

Sector coverage

- Financed vessels under the purview of IMO⁽²³⁾

Emissions scope

- Scope 1 from fuel burn

Metrics

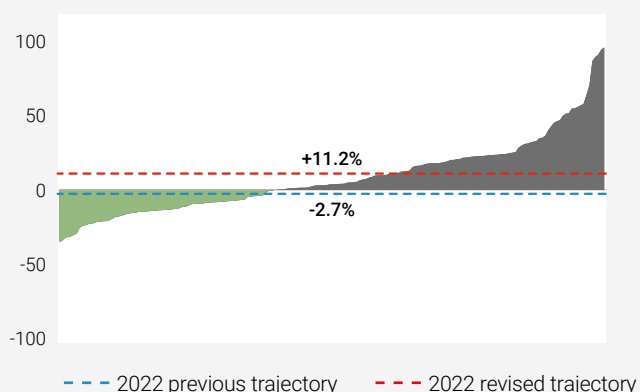
Alignment Delta based on percentage

Reference pathway

IMO Initial Strategy on reduction of total annual GHG emissions by at least 50% by 2050 based on 2008 levels – adjusted for Poseidon Principles

Shipping

Alignment Delta (%)

**Our Approach**

As a PP signatory, our financed emission targets are guided by the PP. Hence, we are measuring AD to cater to diverse emissions characteristics of different vessels that cannot be substituted. To support the growth of this critical transport mode while reducing overall emissions, we track the Annual Efficiency Ratio (AER) of each vessel, which is compared with the relevant benchmark.

Our Progress

Year	OCBC vs IMO – PP	OCBC Position
2021 Baseline		+4.5%
2022		-2.7% (previous trajectory) +11.2% (revised trajectory)
2030	≤0%	
2050	≤0%	

In 2022, we made substantial improvement in our Shipping portfolio AD from our +4.5% 2021 baseline to -2.7%, which is better than the reference pathway. This is partly attributed to the normalisation of markets from the effects of Covid towards the end of 2022, especially in the Container segment. In 2022, we remain committed to our clients as they renew their shipping fleets in preparation for the transition to low-carbon fuels. The majority of the new vessels that we now finance are dual-fuel vessels. Our active engagement with clients has contributed to our clients' ongoing efforts to improve their AER by upgrading their vessels and adopting newer technologies and low-carbon fuels.

⁽¹⁷⁾ International Chamber of Shipping, Shipping and world trade: driving prosperity.

⁽¹⁸⁾ International Transport Forum, Transport demand set to triple, but sector faces potential disruptions.

⁽¹⁹⁾ Poseidon Principles, Annual Disclosure Report 2022.

⁽²⁰⁾ IEA, International Shipping.

⁽²¹⁾ IMO, 2023 IMO Strategy on Reduction of GHG Emissions from Ships.

⁽²²⁾ Well-to-wake emissions include GHG emissions related to every stage in the life cycle of a fuel, from production until it is used to fuel a vessel.

⁽²³⁾ Vessels of 5,000 gross tonnage and above which have an established PP trajectory whereby the carbon intensity can be measured with the IMO Data Collection System.

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In July 2023, the IMO revised its Strategy on Reduction of GHG emissions from ships, and as a signatory, we will disclose our progress on transition using the revised trajectories as well. Our updated progress can also be found in the [Poseidon Principles Annual Disclosure Report 2023](#).

This is not without challenges, as it is dependent on the availability of commercially viable low-carbon alternatives in the sector. The maritime sector is still in a transitional phase and we will ensure our strategic efforts are adaptable and robust in the face of evolving industry standards and technological advancements.

Singapore's first all-electric crew transfer vessel

We are proud to finance Yinson GreenTech in developing the prototype of Singapore's first all-electric crew transfer vessel, the Hydroglyder, which is now undergoing sea trials in Singapore. The Hydroglyder is equipped with an advanced hydrofoil system which provides better energy efficiency as compared to traditional electric vessels of a similar size. The onboard batteries provide power to propel the vessel while the flight control system maintains the stability of the craft during foiling. This is expected to reduce operational costs by up to 90%, while reducing the maritime industry's carbon footprint and local particulate air pollution. Our role in this project underscores our commitment to championing green technologies and aligns with our strategic goal of driving decarbonisation in the maritime sector.



