Net Zero

Embedding Net Zero into the Way We Operate

Our Approach to Our Own Operations

Environmental Management

Environmental Management Policy and Mechanism

As Hong Kong's first domestic bank to attain ISO 14001 certification for all its offices and branches, we aim to play a role in the development of a low-carbon economy. With an environmental policy in place, we closely monitor our environmental management system and ensure its ongoing compliance with the ISO 14001 standards.

We have been undertaking a bank-wide office enhancement programme, which includes initiatives to make our workplaces more energy-efficient and sustainable, with reference to internationally recognised standards. We have also developed specific guidelines on green procurement and waste management.

Our operations comply with the Hong Kong regulations and guidelines, including the Waste Disposal Ordinance (Cap. 354) that governs the storage and disposal of electronic waste.

Greening Our Buildings

The Bank received recognition from the Hong Kong Green Building Council and the Professional Green Building Council at the esteemed Green Building Award 2023. Our accolades were as follow:

- Grand Award for Existing Buildings Category: Completed Projects – Commercial: Hang Seng Bank Headquarters Workplace Transformation
- Finalist for Green Building Leadership Category: Government, Institutions & NGOs: Hang Seng Bank Limited

The Hang Seng Headquarters also received the Certificate of Finalist Award in the Hong Kong Building (Renovation/ Revitalisation) category at the Quality Building Award 2022.

These achievements not only reflect our dedicated efforts towards integrating ESG principles into our operations, but also highlight our leading role in converting workplaces into sustainable environments. We are inspired to continue our journey towards a greener future.

We have implemented various energy saving measures to help reduce energy usage, which include a quarterly review of the operation schedules of existing equipment and the installation of timer controls in the Headquarters Building's cargo lift fan coil units, which help in reducing unnecessary operations during unoccupied periods.

We have installed a Data Analytics System at the Hang Seng Headquarters to reduce the heating, ventilation and air conditioning system's energy usage. The Data Analytics System is an innovative software platform powered by artificial intelligence ('AI') and big data, which allows us to continuously monitor, control and improve the operations of our chiller plant and the primary air handling units efficiency.

In support of the government's climate action, our three office buildings and some of our large-sized branches have enrolled in the Energy Saving Charter 2023 scheme and the 4T Charter scheme.

We participate in the Quality Water Supply Scheme for Buildings, a scheme that is administered by Hong Kong's Water Supplies Department. Under the scheme, our Headquarters Building currently holds a Gold Certificate in the Fresh Water category, while our Mong Kok Office Building holds a Gold Certificate in the Fresh Water category and a Gold Certificate in the Flushing Water category. Bleed-off water from the cooling towers of our air conditioning system is reused for toilet flushing at our Headquarters Building and Mong Kok Office Building.

In 2023, we purchased

11,317,100 kWh

of renewable energy

from a local electricity supplier, which is around

40% of our annual electricity consumption

Local Renewable Energy

To contribute to climate change mitigation, we actively explore opportunities to support local renewable energy generation. Solar panels are installed at our Mong Kok Office Building to generate renewable energy. Around 65,000 kWh of renewable energy has been generated in the past 12 months, which is equivalent to 26 tonnes of carbon emissions in 2023 alone.

In 2023, we purchased 11,317,100 kWh of renewable energy from a local electricity supplier, which is around 40% of our annual electricity consumption in the year. Each unit in a certificate represents electricity produced by local renewable sources, such as solar, wind and landfill gas. This helps to reduce around 4,414 tonnes of carbon dioxide ('CO_2') emissions. Our efforts to support local renewable energy were recognised with the Renewable Energy Contribution Award in the Smart Energy Award 2023. This was the fifth consecutive year for the Bank to receive this recognition.

We aim to source 100% of our electricity from renewable sources by 2030 via our own renewable sources as well as renewable energy certificates. We are dedicated to purchasing around 154 GWh of renewable energy over a 10-year period from 2021 onward, which is equivalent to a reduction of over 60,000 tonnes of carbon emissions from electricity use.

Waste Management

Our cleaning service providers are responsible for providing log sheets detailing the amount of waste handled every month. In addition, we use grey water from water cooling towers for flushing at the Headquarters Building and Mong Kok Office Building.

In 2023, we arranged for the recycling of all electronic waste with an authorised vendor of HSBC Group, according to our environmental-friendly recycling process. Our target and our on-going process are to recycle all electronic waste (if any) via this authorised vendor.

Construction waste generated from demolition and renovations is handled by government-approved contractors. We have taken steps to ensure that the contractors' waste management and handling methods meet our standards. In addition, we have initiated an Integrated Furniture Waste Reduction Programme, with detailed steps on how to dispose of furniture after an office renovation.

