

Climate and Nature Report 2022

Extracted from the Sustainability Report 2022

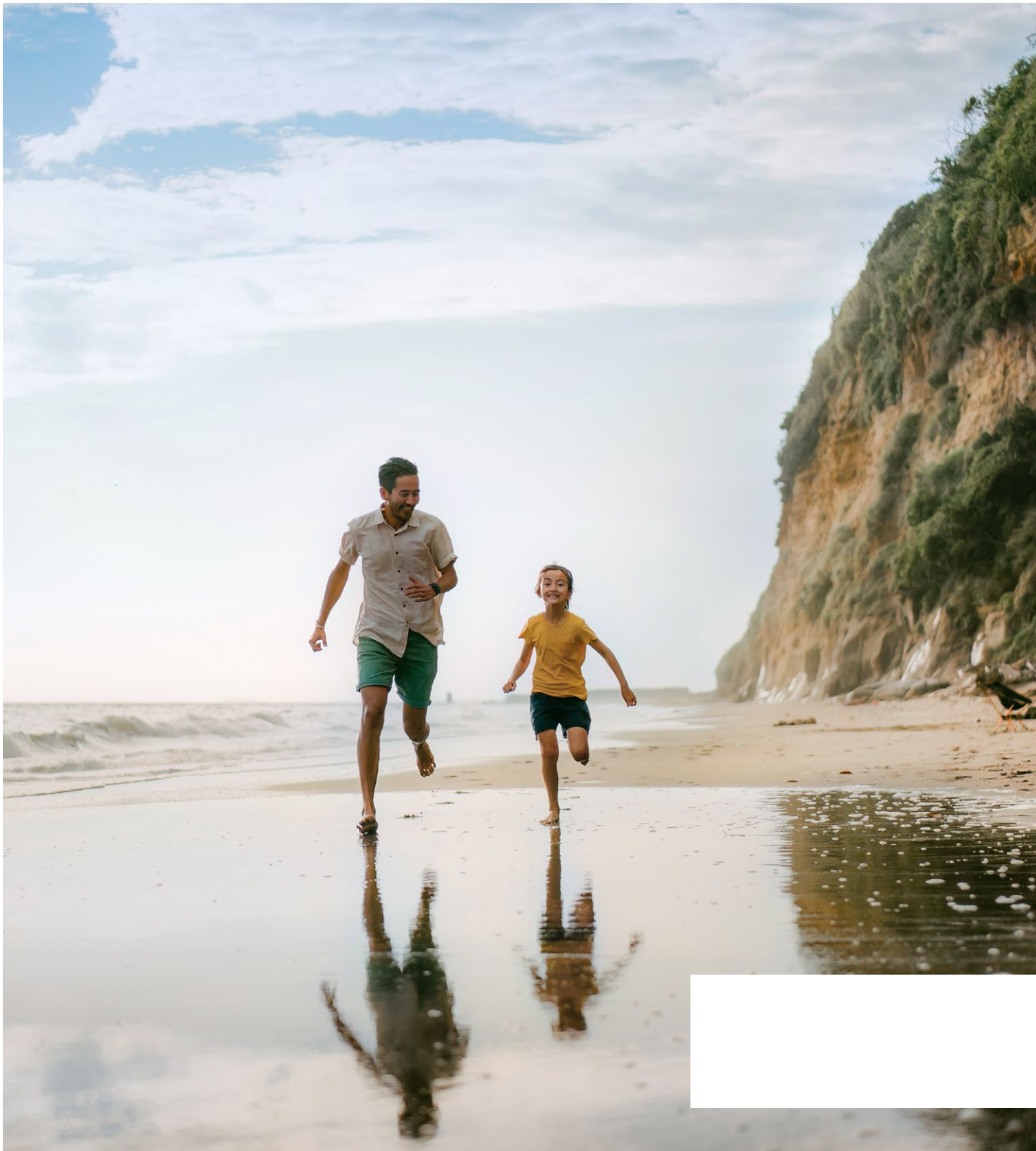


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Introduction

Sustainability is a multi-faceted topic, and climate and nature are two critical elements which are deeply intertwined and must be addressed together in the transition to a low carbon economy. As outlined in the Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Reports released in 2021 and 2022, achieving the Paris Agreement objectives requires a rapid transformation across the economy given that aggregate temperatures have already increased more than 1°C. The impacts of climate change are being felt already, as highlighted in studies such as the UK Government-sponsored The Economics of Biodiversity: The Dasgupta Review. It notes that the stock of natural capital per person has declined by 40% over the last thirty years. Land use change is one of the largest drivers of biodiversity loss and key ecosystems play a critical role in providing carbon sinks to help mitigate climate change as noted in the UN Environmental Program Emissions Gaps Report 2022 released at the 27th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP27) in November 2022. Thus, increasingly climate and nature must be jointly addressed in order to meet the goals established by both the Paris Agreement and the Kunming-Montreal Global Biodiversity Framework agreed at the 15th meeting of the Conference of the Parties to the Convention on Biological Diversity (COP 15) in December 2022.

Similar to the financial world, where assets give rise to flows of revenue, the natural environment consists of stocks of assets (i.e., natural capital) that provide benefits to people and the economy (i.e., ecosystem services). As the transition to a low-carbon economy continues and reporting around climate continues to mature, it is important to remember that biodiversity is an essential characteristic of nature, critical for maintaining the quality, resilience and quantity of ecosystem assets and the provision of ecosystem services that businesses and society rely upon. These dependencies and impacts have been documented through a range of research initiatives including the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)'Global Assessment Report on Biodiversity and Ecosystem Services, the IPCC's Sixth Assessment Report 2021's Fact sheet on Biodiversity, in addition to a variety of industry-led efforts. Hence, we recognize the importance of understanding human dependencies and impacts on nature, to better understand the transmission channels through which our clients and our firm may face risks and opportunities resulting from the dependencies and impacts of society's activities on nature.

In 2022, we continued to progress on this journey toward a low-carbon economy, including through our continued implementation of the recommendations laid out by the Task Force on Climate-related Financial Disclosures (the TCFD). Thus, this Climate and Nature Report has been developed to support our stakeholders in locating climate- and nature-related information contained in our Sustainability Report 2022 (including its Supplementary Information document).

For further pertinent documents, refer to ubs.com/gri

About this report

The reporting period for our Sustainability Report as well as our Climate and Nature Report is 1 January to 31 December 2022 which is aligned with the financial reporting period. All data included in the report is therefore for this period, unless otherwise indicated. Data pertaining to our firm's own environmental footprint covers the reporting period 1 July 2021 to 30 June 2022. Data showing progress against our net-zero sectorial targets pertains to 31 Dec 2021 (due to the unavailability of relevant 2022 data, as explained in the respective section of this report).

Unless otherwise noted, the information included in this report is presented at the consolidated level for UBS Group AG and UBS AG. UBS Group AG and UBS AG consolidated information does not differ in any material respect. Supplementary information regarding certain significant subsidiaries can be found in "Note 28 Interests in subsidiaries and other entities" in our Annual Report 2022.

The purpose of this report is to support our stakeholders in locating climate- and nature-related information contained in our Sustainability Report (including its Supplementary Information document) in one document that follows the structure recommended by the Task Force on Climate-related Financial Disclosures (the TCFD). For this report, we also leveraged the beta framework of the Taskforce on Nature-related Financial Disclosures (released in November 2022). In addition to our Sustainability Report and Supplementary Information document, other information on sustainability topics, including our Sustainability Accounting Standards Board (SASB) index, our World Economic Forum International Business Council (WEF IBC) Stakeholder Capitalism Metrics reference table and our Principles for Responsible Banking (PRB) reporting and self-assessment are available from ubs.com/gri.

Explanation on dependencies

Certain activities of UBS that pertain to the implementation of its sustainability and impact strategy are directly impacted by factors that UBS cannot influence directly or can only influence in part. These include pertinent governmental actions (e.g., when it comes to the achievement of the Paris Agreement and thus the achievement of our firm's net-zero ambitions); the quality and availability of (standardized) data (e.g., in such areas as emissions); the development and enhancement of required methodologies and methodological tools (e.g., on climate- and nature-related risks); the ongoing evolution of relevant definitions (e.g., sustainable finance); or the furthering of transparency (e.g., pertaining to company disclosures of data). Areas where these dependencies are of particular relevance (including in particular regarding the examples noted above) are explained in the relevant sections of our Sustainability Report and our Climate and Nature Report.