Cadeler's offshore wind turbine installation vessel.

Steering towards sustainability

In 2023, OCBC contributed to two of Cadeler's green loans. Cadeler is a supplier in the offshore wind energy industry. The EUR 550 million green loan will be utilised for the refinancing of Cadeler and Eneti's existing vessels, Cadeler's two existing vessel's crane upgrades, and for general working capital, while the EUR 425 million green loan will be used to finance Cadeler's two newbuilds, Wind Peak and Wind Pace. The green loans are structured in accordance with Cadeler's Green Finance Framework, which has obtained a Second Party Opinion by S&P Global. The green loans secure Cadeler's vision in accelerating the renewable transition, cementing their position as a global leader in offshore wind installation in the market.

Accelerating the Transition to a Net-Zero Future

Climate Action: Managing our Climate-Related Risks

Our ability to manage climate-related risks impacting the Bank is crucial and inextricably linked to supporting climate mitigation and adaptation efforts in the real economy. Given the cross-cutting nature of climate risk, we adopt an integrated and risk-based approach, prioritising the management of climate risks of greater likelihood and impact while closely monitoring interconnections between various risk types.

Identifying our Climate-Related Risks

Climate change presents financial and reputational risks, impacting our business directly and indirectly. It can amplify traditional banking risks, including credit, market, liquidity, operational and reputational risks. We conduct our materiality assessment regularly to ensure it stays relevant, tapping on the growing knowledge and evidence base for climate risk. This ensures that risk drivers that impact the Group across the various risks are adequately identified, assessed and managed in accordance with our existing risk management approaches and planning horizon. Our assessment indicates that credit and reputational implications from climate risks are likely to be more material than other traditional risks.

Portfolio-level Risk Management

We prioritise managing ESG and climate-related credit and reputational risks from our wholesale lending activities through integrating these considerations in our Responsible Financing Framework and Policies and credit approval processes.

Specifically for credit risk, we have built a suite of climate models to assess the impacts of transition and physical risks on the Bank's credit portfolios. We also monitor and report on credit exposures to climate-relevant sectors (oil and gas, power generation, metals and mining, chemicals, transportation, agriculture, other energy-intensive manufacturing, and real estate) to our management and board on a periodic basis, to enhance our understanding of climate risk impact on our portfolio.

While sectors of the economy are exposed to the net-zero transition and physical hazards, clients in the carbon-intensive and hard-to-abate sectors are more exposed to transition risks. We focus our decarbonisation efforts on six sectors – Power, Oil & Gas, Real Estate, Steel, Aviation, and Shipping – that we have set net-zero targets for. We also enhanced sector prohibitions to cease project financing to upstream Oil & Gas projects that obtained approval for development after 31 December 2021.

Client-level Risk management

ESG and climate-related risk assessment is undertaken as part of clients' overall credit risk assessment process. High-risk clients or transactions where significant environmental and social risks are identified and referred to a dedicated team of ESG specialists for enhanced due diligence and no objection review. Those with significant ESG risks that cannot be mitigated may be turned down. Clients or transactions with significant reputational risk will be escalated to the Reputational Risk Review Group for clearance. All transactions must be approved by the relevant Credit Approval authority.

In line with our risk-based approach, we have started to assess and engage clients in selected sectors on their ability to manage their climate-related transition and physical risks, in addition to ESG risks. Please refer to our Responsible Financing chapter for more information on our Responsible Financing Framework and Policies.

Other Risk Types

For market, liquidity and operational risks, climate risk materiality assessments are carried out to identify implications of transition and physical risks on trading activities, asset and liability management, and operational resilience. This will help us identify the types of activities and operations that may be affected and warrant deeper assessments and mitigation actions to be taken.

Our assessment on market risk is that the impact on our exposures is limited for climate-relevant sectors. Adverse impact is also moderated by the short-dated nature of such exposures.

On liquidity risks, our assessment has indicated that our liquidity buffers will remain resilient under assessed climate transition stress scenarios. As we move forward, we will continue to study best practices in this area and enhance our assessment approach.