Food container recycling spots and food waste collection points have been set up in the cafeteria area of our Mong Kok Office Building to recycle plastic and paper food containers and collect food waste. A food decomposer is available in the building to process food waste, which is converted into compost for further use.

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We have also adopted a new design for the waste bins at our Mong Kok Office Building and Headquarters Building, with the aim of enhancing waste management education for our staff. In addition, we have initiated a series of programmes across our branches and offices to enhance awareness of energy reduction and recycling, such as an internal branch energy saving competition, a mooncake box recycling programme, and a Christmas tree and peach blossom tree recycling programme.

Paper Consumption Reduction

We launched a paper consumption reduction campaign in March 2022, which is coordinated by the Net Zero Operations Working Group ('NZOWG'), a working group tasked with monitoring five environmental metrics (reduction of energy use, greenhouse gas ('GHG') emissions, paper consumption, water consumption and waste) at an enterprise-wide level on an ongoing basis. Different departments are required to track their monthly paper consumption and the NZOWG holds quarterly meetings to check their performance against the respective KPIs. To build on our success in reducing paper consumption, we are working on three new paper-reducing initiatives, which include minimising the use of paper in Chinese New Year souvenirs, reducing paper consumption in our process revamps, as well as encouraging the adoption of electronic trade advice.

Target Setting and Continuous Monitoring

We aim to achieve net zero in our own operations by 2030. To guide and monitor our net zero operations efforts, we have set a series of 2030 net zero operation targets, which pose reduction endeavours on our overall energy consumption, water consumption, paper consumption, greenhouse gas emissions, waste reduction and recycling.

Embedding Net Zero into the Way We Operate

Our approach to reach net zero operations has aligned with HSBC's strategy – reduce, replace and remove. We are dedicated to reducing our carbon emissions from consumption, and then replacing remaining emissions with low-carbon alternatives. We also plan to remove the remaining emissions that cannot be reduced or replaced by procuring high-quality offsets at a later stage.

As of September 2023, we recorded progresses across all aspects, thanks to the resource conservation initiatives implemented over the last three years in coalition with various business units. Below highlights our progress towards net zero operation as of September 2023[1]:

Aspects	Unit	Base year	Our progress as of the end of September 2023 (against base year)	2030 Targets (against base year)
Electricity consumption	MWh	2018	Decreased by 21.1%	Decrease of 30%
GHG emissions – total Scope 1 and 2[2]	tonnes of CO_2e	2018	Decreased by 33.8%	Decrease of 30%
Water consumption	m^3	2018	Decreased by 31.6%	Decrease of 24%
Paper consumption	tonnes	2019	Decreased by 36.3%	These targets may develop over time in line with market practice or regulation; therefore, we have not included targets in this year's disclosure.
Waste diversion	tonnes	N/A	Diverted 52.7% of waste away from landfill	
Waste reduction	tonnes	2018	Reduced 52.3% of the total waste	

Key: m^3: Cubic metres CO_2e: Carbon dioxide equivalent MWh: Megawatt hours

1. The environmental data in 2023 was compiled from the Bank's operational data from 1 October 2022 to 30 September 2023.
2. GHG emissions include emissions generated from the consumptions of gas, gasoline, diesel, and electricity but exclude the adjustment due to the use of renewable certificates.

Pursuing Environmental Excellence

In 2023, we implemented below major initiatives that made key contributions to our environmental targets:

- Set up food waste collection points at our Mong Kok Office Building
- Converted flushing water at our Mong Kok Office Building from fresh water to sea water
- Replaced 80gsm paper with 75gsm paper for in-building printer services in all operating premises
- Installed a Data Analytics System for our chiller plant optimisation, which helped increase operational efficiency and save electricity

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Environmental Performance

	Unit	2023+
Total GHG emissions[1]	tonnes of CO_2e	**14,557.26**
Scope 1	tonnes of CO_2e	**137.87**
Stationary combustion	tonnes of CO_2e	**86.76**
Mobile combustion	tonnes of CO_2e	**51.11**
Scope 2	tonnes of CO_2e	**13,565.13**
Purchased electricity	tonnes of CO_2e	**13,546.55**
Towngas	tonnes of CO_2e	**18.58**
Scope 3[2]	tonnes of CO_2e	**854.26**
Business travel (land and air)	tonnes of CO_2e	**578.23**
Transmission and distribution loss	tonnes of CO_2e	**260.02**
Upstream transportation and distribution (mobile branch)	tonnes of CO_2e	**16.02**
Total GHG emissions per FTE	tonnes of CO_2e / FTE	**2.10**
From Scope 1	tonnes of CO_2e / FTE	**0.02**
From Scope 2	tonnes of CO_2e / FTE	**1.96**
From Scope 3	tonnes of CO_2e / FTE	**0.12**
GHG emissions per sq. ft.	tonnes of CO_2e / sq. ft.	**0.01**
Total energy consumption[3]	MWh	**25,972.09**
Indirect: electricity	MWh	**25,524.09**
Direct: gas and diesel	MWh	**448.00**
Energy consumption per FTE	MWh / FTE	**3.75**
Energy consumption per sq. ft.	MWh / sq. ft.	**0.03**
Total water consumption	m^3	**54,152.00**
Water consumption per FTE	m^3 / FTE	**7.81**