6 March 2023

UBS Group AG and UBS AG

Contacts

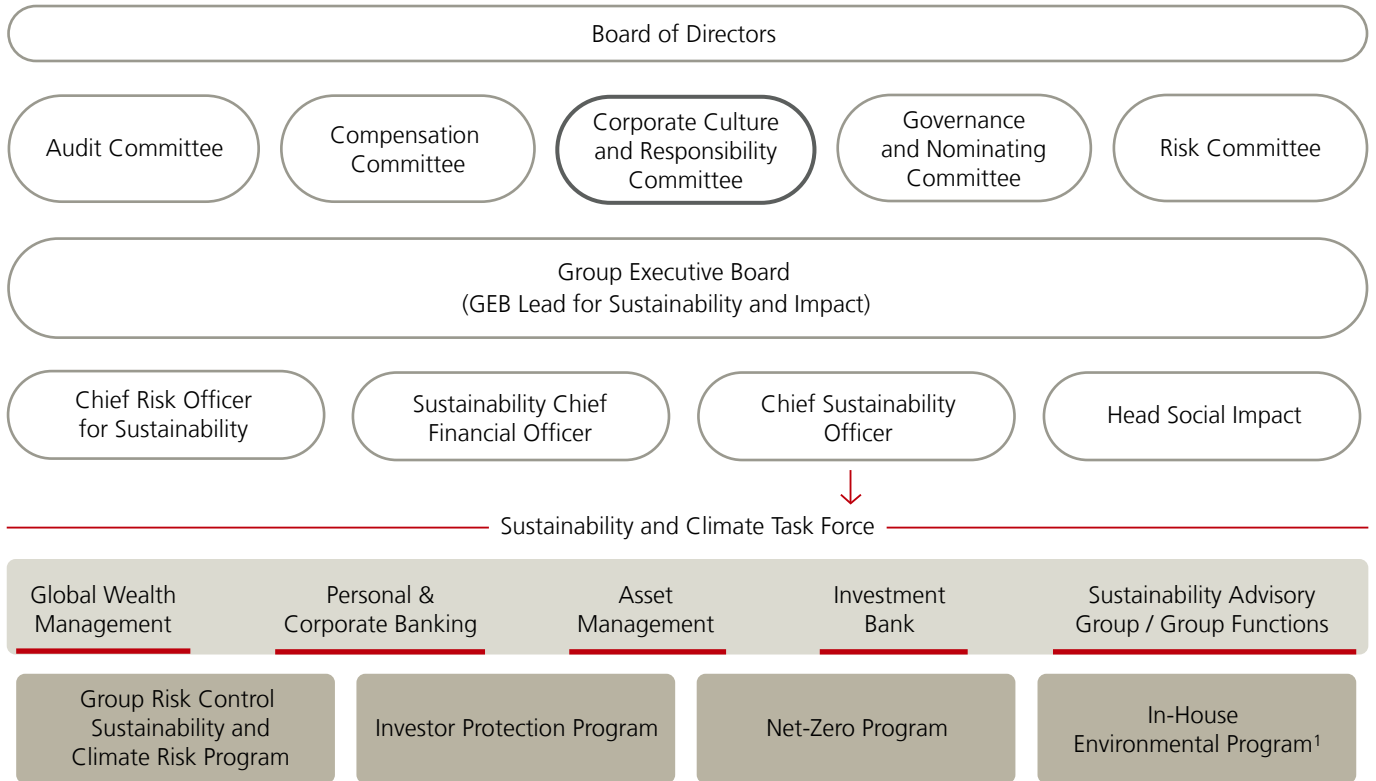
Our Corporate Responsibility team, part of the UBS Chief Sustainability Office, manages UBS's sustainability disclosure and provides information to stakeholders about the content of this report.

cr@ubs.com

Governance

Our sustainability governance

UBS sustainability governance



¹ Also represents the Responsible Supply Chain Program.

Board of Directors and Group Executive Board

Our firm's sustainability and corporate culture activities are grounded in our Principles and Behaviors and overseen at the highest level of the organization. These principles are laid down in our Code of Conduct and Ethics.

Our Board of Directors has ultimate responsibility for the strategy and the success of the Group and for delivering sustainable shareholder value. It oversees the overall direction, supervision and control of the Group and its management. It also supervises compliance with applicable laws, rules and regulations.

Five committees support the Board of Directors of UBS Group AG (the BoD) in fulfilling its duty through the respective responsibilities and authority given to them. All BoD committees have specific responsibilities pertaining to environmental, social and governance (ESG) matters, e.g., the Compensation Committee is responsible for ESG-related compensation topics, the Risk Committee supervises the integration of ESG in risk management, the Governance and Nominating Committee supports the Board in establishing best practices in corporate governance and the Audit Committee has oversight of the control framework underpinning ESG metrics.

Our BoD's Corporate Culture and Responsibility Committee (the CCRC) is the body primarily responsible for corporate culture, responsibility and sustainability.

The CCRC oversees our Group-wide sustainability and impact strategy and key activities across environmental and social topics, including climate, nature and human rights. Annually, it considers and approves our firm's sustainability and impact objectives.

Our Group Executive Board (the GEB) develops the strategy for the Group. It is responsible for managing our assets and liabilities in line with the Group's strategy, regulatory commitments and the interests of our stakeholders. As determined by the BoD's Risk Committee, the GEB manages the risk profile of the Group as a whole. It has overall responsibility for establishing and implementing risk management and control in our firm. The responsibility for setting the sustainability and impact strategy and developing Group-wide sustainability and impact objectives, in agreement with fellow GEB members, has been delegated to the GEB Lead for Sustainability and Impact by the Group chief executive officer (the Group CEO). Progress against strategy and the associated targets are reviewed at least once a year by the GEB and the CCRC.

Our GEB Lead for Sustainability and Impact manages the Group Sustainability and Impact (GSI) organization and, together with our Chief Sustainability Officer (the CSO), co-chairs the Sustainability and Climate Task Force (the SCTF). Both our GEB Lead for Sustainability and Impact and our CSO are also permanent guests of the CCRC.

Group Sustainability and Impact

GSI consists of the Chief Sustainability Office and the Social Impact Office, headed by the CSO and Head Social Impact, respectively. The CSO is responsible for driving the implementation of the Group-wide sustainability and impact strategy, including reporting on our progress toward net zero (and the execution thereof by our business divisions and Group Functions).

The Head Social Impact is responsible for driving and implementing the Social Impact strategy, including Community Impact, Philanthropy Services and UBS Global Visionaries. Reporting to the Head Social Impact, the regional Heads of Social Impact and Philanthropy are responsible for extending the reach of and maximizing the impact of our social impact activities locally, nationally and globally. In addition, they have responsibility for all our programs' operations and risk management, client engagement, and employee volunteering.

Progress made in implementing Group-wide sustainability and impact objectives is reported as part of UBS's annual reporting. This reporting is reviewed and assured externally according to the requirements of the Sustainability Reporting Standards of the Global Reporting Initiative (the GRI Standards). UBS is certified according to ISO 14001.

- › Refer to the "Appendix 1 – Governance" section of this report for additional information on our sustainability governance

The Sustainability and Climate Task Force

The Sustainability and Climate Task Force (the SCTF) is the authority for divisional and functional sustainability and climate governance, as well as the Group's sustainability and climate governance. The SCTF's role includes the approval of the actions required to achieve our firm's climate strategy, monitoring progress against that strategy and providing assurances to the GEB that UBS manages climate risk and opportunities in a proper manner.

Firm-wide sustainability groups

The Sustainable Finance Group

The Sustainable Finance Group (the SFG) is chaired by the CSO and supports the implementation of the sustainability and impact strategy as it relates to sustainable finance across the firm.

The Sustainability Advisory Group

The Sustainability Advisory Group (the SAG) is chaired by the CSO and is organized by the SAG's convener, who has a reporting line to the CSO. It provides a mechanism for disseminating and cascading relevant information regarding Group-wide sustainability and impact efforts into UBS's various control and aligned functions.

Governance of key areas

Sustainability and climate risk

Our management of sustainability and climate risk (SCR) is steered at the GEB level. Reporting to the Group CEO, the Group Chief Risk Officer is responsible for the development and implementation of control principles and an appropriate independent control framework for SCR within UBS, together with its integration into the firm's overall risk management and risk appetite frameworks. Our SCR Policy Framework is applied Group-wide to relevant activities, including client and supplier relationships.

- › Refer to the "Appendix 3 – Risk management" section of this report for more details about our SCR Policy Framework

The Sustainability Chief Financial Officer

Our Sustainability Chief Financial Officer (SCFO) supports the new and expanding requirements that are being driven by our global sustainability agenda. With reporting lines both to the Group Chief Financial Officer (GCFO) and to the GEB lead for Sustainability and Impact, the SCFO works closely with the Group Controller and Chief Accounting Officer's team and is the primary lead on sustainability topics for the GCFO. The SCFO ensures that sustainability considerations are embedded into our financial decision-making processes, supports the expanding external sustainability disclosures arising from both new regulatory requirements and voluntary commitments made by our firm, and ensures the continued development of the financial control environment that underpins our disclosures.

The Net-Zero Program

The Net-Zero Program (the NZP) coordinates implementation of the commitments set out in our "Net Zero and Beyond" statement, with a specific focus on reducing emissions related to our financing activities. The NZP reports into the SCTF and includes members from various Group functions and those teams that support our clients with financing.

The Investor Protection Program

The Investor Protection Program coordinates the implementation of several sustainability-related regulations of the European Union, the European Economic Area, the UK, Switzerland, Singapore, the Hong Kong SAR and the US, as well as related parts around UBS's own commitments, in the context of client investments. The regulations are designed to provide clients with transparency and comparability of sustainable investment products, helping them align investments with their sustainability objectives. They require the integration of ESG metrics into our investment portfolio and risk management processes, as well as reporting to clients and regulators.

In-house environmental management

Our in-house environmental management is steered by the Chief Digital and Information Office (the CDIO). Reporting to the Group CEO, the CDIO is responsible for driving the reduction of the environmental impact from our offices, our technology and our supply chain. The CDIO implements the sustainability and impact strategy within UBS's operations by ensuring local legal compliance, monitoring and measuring of environmental and energy performance, and continuous improvement according to ISO 14001, the international environmental management standard, and ISO 50001 (Region EMEA).

Nature

Our approach to nature is overseen by the BoD, in particular by the CCRC, as part of its responsibility for sustainability topics. In 2022, the CCRC received its first dedicated update on nature and biodiversity, including the progress of the Taskforce on Nature-related Financial Disclosures (the TNFD) and UBS's own activities relating to the TNFD. We expect these updates to continue annually.

The GEB is responsible for driving our nature-related efforts, as part of its sustainability and impact activities. GSI then coordinates these efforts and provides periodic updates to the GEB through GSI strategy management reports. The business divisions and Group Functions ensure the implementation of UBS's nature-related strategy and risk management frameworks.

Controlling risks and metrics

GCRG Sustainability Expert Group

Our Group Compliance, Regulatory & Governance (GCRG) function is responsible for the ongoing monitoring of the adequacy of our control environment for non-financial risks (NFR) and sets out requirements for the design and operation of 1st LoD (Line of Defense) and 2nd LoD controls across Operational Risk, Compliance and Financial Crime Prevention. GCRG is actively engaged across UBS's Risk Committee structure and supervisory board governance. It drives the review and, where necessary, the required adaptations to our NFR frameworks to align the independent control and oversight capabilities with existing and new regulations and changes across business activities.

In 2022, GCRG established the Sustainability Expert Group (the SEG, with senior representatives from across the divisional, regional and functional GCRG units, supported by senior experts across Group Legal, Group Risk Control, Sustainability CFO and Group Sustainability and Impact. In 2022, we focused our activities on initiating a range of enhancements to our ESG NFR risk assessment and process control coverage whilst undertaking appropriate reviews of the integration of ESG factors into the NFR control framework. This included considerations relevant to the consistent assessment, monitoring and escalation of high inherent reputational risk – incorporating ESG factors.