For operational risks, our focus is on understanding the consequences of physical risk events on operational resilience. We have assessed that our existing measures can adequately mitigate the impact of existing physical risk events on our people, processes and systems. Nevertheless, we recognise that physical risks are likely to increase in frequency and severity in the long term and will be developing a framework to identify changing climate risks and ensure that the measures remain fit-for-purpose.

Climate risk ratings across different time horizons

Risk Types	Focus	Short-term (0 – 3 years)	Medium-term (3 – 10 years)	Long-term (>10 years)
Credit risk	Transition risk	Low	Moderate	Moderate
Market risk	Transition risk	Low	Low	Low
Liquidity risk	Transition risk	Low	Low	Low
Operational risk	Physical risk	Low	Low	Moderate

Low

Moderate

High

Accelerating the Transition to a Net-Zero Future

Climate Action: Managing our Climate-Related Risks






Managing our Emerging Risks

In tandem with growing scientific consensus on the interlinkages between climate, nature and biodiversity, the Bank has taken steps to enhance our assessment and management of nature and biodiversity risks.

At the outset, our Responsible Financing Policies prohibit financing of projects that have an adverse impact on nature and biodiversity. More details on our agriculture and forestry sectoral policy can be found in the Responsible Financing chapter.

Within our ESG risk assessments, we have also embedded considerations to assess clients on the impact of their activities on the protection and conservation of biodiversity, water stewardship, minimising of footprint and restoring ecosystems.

Going forward, we will enhance our understanding of nature-related financial risks. This follows from the Bank's participation in the Taskforce for Nature-related Financial Disclosures (TNFD) framework pilot study on assessing nature-related risks and opportunities related to the palm oil sector.

Climate-related Risk Drivers ⁽²⁴⁾	Risk Types	Potential Financial Risk Impacts for Each Risk Type
<p>Transition Risk Drivers</p> <p>Transition risk drivers are the societal changes arising from a transition to a low-carbon economy. They can arise through: Changes in public sector policies; innovation and changes in the affordability of existing technologies (e.g. that make renewable energies cheaper or allow for the removal of atmospheric GHG emissions); or evolving investor and consumer sentiment towards a greener environment.</p>	<p>Credit Risk</p> 	<ul style="list-style-type: none"> Repayment capacity of clients impacted by transition risks (e.g. change in consumer demand, increase in costs due to carbon pricing) or physical risks causing business disruptions Collateral values impacted by rising frequency and intensity of physical risk events, leading to asset stranding, reduced balance sheet, strength of obligors, and reduced recovery from potential defaults
	<p>Market Risk</p> 	<ul style="list-style-type: none"> Decline in market valuation of securities due to disruptive transition events (e.g. sudden climate policy shifts) or severe physical risk events (e.g. major flooding)
	<p>Liquidity Risk</p> 	<ul style="list-style-type: none"> Material change in cash outflows due to climate-induced risk events or adverse reputational events Reduction in liquid assets due to climate-induced macroeconomic stresses
	<p>Operational Risk</p> 	<ul style="list-style-type: none"> Increase in frequency and severity of acute physical risk events, which can affect physical assets, cause business interruptions and pose workplace health and safety challenges
	<p>Reputational Risk</p> 	<ul style="list-style-type: none"> Reputational issues associated with stakeholder perceptions on adequacy of climate risk and opportunity management

Physical Risk Drivers

Physical risk drivers are changes in both weather and climate that impact economies. They can be categorised as acute risks, which are related to extreme weather events, or chronic risks associated with gradual shifts in climate.

⁽²⁴⁾ Basel Committee on Banking Supervision, Climate-related risk drivers and their transmission channels, April 2021.

Accelerating the Transition to a Net-Zero Future

Climate Action: Managing our Climate-Related Risks

Climate Scenario Analysis

Climate scenario analysis serves to facilitate our understanding of risks and opportunities associated with climate change under a range of hypothetical scenarios spanning multiple time periods.

In 2022, we updated our climate scenario analysis methodology to capture the combined impacts of both transition and physical risks to eight climate relevant sectors (oil and gas, power generation, metals and mining, chemicals, transportation, agriculture, other energy-intensive manufacturing, and real estate) using a suite of climate scenario analysis models.