	Unit	2023+
Total paper consumption	tonnes	**1,224.00**
Waste disposed to landfill[4]	tonnes	**199.40**
Waste disposed per FTE[5]	tonnes / FTE	**0.03**
Waste collected for recycling	tonnes	**222.13**
Paper	tonnes	**199.92**
Plastic	tonnes	**0.46**
Aluminium cans	tonnes	**0.18**
Glass	tonnes	**0.08**
Furniture	tonnes	**0**
IT and electrical	tonnes	**10.99**
Food waste	tonnes	**6.89**
Ink jet bottles and toner cartridge	tonnes	**3.61**

• Data coverage: Hang Seng Bank's Hong Kong operations. The data is rounded up to 2 decimal places.

Key: m^3: Cubic metres; CO_2e: Carbon dioxide equivalent; MWh: Megawatt hours; FTE: Full-time equivalent employee; sq. ft.: Square feet; +1 Oct 2022-30 Sep 2023

1. Scopes 1 and 2 GHG emissions were estimated according to the Hong Kong Government's Guidelines to Account for and Report on Greenhouse Gas Emissions and Removals for Buildings in Hong Kong (2010 Edition).

   Scope 2 GHG emissions were calculated based on the electricity and Towngas consumed, as well as the corresponding emission factors, as provided by the utility companies. The emission factor for CLP was 0.39 kg CO_2e/kWh as of 2023. The emission factors for Hong Kong Electric were 0.71 kg CO_2e/kWh in from October to December 2022 and 0.68 kg CO_2e/kWh from January to September 2023.

   Scope 3 GHG emissions were estimated with reference to the GHG Protocol's Corporate Value Chain (Scope 3) Accounting and Reporting Standard.
2. Scope 3 represents indirect emissions attributed to upstream and downstream activities taking place to provide services to customers. Our upstream activities include business travel and emissions from its supply chain including transport, distribution and waste. Our downstream activities include financed emissions, which is not currently disclosed due to data and system limitations.
3. The total energy consumption figures cover the energy consumption of the Bank's building operations only, and exclude the energy consumption of the Bank's company vehicles.
4. Hazardous waste is not counted owing to the insignificant amount.
5. Renovations of our headquarters and other core buildings generated construction waste, resulting in a higher volume of waste disposal.

Environmental Programmes

To protect our planet for present and future generations, we endeavour to optimise the use of resources. We conduct business in an environmentally conscious manner and advocate good practices in our value chain.

To minimise the negative environmental impact of our business, we implement environmental programmes to:

- Promote energy efficiency
- Improve the consumption of materials, minimise waste generation and ensure the disposal of waste in an environmentally acceptable manner
- Promote recycling and the use of recycled or environmentally friendly materials
- Minimise the use of chlorofluorocarbons
- Give preference to suppliers and contractors who adopt environmentally friendly practices
- Meet all relevant environmental, health and safety laws and regulations
- Support environmental initiatives, partly through the Bank's community programmes

To reduce paper usage, we launched the initiatives described below in 2023.

Subscriptions to e-Statement and e-Advice Services

There has been a year-on-year increase in the number of retail customers registered for our e-Statement and e-Advice services. We have also extended the scope of our e-Advice service to cover Capital Protected Investment Deposit and MaxInterest Investment Deposit from September 2023 onward. Customers who have opted-in to e-Statement and e-Advice services will receive their advice in a digital format, which can be viewed and downloaded via the mobile app and personal e-Banking, instead of receiving a hard copy by mail.

Adoption of Digital Coupons

Instead of distributing physical coupons, we have begun to issue digital coupons to customers participating in our promotion campaigns via HARO WhatsApp and Short Message Service ('SMS').

Provision of Information in a Non-Paper-Based Format

Since June 2023, under Section 18 of the revised Code of Banking Practice, we have been providing information (including our terms and conditions) in a non-paper-based format. This allows customers, at the time of the provision, to directly download and store the information for future reference. We also provide customers with information in a paper-based format under special circumstances.

Climate Risk Management

Climate risk relates to the financial and non-financial impacts that may arise as a result of climate change and the move to a net zero economy. Climate risk can materialise through:

- **Physical Risk**, which arises from the increased frequency and severity of weather events, such as typhoons and floods, or chronic shifts in weather patterns; and
- **Transition Risk**, which arises from the process of moving to a low-carbon economy, including changes in government or public policy, technology and market-demand.