In this context GCRG maintains a quarterly dynamic ESG NFR Assessment, which acts as both the basis for its global view on ESG NFR in UBS, as well as a key input for the decision-making for the SEG priorities and associated risk reviews. We performed multiple ESG-related NFR assessments, focusing in particular on the effectiveness of processes and controls designed to mitigate greenwashing risk. This included reviews of relevant framework elements such as reputational risk, as well as specific deep-dives into product lifecycle management across the business divisions, including marketing material and product disclosure. With regards to control coverage more specifically, GCRG also enhanced core global controls relating to new business initiatives, client onboarding and oversight of marketing materials related to sustainability, and integrated ESG topics into the standard regulatory change event process for firm-wide coverage.

› **Refer to “Non-financial risk” in the “Risk management and control” section of our Annual Report 2022 for more information**

Sustainable Finance Legal

Global Sustainable Finance Center of Legal Excellence, a part of our Group Legal division, provides legal and strategic advice on sustainability-related matters to the GEB sponsor for sustainability and impact, the Chief Sustainability Office, the business divisions, and other group functions. The team works closely with lawyers supporting the business divisions and Group Functions.

Strategy

Our sustainability and impact strategy

What climate and nature mean to us

Finance has a powerful influence on the world. At UBS we reimagine the power of people and capital, to create a better world for everyone: a fairer society, a more prosperous economy and a healthier environment. That is why we partner with our clients to help them mobilize their capital toward a more sustainable world and why we have put sustainability at the heart of our purpose.

Our ambition

We want to be the financial provider of choice for clients that wish to mobilize capital toward the achievement of the United Nations' 17 Sustainable Development Goals (the SDGs) and the orderly transition to a low-carbon economy.¹ We are focusing on three key areas to drive that transition: Planet, People and Partnerships. In the following we focus on the first key area, planet.

Planet first

Reaching net zero is an ambitious goal, but we are committed to doing our part. The shift toward a lower-carbon future is a priority for UBS and it is a key focus of our sustainability strategy.

We have set aspirational goals to achieve net-zero greenhouse gas (GHG) emissions from our own business and we are directing capital toward the low-carbon transition by offering the choice our clients need to effect the change that they want to see. At the same time, we are focused on managing the risks related to climate, natural capital and biodiversity to protect our clients' assets and those of our firm from the impact of climate change. We are also seizing the opportunities from the low-carbon transition.

Our climate strategy is a reflection of our focus areas and covers two main areas: managing climate-related financial risks, and taking action on a net-zero future, via four strategic pillars:

Climate strategy

Governance

Strategy

Managing climate-related financial risks

Protecting our clients' assets

- Managing climate-related risks and opportunities through our innovative products and services in investment, financing and research

Protecting our own assets

- Limiting our risk appetite for carbon-related assets
- Estimating our vulnerability to climate risks

Acting for a low-carbon future

Reducing our climate impact

- Sourcing 100% of our electricity from renewable sources
- Responsible supply chain management

Mobilizing capital

- From private and institutional clients
- Toward the orderly transition to a low-carbon economy

Risks and opportunities

Metrics and targets

¹ The low-carbon economy is defined as economic activities that deliver goods and services that generate significantly lower emissions of greenhouse gases; predominantly carbon dioxide.

Climate strategy

Our climate strategy covers two main areas: managing climate-related financial risks and taking action on a net-zero future. Underpinning these two main areas are four strategic pillars:

1. Protecting our clients' assets

As a global financial institution, it is our responsibility to help clients navigate through the challenges of the transition to a low-carbon economy. We help our clients assess, manage and protect their assets from climate-related risks by offering innovative products and services in investment, financing and research.

We work collaboratively across our industry and with our clients, ensuring they have access to best practice, robust science-based approaches, standardized methodologies and quality data for measuring and mitigating climate risks. Our activities include engaging on climate topics with the companies we invest in. For example, our Asset Management business division has implemented an engagement program with companies from the following sectors: oil and gas, electricity and other utilities, metals and mining, construction materials, chemicals, and automotive. During 2022, we also voted upon climate-related resolutions at 160 companies.

As part of our commitment to implementing the recommendations of the Task Force on Climate-related Financial Disclosures (the TCFD), we also strive to integrate these recommendations into our decision-making and processes pertaining to services, strategies or products offered or employed by third parties, including delegates.

2. Protecting our own assets

We seek to protect our assets by limiting our risk appetite for carbon-related assets. We use scenario-based stress testing approaches and other forward-looking portfolio analyses to estimate our vulnerability to climate-related risks. As of 31 December 2022, we had reduced our lending exposure to carbon-related assets to 7.5% (USD 33.8 billion) of our total customer lending exposure. This is down from 8.0% at the end of 2021 and 8.6% at the end of 2020.

Carbon-related assets are defined as significant concentrations of credit exposure to assets tied to the four non-financial groups as defined by the TCFD (using the Global Industry Classification Standard, the GICS). These four groups are (i) energy; (ii) transportation; (iii) materials and buildings; and (iv) agriculture, food and forest products. Recognizing that the term carbon-related assets is currently not well defined, the TCFD encourages banks to use a consistent definition to support comparability. We continue to collaborate with the industry to drive further consistency.

3. Reducing our climate impact

We are committed to achieving net-zero emissions in our own operations (scopes 1 and 2) by 2025. We will do this by replacing fossil fuel heating systems, while striving 100% renewable electricity coverage and investing in credible carbon removal projects (including negative emissions technology). We are compensating for our historical scope 1 and 2 emissions back to the year 2000 and have sourced credible and clear carbon offsets and investments in nature-based solutions. As standards in this area continue to evolve (e.g., the Core Carbon Principles from the Integrity Council for Voluntary Carbon Markets), we will seek to apply them to our activities. Furthermore, we are currently working to understand and quantify the scope 3 emissions in our supply chain. We are engaging with our key vendors about targeting net zero by 2035.

4. Mobilizing capital

We mobilize private and institutional capital through investments that help the world mitigate and adapt to climate change.

We were the first major global financial institution to make sustainable investments the preferred solution for our private clients wishing to invest globally. We also support our goal of mobilizing capital as a lender and as an arranger, underwriter and/or structurer of securities. For corporate clients, we support the issuance of green, social, sustainability and sustainability-linked bonds, as well as the raising of capital in international capital markets, in line with recognized market guidelines, such as the ICMA Green Bond Principles and, in relation to green and sustainable loans, the Loan Market Association (LMA) Green Loan Principles and the LMA Sustainability-linked Loan Principles.

Detailed data accounting of our financed emissions helps us identify climate-related opportunities requiring capital, and improve and tailor our sustainable product range for clients. Additionally, such insights help UBS, our partners and our clients in a number of ways. For instance, they reduce the risk of stranded assets.

Green Funding Framework

Our Group-wide Green Funding Framework sets out how we intend to connect our sustainability objectives with access to financial markets through a variety of funding products.

- › Refer to ubs.com/greenbonds for more details about the Green Funding Framework, external reviews and annual reporting (including impact and allocation reporting)

Our approach to nature

We manage risks and opportunities related to natural capital and biodiversity across our activities, in line with our commitment to mobilize capital toward the achievement of the SDGs and our participation in the Taskforce on Nature-related Financial Disclosures (TNFD). During 2022, we also supported the establishment of a Swiss TNFD national consultation group to support capacity building in our home market.

We recognize the challenges of transitioning toward a society that can meet both human needs while living within the constraints of natural resources, with the objective of also generating net positive outcomes for our natural environment. These challenges are reflected in stark numbers: for example, the World Economic Forum (WEF) estimates that about USD 44 trillion worth of economic value depends on the natural world in some way while a recent UNEP report states that flows to nature-based solutions are currently USD 154 billion per year, less than half of the USD 384 billion needed by 2025. An assessment by Moody's Investors Service puts almost USD 1.9 trillion at risk across nine sectors due to loss of biodiversity. The challenges also find expression in opportunities, with, e.g., the Paulson Institute valuing the market for biodiversity investments at a potential USD 93 billion by 2030 (up from some USD 4 billion in 2019).² We look forward to the setting of global policy objectives and goals through the Convention on Biological Diversity. Public policy has played and will continue to play a critical role in steering and incentivizing markets that will drive the transition to a sustainable economy.

Partnerships bring it together

The challenges our world faces cannot be solved by one organization alone. That is why we partner with other thought leaders and standard setters to unite around common goals that can drive change at a global scale.

- › Refer to the Sustainability Report's Supplementary Information document for more about our partnerships and our approach to them

² Source : Bloomberg and UN environmental program.

Delivering our sustainability commitments and strategy

Integrating climate-related impacts in our financial planning

UBS operates a multi-year financial planning process. This process reflects our business position, corporate strategy and prospective economic environment. Sustainability is a core component of that strategy and planning process, with particular focus on net zero (scopes 1, 2 and 3), sustainability-related assets and investments and philanthropy.

The underlying drivers of our sustainability investments are also considered. These include our own corporate commitments, regulatory and other external requirements, and client-servicing opportunities. The changing global outlook regarding sustainability, and climate change in particular, is reflected in the process, with the risks associated with climate change being reflected in our capital requirement planning calculations.

Our corporate positioning, in terms of balance-sheet exposure and contractual duration, our risk management activities and the nature of the underlying risk, mean we do not currently view climate change as a material risk factor. However, formal guidance on capital-framework calculations is subject to ongoing market and regulatory discussion, and we will continue to reflect this in our planning processes.

- › Refer to our **Annual Report 2022 for more information on UBS's financial planning process**

Sustainability in remuneration

Environmental, social and governance (ESG) objectives are considered in the compensation determination process in objective setting, performance award pool funding, performance evaluation and compensation decisions. ESG-related objectives have been embedded in our Pillars and Principles since they were established in 2011. In 2021, we introduced explicit sustainability objectives in the non-financial goal category of the Group CEO and GEB scorecards. These sustainability objectives are linked to our priorities, and their progress is measured via robust quantitative metrics and qualitative criteria. Sustainability objectives are individually assessed for each GEB member, and consequently directly impact their performance assessments and compensation decisions.