These climate scenario analysis models adopt a bottom-up approach to translate key scenario parameters (e.g. emission intensity pathways, carbon price, fossil fuel price and demand, electricity price and demand, physical hazard frequency and severity) into drivers of business performance such as volume, unit cost, price and capital expenditure. The credit rating impacts are then estimated using the adjusted financial statements.

Leveraging on these models, we analysed the impacts on our credit portfolio using reference scenarios developed by the Network for Greening the Financial System (NGFS), i.e. the Net Zero 2050 (Orderly Transition), Delayed Transition (Disorderly Transition) and Current Policies scenarios.

These scenarios were selected to cover three dimensions in the NGFS Climate Scenarios for Central Banks and Supervisors. This ensures that our scenario analysis accounts for a wide range of climate outcomes representing varying levels of risk to the Bank.

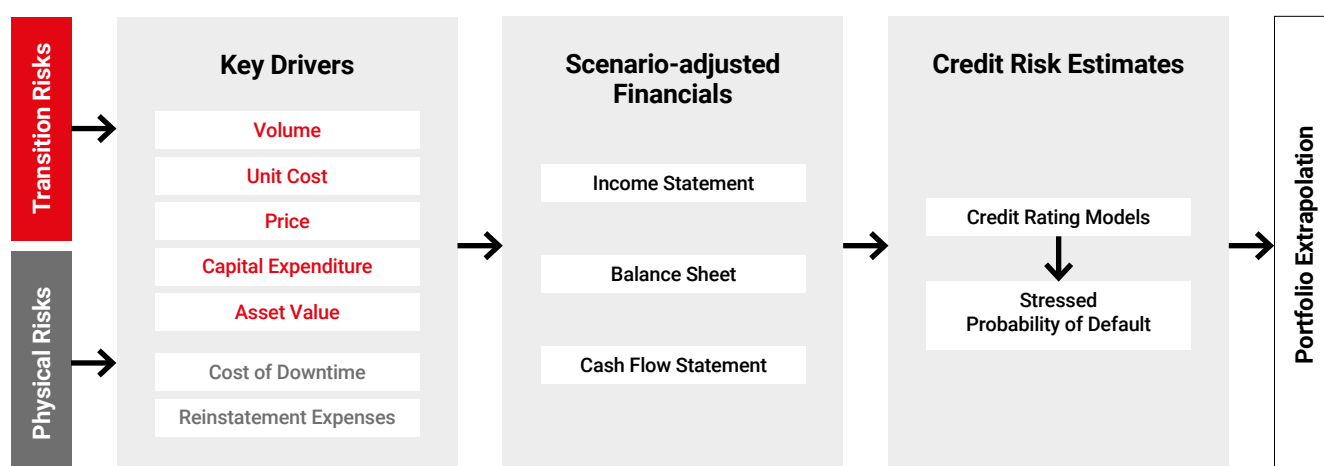
Enhancement to Climate Scenario Analysis

In 2023, we enhanced the methodology for the Real Estate sector to incorporate capital expenditure relating to mandatory or voluntary retrofitting costs required to improve energy efficiency of assets.

Separately, we also conducted a short-term climate scenario analysis as part of the Bank's Internal Capital Adequacy Assessment Process (ICAAP) and Hong Kong Monetary Authority (HKMA) Climate Risk Stress Test 2023. To assess the impacts of short-term physical risk events in these exercises, we identified property collaterals in at-risk areas using geo-locational information (e.g. postal codes, building/street addresses, flood maps) from government or meteorological authorities. Credit impacts arising from potential property devaluation due to asset damages and/or shifts in consumer preferences were assessed.

Results from Climate Scenario Analysis

The scenario analysis results showed that sectors that are carbon-intensive and hard-to-abate would be most impacted under the Orderly and Disorderly Transition scenarios. The high transition risk sectors include upstream and integrated oil and gas, coal mining, conventional power generation, steel and cement manufacturing and aviation, though the impacts are more significant in the medium- to long-term. We have since started regular monitoring and reporting of exposures to these sectors.



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Climate Action: Managing our Climate-Related Risks

Limitations of Climate Scenario Analysis Methodology

It is important to view the scenarios not as future forecasts but hypothetical constructs to understand the nature and magnitude of risks across a range of plausible climate and policy pathways. This would help us prepare for the risks and opportunities that could arise across various sectors and geographies relevant to our credit portfolio.