We are affected by climate risks either directly or indirectly through our relationships with our customers.

We may face direct exposure to the physical impacts of climate change, which could affect our day-to-day operations.

Any detrimental impact to our customers from physical and transitional climate risk could negatively impact us either through credit losses on our loan book or losses on trading assets. We may also be impacted by reputational concerns related to the climate action or inaction of our customers.

The uncertain impacts of climate change and data and methodology limitations may impact our model risk, creating inappropriate and inaccurate model outputs.

In addition to the above, we also consider net zero alignment risk and risk of greenwashing as thematic risk issues, which could result in reputational damage, regulatory and litigation issues which may impact our revenue generating ability.

Our climate risk approach is aligned to our risk management framework and three lines of defence model, which sets out how we identify, assesses, and manage our risks. This approach provides the Board and senior management with visibility and oversight of key climate risks.

For further details of the Bank's climate risk management, please refer to the 'Climate Risk' section under 'Risk' in our Annual Report.

Insights from Climate Scenario Analysis

Scenario analysis supports the Bank's strategy by assessing our potential exposures to risks and vulnerabilities under a range of climate scenarios. It helps to build the Bank's awareness of climate change, plan for the future and meet growing regulatory requirements.

In climate scenario analysis, the Bank considers, jointly, both physical risks and transition risks. The Bank analyses how these climate risks impact how other risks are managed within the organisation, including credit, traded market risks, and non-financial risks.

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Our Climate Scenarios

In 2023, the HSBC Group enhanced its internal climate scenario analysis exercise by focusing efforts on generating more granular insights for key sectors and regions to support core decision making processes and to respond to regulatory requirements.

HSBC Group created its internal scenarios using external publicly available climate scenarios as a reference, including those produced by the Network for Greening the Financial System, the Intergovernmental Panel on Climate Change and the International Energy Agency. Using these external scenarios as a template, the HSBC Group adapted them by incorporating its unique climate risks and vulnerabilities to which the organisation and customers across different business sectors and regions are exposed.

HSBC Group's scenarios were:

- **the Net Zero scenario**, which is consistent with the Paris Agreement. This assumes that there will be orderly but considerable climate action, limiting global warming to no more than 1.5°C by 2100, when compared with pre-industrial levels;
- **the Current Commitments scenario**, which assumes that climate action is limited to current governmental committed policies, including already implemented actions, leading to global temperature rises of 2.4°C by 2100. This slow transition acts as a baseline to determine the actions we need to take to reach its net zero ambition while operating in a world that is not net zero;
- **the Delayed Transition Risk scenario**, which assumes that climate action is delayed until 2030 with a late disorderly transition to net zero but stringent and rapid enough to limit global warming to under 2°C by 2100. This scenario allows us to stress test severe but plausible transition risk impacts;
- **the Downside Physical Risk scenario**, which assumes climate action is limited to currently implemented governmental policies, leading to extreme global warming with global temperatures increasing by greater than 4°C by 2100. This scenario allows us to assess physical risks associated with climate change; and
- **the Near Term scenario**, which assumes both a sharp increase in policies that drive a disorderly transition towards net zero and a sharp increase in extreme climate events over a five-year period until 2027. This scenario focused on HSBC Group's business in Asia.

The Near Term Scenario

Designed to meet the HKMA regulatory requirements, the Near Term scenario allowed the Bank to explore the combined impacts of a disorderly transition towards net zero and extreme acute events occurring simultaneously. The exercise allowed the Bank to understand the extent to which a stressed scenario exhibiting both high physical and transition risks in the near term could immediately impact the Bank's customers across all its sectors.

Our Methodology

The models incorporate a range of climate-specific metrics that will have an impact on our customers, including expected production volumes, revenue, costs and capital expenditure. These results feed into the calculation of the Bank's risk-weighted assets and expected credit loss projections. For the Bank's real estate portfolio models, these focus on physical risk factors, including property locations, perils and insurance coverage when assessing the overall credit risk impact to the portfolio. The results were reviewed by the Bank's sector specialists who, subject to its governance procedures, make bespoke adjustments to the results based on their expert judgement when relevant.

There are industry-wide limitations, particularly on data availability, however, our models are designed to produce outputs that can support the Bank's assessment of the level of its climate resilience.

How Climate Change is Impacting Our Portfolios

Within the Bank's wholesale lending portfolio, customers in higher emitting sectors continue to be most exposed to larger climate-related losses. Notably, continuing from the 2022 disclosure, the Bank's commercial real estate and retail mortgage portfolios remain resilient to climate risk. Even though Hong Kong contains material physical risk exposures due to the impacts from tropical cyclone winds and to a lesser extent coastal inundation, the impact on prospective credit losses remains low as the properties remain largely protected against these events due to high building standards and coastal defences.