In addition, in the performance award pool funding across the Group, ESG is also reflected through an assessment of progress made against targets linked to our focus areas of Planet (including climate-related goals), People (including progress made against our diversity ambitions) and Partnerships, alongside other key dimensions. Therefore, ESG is taken into consideration when the Board of Directors' Compensation Committee assesses not only what results were achieved but also how they were achieved. For 2022, we established robust and concrete targets, and made good progress toward achieving them. We continue to increase our focus on this topic.

- › Refer to **"GEB performance assessments" in our Compensation Report 2022 for more information**
- › Refer to **"Our focus on sustainability and climate," "Employees" and "Social impact" in our Annual Report 2022 for more information**
- › Refer to **ubs.com/gri for more information about ESG-related topics**

Sustainability education

Our in-house UBS University delivers formal training, along with quick learning bites and other resources. Our largely online offering focuses on building skills for use now and in the future and includes specialized business training, client advisor certification and both leadership and line manager training. We introduced foundational training on sustainability and sustainable finance in 2022, and modules on agile working, data literacy, regulatory requirements, diversity and inclusion, well-being and other topics round out the curriculum. In 2022, our full-time employees completed more than 1,327,000 learning activities, for an average of two training days per employee.

- › Refer to **"Group Sustainability and Impact management indicators" in the Sustainability Report's Supplementary Information document for further information on relevant trainings**

Our approach to sustainable finance

Supporting our clients

Sustainable finance is crucial when it comes to helping our clients achieve their diverse sustainability objectives. Through our product and service offering, we target four key objectives in serving our clients:

- The power of choice: We want to give our *investing* clients the choice they need to meet their sustainability objectives.
- A smooth transition: We aim to support our clients in their transition to a low-carbon economy, for instance, by offering innovative sustainable *financing* solutions.
- Safely managing risks and identifying opportunities: We offer *research* and insights, together with analytics services. Combined with targeted *advice*, they are designed to help clients mitigate their risks and spot new opportunities.
- Making sustainable finance an everyday topic: We want to make sustainability topics tangible throughout our *interactions with clients*. To help us do that, we provide support in the form of *tools, platforms, and education*.

Sustainable finance ambitions

In accordance with our ambitions, our **sustainable finance product offering** evolves across four areas:



Investing

Sustainable investing solutions for private and institutional investors



Financing

Sustainable financing solutions for real estate and corporate purposes



Research and Advisory

Solutions guiding our clients on their sustainability transition journey



Data, Platforms and Client Interactions

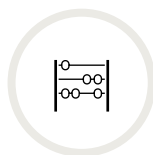
ESG analytics, scoring, reporting, tools and client support through our interactions

Sustainable finance opportunities



Analysis

We help clients understand the relevance of ESG factors for their business or portfolio



Advice

We provide targeted advice to our clients on managing ESG-related risks and/or capturing ESG-related opportunities for their specific circumstances



Action

We develop innovative and individualized sustainable finance products for clients



Assessment

We give transparent feedback to clients on non-financial outcomes achieved with regard to sustainable financing and investing client promises

Research, thought leadership, data, analytics and tools

Identifying sustainable finance opportunities

Our Sustainable Finance Group (the SFG) brings together UBS's senior sustainable finance experts and business leads. In view of our firm's diversified business model, it has been established as a cross-divisional group. Chaired by our Chief Sustainability Officer, the SFG helps to identify strategic sustainability themes for the development of innovative products and services. It plays an important role in furthering internal collaboration, synergies, and consistency. For example, it acts as a steering body for initiatives that help drive commercial activities and outcomes. It also helps develop firm-wide sustainable finance product guidelines and leads the analysis of important market and financial industry trends.

Defining sustainable finance

It is important to set out how we define sustainable finance (SF) as, at present, there is no global, uniformly accepted definition. SF comprises any financial product or service (including both investing and financing solutions) that aims to explicitly align with and/or contribute to sustainability-related objectives, while targeting market-rate financial returns. Sustainability-related objectives may include but are not limited to the Sustainable Development Goals identified in the United Nations' 2030 Agenda for Sustainable Development.

This definition is also reflected in our Group SI framework, which specifically defines "sustainability focus" and "impact investing" products. Both categories reflect a defined and explicit sustainability intention of the underlying investment strategy. This intentionality differentiates them from "traditional" investment products, or those that consider ESG aspects but do not actively and explicitly pursue any specific sustainability objective, such as ESG integration- or exclusions-only approaches.

- › Refer to the Sustainability Report's Supplementary Information document for more on ESG integration and exclusion

Investment approaches

UBS's definition of sustainable investments

'Traditional' investing

- No explicit sustainability objectives
- Manage sustainability and all risks related to investment performance
- May use ESG tools, but these do not drive the strategy

Sustainability focus

- Target market-rate investment returns
- Have explicit sustainable intentions or objectives that drive the strategy
- Underlying investments may contribute to positive sustainability outcomes through products, services and/or proceeds

Impact investing

- Target market-rate investment returns
- Have explicit intentions to generate measurable, verifiable, positive sustainability outcomes
- Impact attributable to investor action and/or contribution

Challenges and opportunities

2022 was a challenging year for our clients, with volatile financial markets, significant geo-political events and rising inflation across many economies. Our comprehensive offering of research and advisory products played an important role in helping our clients better understand these complex developments, as well as the implications for their portfolios and businesses.

Against the backdrop of global challenges, financial markets contracted across asset classes during 2022. For investments, global open-ended fund and ETFs total net assets decreased by 19%¹ in 2022. Despite this downturn, the long-term trajectory for sustainable investing remains one of growth, demonstrated by continuous quarterly inflows into sustainable investing products while "traditional," non-SI products faced outflows throughout most of 2022.¹ In line with these global market developments, at UBS we continued to increase SI assets under management (AuM) as a share of total AuM, reaching 6.8% by the end of 2022, up from 5.5% at the end of 2021.

Financing markets were equally impacted by the difficult macro environment, where overall bond market issuances dropped by 21%.² This was reflected in the market for green, social, sustainability and sustainability-linked (GSSS) bonds, where global issuance dropped by 22%.² Despite these headwinds, we continued to increase our activity in the GSSS bond markets in EMEA, where UBS-involved GSSS bond issuance increased by 8% year on year.

¹ Morningstar

² Bloomberg

We continued to maintain a dominant position in our fast-growing home market of Switzerland, securing leadership in the league table in the Swiss Franc market with a 44% market share.

Sustainable investing for our clients

In 2022, we made progress on a number of important investment product initiatives relevant to a broad spectrum of clients across our business areas. For example:

- We made it easier for private clients to access sustainable investment products and services, suited to their individual preferences, e.g., through expanded access to our Advice SI and separately managed account (SMA) solutions, and new targeted sustainability and impact offerings. In line with EU regulations for clients in scope, UBS systematically captures clients' preferences when it comes to SI.
- We expanded the range of sustainability and impact funds in public and private markets and exchange-traded funds (ETFs) available to private, institutional, and corporate clients.
- We continued to provide customized, tailored, and structured investment solutions for private and institutional investors.

Launching innovative sustainable investing products

Transition and impact are key focus areas for our clients and the financial industry in general. In response, we launched several dedicated investment strategies supporting the allocation of capital to thematic areas such as decarbonization or energy storage.

SI solutions for private clients – addressing individual preferences

- *Private market impact vehicles*: We made available six private market funds providing investment opportunities aligned with the SDGs available to clients.
- *Personalized Sustainable Investing (PSI) SMAs*: Launched by our Global Wealth Management business division in the US, managed by our Asset Management teams and powered by our Chief Investment Office (CIO), it addresses demand for customization by allowing clients to personalize specific strategies to align with their individual sustainability preferences.
- *Inclusive Investing*: Launched by Global Wealth Management in the US, the offering aims to address investor preferences for strategies that support diversity, equity and inclusion and amplify the CIO longer-term investment theme on diversity and equality. Over time, the focus will be on enhancing capabilities and educating financial advisors and clients on the offering.
- *Sustainability-focused hedge fund*: Our advisory clients can benefit from an expanding platform of alternative SI products. In 2022, we have onboarded a hedge fund aiming to invest in sustainability themes and short businesses facing potential disruption from sustainability-related trends.
- *Future of Earth fund*: Launched in 2021, this fund promotes environmental objectives built around the themes of sustainable land use, sustainable water use, the shift to clean energy and providing health solutions that may help mitigate the impacts of environmental degradation on human health.

Customization for institutional investing clients

- *Aon Transition and SDG fund*: We joined forces with Aon in March 2022 to co-develop and launch the UBS Global Equity Climate Transition Fund. The Aon MasterTrust and Group Personal Pension Plan seeded the fund with more than GBP 700 million. This collaboration brings together our award-winning proprietary Climate Aware Framework and our global stewardship program to help companies such as Aon transition towards a lower-carbon future while also meeting their broader sustainability preferences.
- *Innovation fund*: We launched this fund in August 2022 to invest in leaders across four key areas: planet / climate, people / health, digitalization and additional diversifiers. We know these issues are continually evolving. Some of the sleeves provide exposure to important sustainability themes and high conviction strategies. One example is the UBS Healthy Living strategy, a mix of established companies with long-term experience in healthy living, and fast-growing market players.
- *Energy storage*: Our Asset Management business division acquired five standalone, development-stage energy storage projects in Texas from Black Mountain Energy Storage (BMES). This acquisition forms part of the strategic expansion of Asset Management's infrastructure business, providing clients with further sustainable investing opportunities in the alternatives space. It marks an important milestone following the establishment of the Energy Storage Infrastructure team in 2021. The projects will provide flexibility, responsiveness and dispatchability to the Electric Reliability Council of Texas (ERCOT) grid once it becomes operational in 2024. These capabilities make energy storage a critical component of grid reliability and a key technology for the energy transition, helping ERCOT and the Texas consumers it serves benefit from innovation and more economic sources of energy.

- *UK life sciences fund*: We raised GBP 400 million in the first closing of a UK life sciences fund which aims to develop research and development and advanced manufacturing facilities for the sector in the UK. These facilities are required in order to facilitate the growth of life sciences and the advancement of novel healthcare products. They also create significant skilled employment opportunities for local economies and population.
- *Transition fund*: We collaborated with Essex Pension Fund and Hymans Robertson to launch an investment fund specifically tailored to meet Essex Pension Fund’s objectives to invest in companies leading the transition to a low-carbon economy. In addition, the investment fund makes a positive social contribution by favoring companies that align with five of the SDGs.