Although we have strengthened our climate scenario analysis methodology and understanding progressively, the results should be interpreted with the following methodological limitations in mind:

- i. Extent of assumptions – Due to uncertainty in extended projection timeframe, a large set of assumptions is used.
- ii. Relevance of scenario parameters – Climate risk scenarios and parameters from various international think tanks and research bodies are often provided and calibrated at a certain level of granularity which may not fully reflect local market dynamics and constraints.
- iii. Availability and consistency of data – Company-level emissions and business activity data may not be available or consistent across companies or sectors.
- iv. Absence of company- and country-level transition plans and measures – Such transition plans may not be disclosed and it may be too complex to incorporate granular information at scale.

We remain committed to keeping abreast of developments in this area and continually enhancing our methodology in line with industry standards.

Building Resilience into Our Business Model

We acknowledge that our portfolio faces climate risks and recognise the impact of our lending decisions on the climate through financing. Our net-zero strategy actively aligns the portfolio with a 2050 commitment, setting ambitious decarbonisation targets, particularly for financed emissions. Through partnerships with clients, we actively support sectors in planning effective transitions for decarbonisation and sustainability. More information on our target-setting methodology and selection of key sectors can be found in our net-zero publication: Partnering Clients towards a Net Zero ASEAN and Greater China.

In our journey to a low-carbon world, responsible financing and sustainable solutions play pivotal roles. We have proactively tightened lending policies to shift away from fossil fuel consumption, including enforcing enhanced coal-related prohibitions. In 2021, we committed to growing our sustainable finance portfolio to \$50 billion by 2025 and we have surpassed the target ahead of schedule. More information on our Responsible Financing can be found on page 39 and Sustainable Financial Solutions can be found on page 43.

Accelerating the Transition to a Net-Zero Future

Climate Action: Managing our Environmental Footprint

As we support our clients' net-zero transition and their aspirations for a low-carbon world, we also prioritise aligning our operations with sustainability principles to safeguard the vital ecosystem supporting life on Earth and minimising our environmental impact.

We are committed to reducing the environmental footprint of our physical operations by reducing our consumption of energy, water, paper and other resources. To reduce our environmental impact, three key approaches have been identified:

- **Improving building energy efficiency with technology and management practices**
- **Exploring innovative solutions to push boundaries**
- **Enhancing sustainability through strategic collaboration**



OCBC Centre (Singapore).

Maintaining Carbon Neutrality

In 2023, we met our target of achieving carbon neutrality for OCBC's banking operational emissions through a hierarchy of priorities:

Priority 1:

Reducing Energy Consumption from our Operations

We are consistently prioritising the deployment of sustainable technologies, optimising building system efficiency and exploring innovative solutions for Group-owned properties. Since 2020, reducing energy consumption from our operations has been our immediate key agenda. A portfolio-wide energy audit has been conducted across our buildings, supporting the deployment of several data-driven energy optimisations.

Building equipment is progressively replaced with best-in-class energy efficiency options where feasible. Exploration of innovative technology is also intensified to supplement the drive to reduce energy consumption (e.g. deployment of Passive Heat removal technology at our data centre in 2022).

Priority 2:

Increasing Renewable Energy Adoption

We are maximising the deployment of on-site renewable energy. Solar panels have been progressively installed at viable spaces across our local and regional buildings and branches.

For our remaining Scope 2 emissions, we place emphasis on securing Renewable Energy Certificates (RECs) that are generated in the locality we operate in. By doing so, we support the transition of the local electricity grid towards a cleaner grid. We have done so for our operations in Malaysia, Indonesia and Greater China. For Singapore, local renewable energy is limited in supply and we will continue to watch the development of this space and will participate when viable.

Priority 3:

Responsible Purchase of Carbon Credits to Offset Residual and Unavoidable Emissions

For hard-to-abate emissions, we are supporting credible carbon sequestration nature-based offset projects that remove carbon from the atmosphere. Our support extends to carbon removal projects originating in Indonesia and Greater China. These projects not only sequester carbon dioxide but contribute positively to multiple UN SDGs.

These approaches and priorities underscore our commitment to comprehensive sustainability and environmental responsibility.

Accelerating the Transition to a Net-Zero Future

Climate Action: Managing our Environmental Footprint

Our Operational Footprint

	% change between 2023 and 2022	2023	2022	2021
Energy				
Total energy consumption (GJ)	4.3	418,221	401,076	419,941
Diesel consumption for building operations (GJ)	-62.6	219	586	643
Company fleet mileage (GJ)	11.6	1,842	1,650 ⁽²⁵⁾	2,659
Total electricity consumption (MWh)	4.3	115,600	110,789	115,733
Electricity intensity (MWh/ft ²)	5.0	0.021	0.020	0.022
Emissions⁽²⁶⁾⁽²⁷⁾				
	%	2023	2022	2021
Total emissions (tCO ₂ e) ⁽²⁸⁾	-58.0	27,497	65,488	68,151
Scope 1 (tCO ₂ e) ⁽²⁹⁾	-8.1	147	160	237
Scope 2 (tCO ₂ e) ⁽³⁰⁾ (Location-based)	7.1	68,334 ⁽³¹⁾	63,811 ⁽³²⁾	67,636 ⁽³²⁾
Scope 2 (tCO ₂ e) ⁽³³⁾ (Market-based)	-63.2	23,501	63,811	67,636
Scope 3 (tCO ₂ e) ⁽³⁴⁾	153.7	3,849	1,517	278
Emission intensity ratios				
	%	2023	2022	2021
Scope 2 (tCO ₂ e/ft ²)	7.0	0.0123	0.0115	–
Water				
	%	2023	2022	2021
Total water consumption (m ³) ⁽³⁵⁾	8.4	433,969	400,322	407,051
Water consumption intensity (m ³ /ft ²)	4.1	0.101	0.097	0.077
Waste				
	%	2023	2022	2021
General Waste (tonnes)	30.6	1,605	1,229	–
Recycled waste (tonnes) ⁽³⁶⁾ – includes electronic waste	27.0	207	163	–
Office paper (tonnes) ⁽³⁷⁾ – excludes statement paper	-7.9	340	369	379

⁽²⁵⁾ Company fleet mileage for 2022 was restated due to data improvement from our operation in Mainland China.

⁽²⁶⁾ Our approach to carbon emissions is aligned to the GHG Protocol Standards, using the operational control approach to determine carbon emissions boundaries. The environmental data covers all our operations in Singapore, Malaysia, Indonesia and Greater China unless otherwise stated.

⁽²⁷⁾ Emission factors used to calculate carbon emissions are derived from, or in reference to, the Intergovernmental Panel on Climate Change (IPCC) emission factor database.

⁽²⁸⁾ Total emissions refer to the aggregation of Scope 1, Scope 2 (Market-based) and Scope 3 emissions.

⁽²⁹⁾ Scope 1 carbon emissions include direct carbon emissions from backup diesel generators on OCBC premises and carbon emissions from petrol consumption by corporate cars.

⁽³⁰⁾ Scope 2 carbon emissions refer to purchased electricity. OCBC reports Scope 2 carbon emissions using the location-based approach. Emission factor source: Energy Market Authority of Singapore, Malaysia Energy Commission, Institute of Global Environment Strategies (IGES) – IGES Grid Emission Factors, HK Electric, CLP Power Hong Kong Limited, Companhia de Electricidade de Macau and (Indonesia's) Directorate General of Electricity.

⁽³¹⁾ In 2023, we have added OCBC Space, a new building in Indonesia that is 100% powered by renewable energy to our reporting.

⁽³²⁾ Scope 2 carbon emissions for 2022 and 2021 were restated due to an update to the grid emission factor for Malaysia's purchased electricity released in 2023.

⁽³³⁾ Under the market-based approach, our Scope 2 emissions were reduced from purchased RECs in Malaysia, Indonesia and Greater China.

⁽³⁴⁾ Scope 3 carbon emissions include business air travel which covers OCBC Bank's key markets, Bank of Singapore, OCBC Securities Pte Ltd and OCBC Property Services Pte Ltd. Emission factors are derived from, or in reference to, the United Kingdom Department for Environment Food and Rural Affairs (DEFRA). This does not include financed emissions. Financed emissions also do not form part of the scope of external assurance.