Structured products and solutions for institutional and private clients

- *Carbon emissions*: Our clients continued to allocate to solutions linked to the recently launched UBS CMCI (Constant Maturity Commodity Index) Emissions Index or carbon emissions futures directly.
- *Bespoke ESG portfolio*: Bespoke investment methodology offerings with a custom ESG screening and a climate change focus.
- *Actively Managed Certificates*: Portfolio certificates linked to a range of sustainability and climate investment themes actively managed by private banks.

Actively driving the sustainability transition in Asset Management

We believe active ownership has an important role to play in helping to drive the sustainability transition. So, we engage with companies, issuers and standard setters to help make a demonstrable contribution to portfolios and sustainability outcomes. Collaboration with like-minded investors, as well as our ongoing partnership with clients, are key to achieving impact on a global scale.

- *Climate opportunities*: We joined the Energy Storage Solutions Consortium to pioneer methods of assessing and maximizing the greenhouse gas emissions benefits of stored energy usage. The goal is to create an open-source, third party-verified methodology to quantify the emissions benefits of certain energy storage projects and provide guidance on maximum emissions reduction benefits through stored energy.
- *Stewardship*: In our voting at annual shareholder meetings we require, as of 2022, 30% gender diversity at board level for large cap companies in developed markets, including markets generally lagging in this regard, such as Japan. In addition, we withheld support for the election of board directors responsible for the nomination process at 441 Japanese companies (up from 204 in 2021), 49 Swiss (up from 25 in 2021), and 389 US companies (up from 32 in 2021) due to lack of gender diversity.
- *Thematic engagement*: Through our dedicated program, we engaged with companies on climate change, for the fourth year running. During this time, we have raised our expectations for companies significantly, including enhanced disclosure of climate risks, and a greater focus on decarbonization ambitions and actions companies are taking towards a net-zero future. We continue to use collaborative engagement as a lever to scale our impact, in addition to our direct engagement, through our membership of Climate Action 100+. As of end of 2022, via Climate Action 100+, we co-led on five company engagements and participated in 20 company engagements. We are also a member of the FAIRR (Farm Animal Investment Risk and Return) initiative, the largest investor collaboration focused on ESG risks in the food and agriculture sector, we engage as the lead every year with one of the 25 companies targeted via the “sustainable protein engagement” program. Through engagement on sustainable proteins, we aim to reduce negative externalities from traditional protein production.

Leading by example

In 2022, our Group Treasury continued to invest its high-quality liquid assets (HQLA) portfolios under a dedicated Treasury ESG Investment Framework, which integrates ESG considerations in the investment process alongside more traditional economic and risk dimensions. It supports investments in ESG-labelled securities that have a direct link to sustainable projects. More holistically, it promotes investments in issuers with positive ESG characteristics and flags potential risks. At year-end 2022, Group Treasury held more than USD 6.7 billion of green, social and sustainability bonds in its HQLA portfolios, a growth of 97% year on year, in contrast to declining global ESG bond issuance in 2022.

Financing a sustainable future

We develop financing solutions to help our clients transition to a more sustainable future. These solutions can be on-balance sheet (e.g., green or sustainable loans and mortgages) or off-balance sheet (such as access to debt and equity capital markets), and also included transaction structuring.

Our Investment Bank facilitated USD 48 billion of GSSS bonds financing through 77 bond deals for our clients, with a market-leading share of the Swiss franc GSSS bond market. Among our most notable transactions during 2022 were a UK Debt Management Office (DMO) Green Gilt transaction, as well as an inaugural green bond issuance for New Zealand Debt Management. In addition, UBS was the sustainability structuring advisor for the Republic of Philippines' inaugural sustainability bond. These were pivotal for financing part of the respective governments' plans for tackling climate change and other environmental challenges. They also funded much-needed infrastructure investment and created green jobs.

In our Swiss home market, we have been developing new and innovative real estate financing solutions to support our clients in the transition to a low-carbon economy. Key examples include:

- *UBS Mortgage Energy* for private clients:¹ We launched this offering to encourage clients to invest in more sustainable energy and heating systems, such as through replacing fossil fuel heating with a more sustainable alternative or by installing a photovoltaic system. In doing so, clients benefit from attractive interest rates and lower long-term energy costs.
- *UBS Loan Energy* for energy-efficient investment properties:¹ Our clients benefit from attractive interest rates and comprehensive advice for their low-energy properties. In addition, they can discuss sustainability matters with a Switzerland-wide network of real estate experts.

For our financing clients we also include considerations of nature alongside other topics. Transition finance, for example, can be part of a broader process over time with the conclusion only evident years after the financing was provided. Nature can be built into transition finance transactions, particularly those that impact the physical environment.

- *Nant de Drance power station*: Inaugurated in September 2022, UBS contributed to the development of this innovative "water battery", designed to help balance the renewable electricity grid not only in Switzerland but also Europe. Nant de Drance has 900 MW of power-generating capacity, equivalent to that of the Gösgen nuclear power plant in Switzerland. This innovative structure took nearly 14 years to build and UBS was part of several bond financings needed to provide the financial support for its construction. One of the priorities in the construction of Nant de Drance, as agreed with the licensing authorities, was reducing its environmental impact. Fifteen projects, at a total cost of CHF 22 million, have been, or will be, completed to offset the environmental impact of the construction of the pumped storage power plant and very high-voltage lines connecting the power plant to the power grid. Most of the projects aim to recreate specific biotopes locally, especially wetlands, in order to encourage recolonization of the area by certain rare or endangered animal and plant species in Switzerland.

Driving the debate

In a year of fundamental change, our priority has continued to be providing our clients with timely and targeted ESG content, strategic insights and advice. Through these we also aim to raise awareness, distil inherent complexities and further the debate around key sustainability topics as they grow in importance in the collective consciousness of companies, clients and the broader public. We deliver our views and insights through a variety of channels, including our dedicated research and advisory services for corporate clients, institutions and private clients, as well as our specialist sales teams. In addition to focused ESG research, we also provide sustainability-related thought leadership and insights at industry conferences and through broader thematic publications.

¹ In December of 2022, UBS adopted guidelines providing an internal global standard for all our products in the categories of sustainable lending, sustainable bonds and GHG emissions trading. During the course of 2023, UBS expects to (re-)assess all its products against these guidelines.

ESG content and research

We address the question most frequently addressed to our sell side research team of how ESG factors connect to the markets, sectors and companies under coverage in a number of ways:

- We flag ESG-relevant content with our *ESG icon*. In 2022, the number of reports carrying the icon rose by 50%. Our flagship ESG content is the ESG Radar series, developed in collaboration with sector analysts over years. By the end of 2022, UBS sector analysts had lead-authored a cumulative total of over 90 ESG Sector Radars. In July 2022, we launched the ESG Company Radar series (over 30 published by year end).
- We explore debates of interest to our clients through thematic and cross-sectoral collaborations.
- In 2022 we gained global depth through an expansion of the team, now present in London, New York, Hong Kong, Tokyo and Sydney.
- Some of the research pieces which resonated most with institutional clients in 2022 included “Global Sustainability: Inflation Reduction Act,” “EU Sustainability Regulation: It’s Complicated,” “State of the Global Energy Transition 2022,” and “Future of Food: Have plant-based protein sales peaked?”.

Our CIO continues to provide guidance to private clients on incorporating sustainability into investments, particularly in a diversified portfolio context. Our research and investment views, together with a differentiated sustainable investing asset allocation, enable clients to gain exposure to diversified cross-asset portfolios using building blocks with explicit sustainability objectives. In 2022, CIO expanded its guidance to include hedge funds and structured products, which enabled Global Wealth Management to expand its sustainable investing offering. We also provided clients with timely guidance on other topics including “Sustainable Investing in an Energy Crisis” and the “Renaissance of Nuclear Energy.”

CIO also continued to provide actionable investment ideas to clients via its monthly *Sustainable Investing Perspectives* publication and podcast series, complementing its quarterly *Sustainable Insights* report series which provides regular updates on the state of the SI market, a running list of answers to frequently asked questions, and educational content on making sense of ESG data and scores.

ESG Advisory

Our Global ESG Advisory team in Global Banking provides strategic advisory and capital-raising services by specifically accounting for the structural shift in investor preferences towards ESG investment opportunities. To do so, we have been building the capabilities to assess a corporate’s sustainability profile and to link that profile to ESG investor demand. We expect this approach to underpin all Global Banking transactions over time.

In 2022, we developed tools to aid corporate clients in their ESG profiling, such as ESG key performance indicator (KPI) benchmarking analysis, ESG ratings interpretation and ESG valuation levers, amongst others. In addition, we implemented internal tracking systems for our senior bankers to record ESG-related client interactions. This tracking aims to capture the progress we are making with clients in integrating ESG considerations into all aspects of our services. These interactions can range from discussions around ESG regulatory developments to ESG-focused strategic opportunities in mergers & acquisitions (M&A).

Thought leadership

Our UBS Sustainability & Impact Institute (SII) has brought together a collective of sustainability thought leaders from across UBS to engage on current and future topics. Over 2022, the SII gathered their insights and published white papers, opening up key topics such as systems thinking and natural capital (e.g., *From Ozone to Oxygen*), and decarbonization for wider discussion.

Progressing with data, platforms and analytics

We regard the availability of good data, analytics and technology capabilities as essential enablers for getting us to a more sustainable future. They will equally help our clients make informed sustainability-related investing and financing decisions. Through various entities, we offer solutions such as portfolio analytics, ESG scoring and reporting or design and development of platforms providing innovative ways to access markets.

How we helped our clients in 2022

- *esg2go*: We became a partner and member of the strategic committee of *esg2go*, which provides small- and medium-sized enterprises (SMEs) with detailed insights into their sustainability performance, based on ESG criteria. This takes the form of a sustainability rating score for the SME and an accompanying report which the SME can pass on to its stakeholders.