⁽³⁵⁾ All of our water use is withdrawn from the municipal water supply, consumed within our operations and discharged to the public sewerage system. The quality of water withdrawn and discharged is managed by the public utility provider. We recognise that OCBC operates in countries that may be water-stressed including Singapore and will therefore continue to do our part to promote water conservation.

⁽³⁶⁾ Recycled waste includes 18 tonnes of recycled electronic waste from OCBC Bank's key markets, Bank of Singapore, OCBC Securities Pte Ltd and OCBC Property Services Pte Ltd, excluding OCBC Indonesia.

⁽³⁷⁾ Our paper usage data accounts for paper used within the Group offices for business operations. It excludes papers used for customer statements and letters. Total office paper in 2021 covers Singapore entities including OCBC, OCBC Securities Pte Ltd, OCBC Property Services Pte Ltd, Bank of Singapore, OCBC Malaysia, OCBC China, OCBC Hong Kong, OCBC Macau and OCBC Indonesia. In 2022, the scope expanded to include an additional 38 tonnes from remote offices and branches outside Kuala Lumpur, which were not tracked in 2021. In 2023, office paper covers all OCBC key markets, Bank of Singapore, OCBC Securities Pte Ltd and OCBC Property Services.

Accelerating the Transition to a Net-Zero Future

Climate Action: Managing our Environmental Footprint

Significantly, scope 3 emissions have risen from 2022, which can be attributed to the post-pandemic recovery in air travel. This recovery has led to an increase in the number of business air travels made in 2023. Going forward, we remain dedicated to improving our progress in fostering sustainability within our operations.

Improving Building Energy Efficiency with Technology and Management Practices

In 2023, we continued the post-pandemic recovery of our office occupancy, directly increasing the energy requirements of our buildings. We have sustained the optimisation of our building to reduce the impact. In Malaysia, we successfully completed the retrofitting of lights at all our offices in Wisma Lee Rubber and Menara OCBC. Across the region, we also completed the installation of solar panels covering 27,000 square feet across several of our buildings, notably on the rooftops of OCBC Centre Tampines One and Two, OCBC Centre (Shanghai) and OCBC Space (Indonesia).



Installation of solar panels on OCBC Tampines Centre Two (left) and OCBC Centre (China) (right).

In tandem with our Singapore branch refurbishment plan, energy efficiency optimisation is also progressively implemented at our 32 branches.

In 2023, two of our branches – Wisma and Tampines – have attained the Green Mark Platinum certification, bringing our total certified branches to 8 out of 32 branches.

Exploring Innovative Solutions to Push Boundaries

While actively promoting building energy efficiency through lifecycle equipment replacement and operational optimisation, we recognise that conventional methods have almost reached saturation. Therefore, in 2023, we intensified our focus on innovation and embarked on two pilot projects to ascertain carbon reduction potential and scalability. One project actively utilises material properties to ionise and break up water molecules, enhancing heat transfer efficiency in our indoor air environment. The other actively leverages the smart Internet of Things (IoT) to optimise our building's air conditioning system. Both projects demonstrated significant carbon reduction potential, prompting active exploration for scaling up across our assets.

Pilot project: Installation of ceramic nets on Air Handling Units (AHUs) and smart optimisation of Heating, Ventilation and Air Conditioning (HVAC) system (chiller plant) operations

Ceramic nets implementation

The implementation of ceramic nets was piloted at OCBC Tampines Centre One. The nets optimise heat exchange through breaking up of water molecule clusters. The first phase of implementation was done at the AHU on a single level to determine the nets' effectiveness in reducing the air conditioning cooling load. With promising results from the pilot, we have since implemented the nets in all the AHUs of the building.



Implementation of ceramic nets at OCBC Tampines Centre One.

HVAC optimisation

Smart Building HVAC optimisation uses historical data, real-time data collected and machine learning to achieve a holistic system efficiency improvement and allow HVAC systems to always work at peak efficiency.



Performance dashboard used for HVAC optimisation.

In the second half of 2023, we started a pilot implementation for HVAC optimisation at our building to assess its viability and feasibility for our operations. While the initial findings from both projects have been promising, we are continually monitoring and assessing their performance with the aim of scaling up across our assets.

Accelerating the Transition to a Net-Zero Future

Climate Action: Managing our Environmental Footprint





Enhancing Sustainability Through Strategic Collaboration

Together with the Singapore Green Building Council (SGBC) and World Wildlife Fund (WWF) Singapore, we curated a series of sustainable real estate management workshops and seminars with our key stakeholders in mind. The workshops and seminars were open to employees and tenants leasing spaces within our properties. Through this, we aim to grow with our ecosystem stakeholders, actively enhancing our capacity and expertise to decarbonise.

Going Forward

Given the existential nature of climate change and the urgent need to substantially reduce emissions, the transition to a net-zero future remains a key priority for us. We will continue to manage our environmental footprint.

Our Forthcoming Targets

-  Achieve net zero in financed emissions for six sectors by 2050
-  Maintain carbon neutrality for OCBC's banking operational emissions in 2024
-  Receive BCA Green Mark award for all OCBC Bank Singapore branches by 2030
-  Provide electric vehicle charging facilities to major Group-owned commercial buildings by 2025

SGBC-OCBC Built Environment Decarbonisation Challenge



(From left to right) Mr Allen Ang, 1st Vice President, SGBC; Ms Yvonne Soh, Executive Director, SGBC; Ms Emily Teo, Head of Group Property Management, OCBC; and Mr Mike Ng, Group Chief Sustainability Officer, OCBC.

In a strategic collaboration, OCBC entered into a partnership with the SGBC to drive the adoption of sustainability in the real estate sector.

One of the key outcomes of this partnership is an issuance of challenge call to the industry for novel building technology that will further fuel the decarbonisation of the real estate sector. Successes from the challenge will be shared within SGBC's network and OCBC's client base, proliferating their adoption.

Tailored training is also designed for OCBC employees, clients and tenants to strengthen our combined capabilities and knowledge of decarbonisation. Through closer connections, green financing can be provided to member organisations under SGBC, facilitating and amplifying the deployment of sustainable solutions in the broader community.

Accelerating the Transition to a Net-Zero Future

Responsible Financing



Driving responsible growth

Why this is Material to Us

The escalating challenge of climate change and the critical imperative for sustainable development present a dual landscape of business risks and opportunities within the banking industry. As we navigate these evolving risks, particularly in the ESG domain, we prioritise effective ESG risk management and responsible lending practices to safeguard our businesses while contributing to a greener future.

Our Management Approach

Our approach is rooted in the principles of risk management and responsible lending. We are cognisant of the significant impact our financing activities can have on the environment and society. We also recognise the diverse physical and transition risks that climate change poses to both our clients and the Bank's portfolio. As such, our primary objective is to prudently navigate and mitigate these risks and provide a steadfast commitment to guide our clients towards the transition to a low-carbon economy, in alignment with the objectives of the Paris Agreement.

This strategic focus goes beyond fulfilling our social responsibilities; it is also instrumental in mitigating the Bank's exposure to climate-related risks and safeguarding the long-term value of our clients' assets.

We are guided by our Responsible Financing Framework and Policies which outline OCBC's approach and dedication to managing ESG risks within our lending practices. Our Framework and Policies detail our ESG-focused strategy for both lending and debt-related activities, encompassing debt issuance and underwriting, and applies to new and existing corporate, commercial, and institutional clients. We firmly adhere to a policy of non-engagement in any financing activities that are on our exclusion and prohibition lists where there is clear evidence of immitigable adverse impact to the environment, people or communities, or where there is a breach of local regulations.

See the table on the following page for key highlights of our major policies.

Our Targets and Performance

Our 2023 Targets

- Strengthen ESG policies and procedures to support climate risk management

Performance Against Targets

- We have strengthened ESG policies and procedures through:
 - prohibition of project financing to upstream Oil & Gas projects that obtained approval for development after 2021;
 - expansion in scope of Responsible Financing Policy for Agriculture and Forestry to include animal production and fisheries, and enhanced our expectations including No Deforestation, No Peat, No Exploitation (NDPE); and
 - full implementation of climate risk assessments to assess clients' transition and physical risks for climate-relevant sectors



Achieved



On track