- *UBS key4 banking app*: We provide a digital banking offering, which includes a sustainable savings account alongside a conventional personal account. Furthermore, for every UBS key4 banking account opened, UBS offsets 100 kg of CO₂ emissions with a donation to myclimate.
- *key4 by UBS Green Mortgage* (for self-occupied real estate): Our key4 by UBS mortgage platform allows investors to offer preferential mortgage terms if clients can demonstrate, via a certificate (e.g., Minergie), that the property they wish to finance meets certain environmental standards. This offer is targeted at private clients.
- *key4 by UBS Energy Check*: In collaboration with experts from pom+, a real estate consulting company with proven expertise in sustainable properties, key4 by UBS is offering a free energy check to determine the potential energy and cost savings of an investment property. Interested prospects or customers can use the tool to receive a concrete plan of action. A key4 client advisor will then discuss the results with them.
- *UBS Sustainability Analytics*: We support our Asset Servicing clients with this enhanced online tool to actively monitor, manage and improve the sustainability profile of their investment portfolios. The analysis provides insights on sustainability ratings, business activity checks and carbon emissions, and helps to reduce the carbon footprint of their portfolios and align it to their chosen climate glidepath.
- *Carbonplace*: We co-founded Carbonplace, a technology platform for the voluntary carbon market that has the goal of creating a streamlined and transparent market for our clients. We have been working collaboratively to help deliver on this initiative and launched two pilot transactions in 2022.
 - › Refer to the “Metrics and targets” section of this report for key sustainable finance figures
 - › Refer to the “Appendix 2 – Strategy” section of this report for additional information on our approach to sustainable finance
 - › Refer to the Sustainability Report’s Supplementary Information document for a list of our key sustainable products

Taking action on a net-zero future

We recognize the vital importance of taking action to support the transition to a low-carbon economy. By 2050, we are aiming to achieve net-zero greenhouse gas (GHG) emissions for scopes 1, 2 and 3 across our business, in line with fiduciary duties. Our climate roadmap sets out how we aim to get there. It comprises three key aspects:

- net zero to reduce our direct climate impact;
- net zero to support the transition of our financing clients; and
- net zero to support the transition of the assets of our investing clients.

We are committed to standing with our clients to help them achieve their net-zero goals and to support the work governments around the world are doing to move the real economy to align with the Paris Agreement 1.5°C commitment. In Switzerland, where our firm has its headquarters, we look forward to partnering with regulators to identify appropriate goals for financial institutions under the country's CO₂-Act.

Direct climate impact: In 2022, we reduced our scope 1 and 2 emissions by 13%. We also identified “GHG key vendors,” that collectively account for more than 50% of our estimated vendor GHG emissions. We invited the vendors that accounted for 67% of our annual vendor spend to disclose their environmental performance through CDP’s Supply Chain Program. 66% of those invited completed these disclosures.

Financing activities: We have established interim goals aligned with this objective for real estate lending across all of our business divisions and for other financing activities in our Investment Bank and our Personal & Corporate Banking. In 2022, we defined cement as a further net-zero target sector and added it to the scope of our roadmap for the Investment Bank and Personal & Corporate Banking. We also undertook further assessment of the overall emissions associated with UBS’s corporate lending and real estate mortgages. We intend to set additional goals for financing activities across all of our business divisions as appropriate data and methodologies are developed.

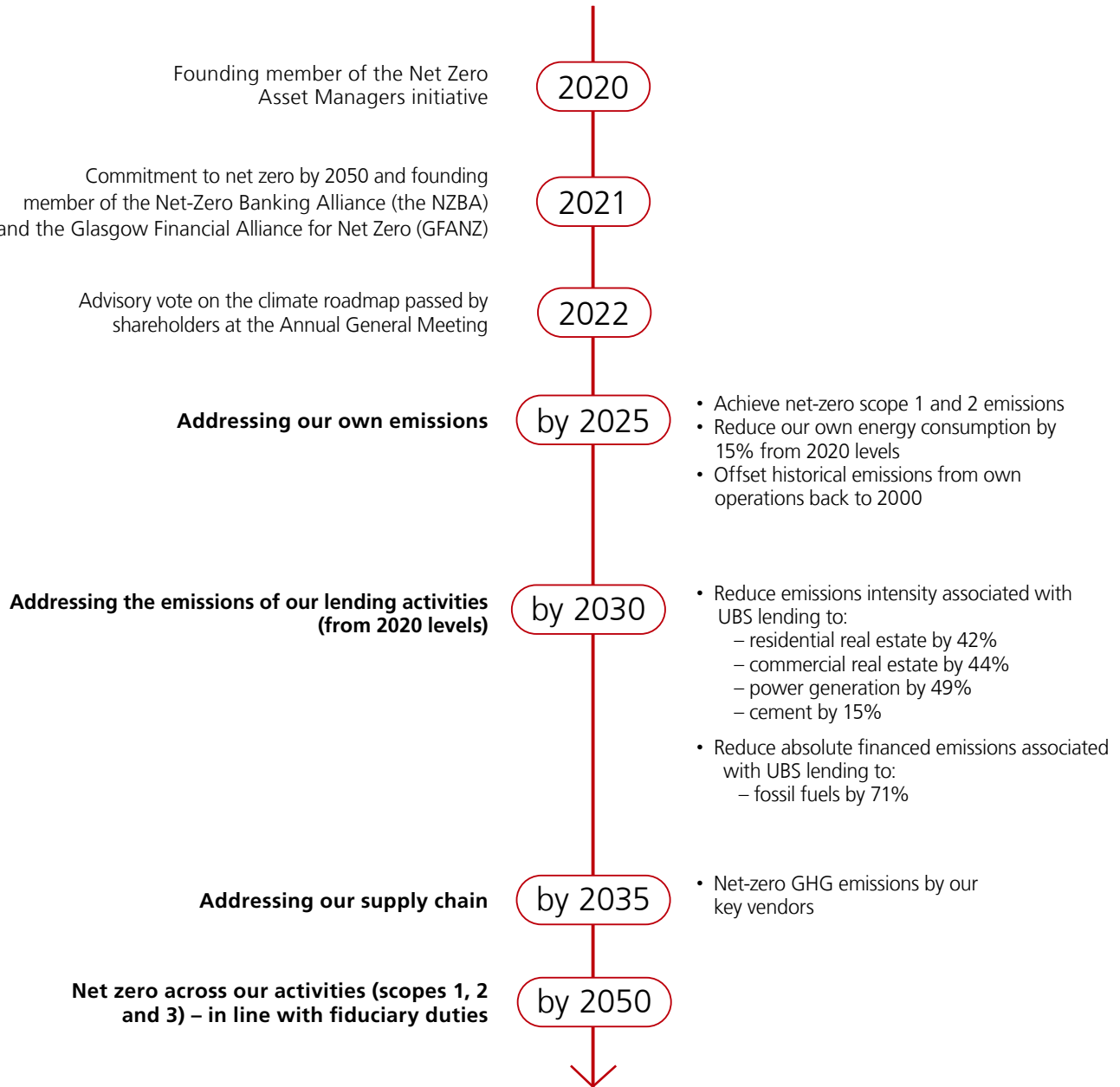
Investing: In 2022, our Asset Management business division made progress across the foundational pillars required to deliver its target of aligning 20% of total assets under management (AuM) to be managed in line with net zero by 2030.¹ This included enhanced data sourcing and governance, developing asset-class-specific net-zero-aligned frameworks, and extending our long-standing climate engagement program. In 2023, Asset Management intends to implement revisions to fund documentation and investment management agreements to align with these updated frameworks. Our Global Wealth Management business division will develop plans to expand its solutions offering to enable clients to achieve their net zero objectives. In 2022, Global Wealth Management continued to leverage its knowledge and industry partnerships to explore and develop carbon-focused offerings.

- › Refer to the “Appendix 4 – Metrics and targets” section of this report for our climate-related methodologies
- › Refer to “Our transition plan” in the “Appendix 4 – Metrics and targets” section of this report for a high-level overview of our activities to support our own transition and that of our counterparties in the real economy

¹ The 20% alignment goal amounted to USD 235 billion at the time of Asset Management’s commitment in 2021. By 2030, the weighted average carbon intensity of funds is to be 50% below the carbon intensity of the respective 2019 benchmark.

Our climate roadmap

Our climate roadmap – what we are aiming for



Reducing our environmental footprint

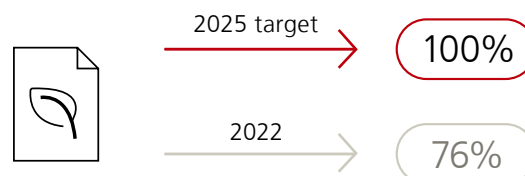
We are working to minimize our own operational footprint and support our employees, clients, suppliers and investors in the decarbonization of their activities. By ensuring extensive and accurate reporting of the progress to reduce greenhouse gas (GHG) emissions, we are laying the groundwork for transparent monitoring by our stakeholders. Energy aside, our other environmental focus areas are water, paper, waste and travel.

Environmental performance and 2025 targets

Energy reduction¹



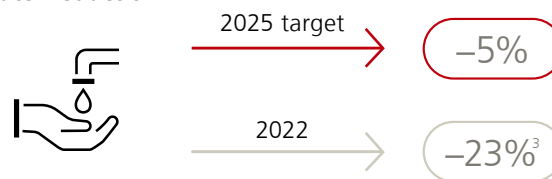
Paper from sustainable sources



Waste reduction¹



Water reduction¹



¹ All reduction targets relate to 2020 baseline. ² Per full-time employee. ³ Due to the impact of COVID-19 and working from home.

Environmental focus areas

Energy reduction and sustainable buildings

We have stepped up efforts to reduce our operational energy consumption while also improving the efficiency of our corporate real estate portfolio. We achieved an energy consumption reduction of 8% in 2022, compared with 2021. Several different initiatives contributed to this reduction, for example, reducing our global real estate and data center footprint, investing in more sustainable buildings and upgrading existing buildings by switching to energy-saving LED lamps and replacing pumps, heating systems and other equipment. We also installed solar panels on 3 buildings during 2022. These measures led to a reduction of 13% in our scope 1 and 2 emissions compared to the previous year.

We remain committed to sourcing 100% renewable electricity across our operations globally. For 2022, despite challenging circumstances, we achieved 99% in line with RE100 initiative requirements.¹ We have taken further steps to decarbonize our operations. Several locations have been certified to internationally recognized green-building standards, including our office in Shenzhen. It achieved the highest score for *LEED Platinum v4* globally at the time of certification (October 2022). To ensure our buildings adhere to such high standards in the future, we have designed and are implementing a new internal benchmark to rate potential real estate options based on their environmental impact and sustainability. This benchmark was built on foundations from international standards such as Leadership in Energy and Environmental Design (LEED), the Building Research Establishment Environmental Assessment Method (BREEAM) and Green Mark.

› For more details on LEED certifications refer to usgbc.org/projects

For the transition period to net-zero scope 1 and 2 emissions by 2025, we have purchased high-quality nature-based carbon offsets to compensate for our current net emissions. From 2025 onward, we expect there will be a residual amount of emissions that cannot be fully mitigated. We have therefore contracted over 80,000 metric tons of permanent carbon removal, of which we anticipate needing 8,000 to 10,000 metric tons per annum. Our commitment to the very highest standards of permanent carbon removal also creates an implied internal cost of carbon of approximately USD 400 per metric ton for scope 1 and 2 emissions and provides a strong reduction incentive, for instance on investment cases that seek to eliminate fossil fuel heating systems.

¹ RE100 is a global corporate renewable energy initiative, which brings together hundreds of large businesses committed to 100% renewable electricity.

Reducing water, paper and waste

We regard the reduction of water consumption as a key priority. With many countries experiencing severe droughts in 2022, the urgency is clear. Some of the efficiency measures we took included the use of aerator taps, waterless urinals, new mixing valves and WaterSense-certified showerheads. As a result, we were able to retain the low level of water use from 2021 and avoid an expected increase from higher employee presence in our offices.

We reduced paper consumption per full-time equivalent (FTE) by 8% compared to 2021 through our *#ZeroPaper campaign*. We achieved this by an ongoing reduction of the number of printers in our offices and several employee awareness campaigns. In addition, our firm's employees have continued their reduced printing habits when returning to the office after the pandemic. We also launched a concerted effort to map all our paper-intensive processes and find alternatives. Our paper usage consists of 21% copier / printer paper, 52% client output and 8% publications, with the remainder coming from various paper products. The share of paper sourced either from recycling, or paper certified by the Forest Stewardship Council (the FSC) was 76%.

We eliminated takeaway packaging at selected locations, as part of our efforts to reduce our waste production. This resulted in an elimination of 650,000 single use items per year. This supported a general waste reduction per FTE by 6% compared to 2021. We also cut landfill waste by 1% compared to the prior year, to approximately 2,300 metric tons globally.

Travel

We see travel activity returning again after the pandemic. Through our travel policy, we actively promote video conferencing and other collaboration tools as a first option to reduce air travel. Secondly, we focus on the means and frequency of travel and work to change mindsets and traveler behavior. During 2022 we introduced CO₂ emissions as a key metric on all business-reporting dashboards and introduced emissions metrics at the time of booking to support more sustainable travel through lower carbon options such as train rather than air travel. Among our preferred hotels are those that have met certain sustainability criteria. These have a green flag credential that is visible at the time of booking to aid bookers in their decision-making. We continue to purchase high-quality carbon offsets that correspond with 100% of our air travel emissions.

Biodiversity

We introduced measures to improve biodiversity, for example through the installation of new beehives at some of our office locations and tree planting initiatives across Europe. We also introduced an annual "Clean-up day," during which UBS volunteers took part in a coordinated effort to clean up street litter in their respective cities.

Emissions in our value chain

We recognize the importance of better understanding the emissions resulting from our value chain. For scope 3, category 1, we have made a first estimation, which enabled us to identify the top contributors and design a program for their engagement.

› Refer to "Monitoring the environmental impact of our supply chain" below

We are also looking to quantify any relevant scope 3 emissions from categories 1 to 14, for instance employee-related ones resulting from working from home and commuting.

Our environmental management system (EMS)

All our environmental activities, including the entire scope of UBS products, services and in-house operations, are subject to our EMS, which we run in accordance with ISO 14001:2015. We have done so since 1999, when we were the first bank to obtain this certification for our worldwide EMS. Since then, we have successfully passed the ISO 14001 audits every year. Additionally, in the EU and the UK we are certified according to the energy management system standard ISO 50001:2018. Information on our environmental indicators (energy, water, paper, waste, recycling and travel) and associated GHG emissions is externally verified on the basis of the ISO 14064:2018 standard. These three sets of comprehensive audits confirm the appropriate policies and processes are in place to manage environmental and energy topics in our operations and that they are applied on a day-to-day basis.

Challenges

During the second half of 2022 the energy supply situation in Europe prompted us to introduce additional operational measures to decrease energy use generally and natural gas use specifically. Examples include lowering heating set-point temperatures, reduced comfort cooling in offices and tighter control of lighting. In line with government recommendations, we also switched from natural gas to oil to fuel some of our heating systems in Switzerland. Because our environmental reporting year is 1 July to 30 June, the result of these measures will be shown in our 2023 sustainability disclosure. While the energy reduction measures will have a positive impact on our energy usage, the temporary fuel switch will result in a modest increase in our emissions for that period. We remain committed to our net-zero scope 1 and 2 emissions goal for 2025.

Managing our supply chain responsibly

We embed environmental, social and governance (ESG) standards into our sourcing and procurement activities. Our firm-wide Responsible Supply Chain Management (RSCM) framework is based on identifying, assessing and monitoring vendor practices in the areas of human and labor rights, the environment (including aspects of nature), health and safety and anti-corruption. Central to our RSCM framework are our Responsible Supply Chain Standards (RSCS), to which our direct vendors are bound by contract. The RSCS define our expectations toward vendors and their subcontractors regarding legal compliance, environmental protection (including aspects of nature), avoidance of child and forced labor, non-discrimination, diversity, equity and inclusion, remuneration, hours of work, freedom of association, humane treatment, health and safety, anti-corruption measures, and whistleblowing protection for employees.

In 2022, we revised our RSCS and raised the bar for ourselves and our suppliers.

› Refer to our RSCS, available at ubs.com/suppliers

Monitoring the environmental impact of our supply chain

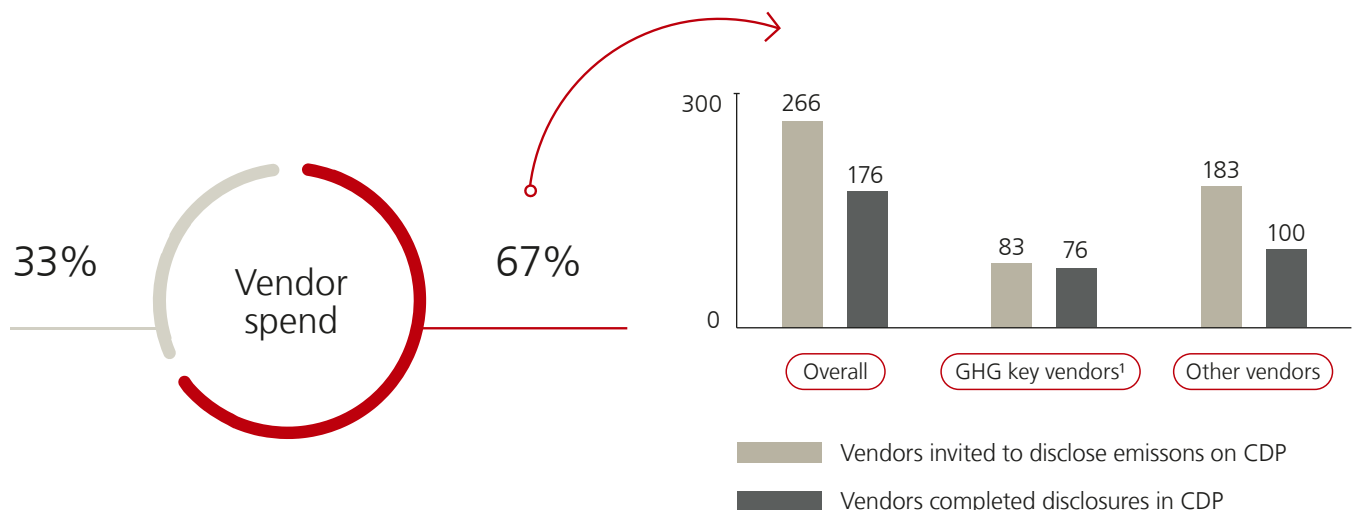
We are strengthening sustainable practices and engaging with many of our suppliers on climate information disclosures to create transparency and commitment toward the reduction of GHG in our supply chain. In 2021, we received external recognition for our efforts through the CDP Supplier Engagement Leaderboard.

In 2022, we identified “GHG key vendors,” which we define as those vendors that collectively account for >50% of our estimated vendor GHG emissions. We then invited the vendors that accounted for 67% of our annual vendor spend to disclose their environmental performance through CDP’s Supply Chain Program. This included all GHG key vendors. We implemented a structured communication plan, conducted webinars to guide our vendors through the disclosure process and requirements, and met with all the GHG key vendors to ensure they understood the need for and importance of declaring their emissions and committing to their own net-zero targets.

The results have been very positive, with 66% of the invited vendors completing their climate disclosures in the CDP platform. This not only enables us to develop tailored engagement plans based on the maturity of the vendor, it also provides a vital input for us to establish a baseline for supply chain vendor scope 3 emissions and identify focused emissions reduction initiatives. In 2023, we plan to extend CDP to a further set of vendors, thereby expanding coverage across our supply chain.

› Refer to the “Appendix 4 – Metrics and targets” section of this report for details on the methodology applied

Climate disclosures of our vendors



¹ GHG key vendors list is revised annually to take into account changes in spend and business relationship.

Engaging in sustainable technology

Leveraging the power of knowledge of our technologists

The Group-wide Sustainable Technology Guild (the STG) of our Chief Digital and Information Office (the CDIO) aims to raise awareness among our firm's technology teams of sustainable technology initiatives and accelerate the execution of strategic plans that will have a positive environmental impact. The STG also contributes to our firm's net-zero-by-2050 ambition by rethinking ways that we develop and deploy applications, store data and manage our firm's infrastructure to fully offset legacy CO₂ emissions in CDIO Technology.

Staffed by a volunteer community of UBS employees, the STG has expanded and now includes subject matter experts, such as key talent technology engineers and business influencers,¹ who have a strong interest in sustainable technology. Backgrounds range from software development to infrastructure engineering, cloud computing, real estate expertise, initiative management and communications.

The STG has been focusing on four distinct tracks, all of which are sponsored by our firm's senior management:

- Optimization of our on-premises technology estate to support more energy-efficient consumption, by continuous decommissioning of unused and power-intensive technology components, as well as changes to hours of operations;
- application development with sustainability in mind, achieved by providing transparency, using near real-time metrics, to application owners about the environmental impact of their applications;
- execution of our Cloud First strategy and continuous adoption of our primary strategic Cloud partner, Microsoft; and
- optimization of projects, process, production environment and people by running internal campaigns to encourage employees to clear up their archives and the applications and systems that they are accountable for.

Across all these initiatives, CDIO Technology continues to upgrade our firm's technology infrastructure with newer and more efficient, market-leading infrastructure and technology vendors, moving some technology platform workloads from its on-premises and private cloud servers to Microsoft Azure yielding energy reductions of, in some specific use cases, up to 30%.

We have joined the Green Software Foundation (the GSF), as part of our ongoing commitment to drive more sustainable practices. As a GSF steering member, we explore ways of reducing emissions associated with our large technology estate. For example, UBS and Microsoft co-developed a Carbon Aware API. This open-source solution recommends scheduling workloads requiring heavy computer power during times when clean, renewable or low-carbon sources of electricity are most available. Both firms then provided this solution to the GSF so it could be shared with large and small companies around the world.

¹ Members of staff with specialized knowledge and expertise on sustainable technology and whose roles have a wide reach across their respective teams.

Driving social impact

As we continue to drive our social impact and philanthropy services strategy forward, we are building a strong platform for the future. We seek to grow our reach and maximize our impact on a local, national and global scale.

Philanthropy Services

We believe that by working collectively, philanthropists and public and private organizations have the potential to create lasting change and maximize a positive impact for people and planet. *UBS Philanthropy Services* provides comprehensive advice, insight and execution services to work with our clients and find innovative ways to tackle some of the world's most pressing social and environmental problems. To support our clients we have also issued various publications such as the philanthropy guides: *Sea beyond the Blue*, *Seeds of Change*, and *On Thin Ice*.

The UBS Optimus Foundation network

In many cases investing in nature also requires partnerships and strategic collaboration. As an example, the UBS Optimus Foundation network and the Swiss Agency for Development and Cooperation supported the issuance of two reports by Earth Security: *The Blended Finance Playbook for Nature-Based Solutions* and *Financing the Earth's Assets: The Case for Mangroves*. These reports outlined approaches to nature-positive investments using blended finance structures that leverage philanthropic capital. We took this a step further toward moving from concept to solution in 2021 with the creation of the Mangrove 40 initiative to support nature-based solutions for carbon sequestration via the restoration of mangroves, designed to provide environmental and social co-benefits.

The work with Earth Security has identified 40 locations globally that contain 70% of the world's remaining mangroves, of which approximately 50% have been degraded. Mangrove ecosystems store carbon faster than land forests, protect coastlines and restore biodiversity, and they can also support local livelihoods. This demonstrates the UBS Optimus Foundation network's strengthened focus on climate and the environment, as well as the power of philanthropy to catalyze nature-based solutions and help create new nature markets.

2022 highlights include:

Collective impact

- Members of the Accelerate Collective, Climate Collective and Transform Collective entered their second year of collective impact and learning, including in-person summits.
- Through the UBS Climate Collective, for example, clients are able to fund, develop and implement strategies that target climate change mitigation and adaptation, and may also serve to support natural capital.
- We signed a memorandum of understanding with Prince Albert II of Monaco, creating a new USD 2 million program within the Pelagos Initiative, which is accelerating climate action in the Mediterranean.
- In partnership with the Galileo Foundation, we launched the *Human Family Fund* at the Faith and Philanthropy summit at the Vatican, which is a multi-faith philanthropic fund supporting faith-inspired initiatives with verified outcomes in health, education, climate / environment and anti-trafficking.
- We formed a new strategic partnership with the Marshall Institute and LSE (London School of Economics).

Donor-advised funds

These funds offer clients an easy, flexible and efficient alternative to setting up their own foundation and can be managed in line with their usual investment approach.

UBS Global Visionaries

To further grow our environmental and social impact, we see an opportunity to connect people, to bridge the gap between incubation, acceleration and impact investments, supported by a strong ecosystem and partnership approach. One way we are doing this is through our *UBS Global Visionaries* program, where we aim to (i) create opportunities for clients and prospective clients to connect with leading social entrepreneurs and (ii) help the best entrepreneurs focusing on social and environmental issues to scale their positive change by expanding their network, building capacity and raising awareness about their work.

Risk Management

Managing sustainability and climate risks

At UBS, sustainability and climate risk is defined as the risk that UBS negatively impacts, or is impacted by, climate change, natural capital, human rights, and other environmental, social and governance (ESG) matters. Sustainability and climate risks may manifest as credit, market, liquidity and/or non-financial risks for UBS, resulting in potential adverse financial, liability and/or reputational impacts. These risks extend to the value of investments and may also affect the value of collateral (e.g., real estate). Climate risks can arise from either changing climate conditions (physical risks) or from efforts to mitigate climate change (transition risks). Physical and transition risks from a changing climate contribute to a structural change across economies and, consequently, can affect banks and the financial sector through financial and non-financial impacts.

The firm's Sustainability and Climate Risk (SCR) unit (part of Group Risk Control), manages material exposure to sustainability and climate risks. It also advances our firmwide SCR initiative to build in-house capacity for the management of sustainability and climate-related risks.

› **Refer to the "Appendix 3 – Risk management" section of this report for a full description of our sustainability and climate risk policy framework**

Our SCR initiative follows a multi-year roadmap. It is designed to integrate sustainability and climate risk considerations into our firm's various traditional financial and non-financial risk management frameworks, and related policies and processes. This is necessary to meet expectations regarding the management of sustainability and climate risks and to deliver on climate stress-test exercises. Our roadmap is configured to address current and emerging regulations and builds capacity through expertise and collaboration, for example, structured engagement with internal and external stakeholders (e.g., our Group Compliance, Regulatory & Governance (GCRG) function, for non-financial risks) and pertinent experts.

Our SCR initiative has been set up to address risks across our firm's business divisions and legal entities. In 2022, it monitored emerging sustainability and climate risk regulation, engaged with select regulators for deep-dives, further advanced efforts toward the goal of full integration of sustainability and climate risk into our firm's traditional risk management frameworks and stress-testing capacity. Further developments included the introduction of sustainable product guidelines, building new capacity to centrally structure, acquire, and deploy ESG data across the firm, and further refining governance and methodologies driving ESG reporting and disclosure.

Sustainability and climate risk management framework

We currently identify and manage sustainability and climate risks in our operations, balance sheet, clients' assets, and our supply chain.

In 2022, we continued to methodologically integrate sustainability and climate-related risk considerations into the firmwide risk management framework to protect both our clients' and our own assets from climate-related risks. As shown below, this work comprised: (i) risk identification and measurement; (ii) monitoring and risk appetite setting; (iii) risk management and control; and (iv) risk reporting processes.

We are implementing the sustainability and climate risk management framework in line with the multi-year roadmap to integrate sustainability and climate risk into our financial and non-financial risk frameworks and related processes. The development of new and enhanced tools and methodologies in 2022 supports our firm, front-to-back, in these integration efforts.



Sustainability and climate risks are identified and integrated in the Group risk identification process

- Annual sustainability and climate materiality¹ assessment
- Climate risk heatmaps¹
- Climate scenario analysis and stress test exercises, including the development of an in-house framework²
- Sustainability and climate risk scorecard³



Key sustainability and climate risk considerations are included in internal and external reporting

- Expand scope and automation of periodic risk reports⁴
- Further align external disclosures¹ with TCFD



Sustainability and climate risk exposures are monitored and metrics reported internally to enable risk appetite setting

- Disclose and enhance sustainability and climate risk metrics¹
- Qualitative climate risk appetite¹
- Quantitative climate risk appetite³



Management and control processes ensure that material sustainability and climate risks are identified, measured, monitored and escalated in a timely manner

- Integrate sustainability and climate risk into policies and processes⁵
- Build in-house capacity, including training⁵
- Centralize and execute ESG data strategy⁵



Related toolkit

¹ Partially implemented, externally disclosed, further development underway.

² Historic scenario assessments disclosed, scenario analysis and stress test framework development underway.

³ Under development.

⁴ Partially implemented, internally reported, further developments underway.

⁵ Climate risk-specific controls, integration, and capacity building are ongoing with further development underway.

Integrating sustainability and climate risk into other risk categories – our ambition

In 2022, we further embedded physical and transition risks into our climate risk management framework. As part of the integration of climate in credit risk, we are developing a playbook to help the business divisions integrate climate into processes, policies and frameworks. This approach is also under development for market risk.

We also established a data model and a business process for scoring sustainability and climate risk at the company and asset levels, across a range of materially relevant types. These types are included in the table below, describing how sustainability and climate risks may transmit financial and non-financial risks to UBS, across a variety of counterparty and asset types.

Climate risk transmission to financial and non-financial risk				
Overview	Credit risk	Market risk (traded and non-traded)	Non-financial risk (NFR)	Reputational risk
<p>Transmission of sustainability and climate risk drivers, including transition, physical, and nature-related risks, through counterparties, collateral, and macro shocks impacting UBS.</p> <p>Amplified or mitigated sectoral, jurisdictional and/or geographic concentrations or structural product considerations.</p>	<p>Financial impact to UBS from climate policies, low-carbon technologies, and/or demand shifts impacting UBS counterparties' credit worthiness and/or value of collateral held by UBS. Risk drivers may affect:</p> <p>(i) counterparties, including private individuals, corporate entities, investment vehicles or sovereign entities; (ii) counterparties' ability to service and repay debt to UBS; and (iii) market and/or lending value of collateral held by UBS supporting credit agreements and the ability to fully recover potential losses in the event of a default.</p>	<p>Financial impact to UBS from price shocks and/or market volatility, climate policies, low-carbon technologies, demand shifts and/or market perception impacting the value of UBS's positions and/or leading to a breakdown in correlations between risk factors or a change in market liquidity.</p> <p>Includes UBS's positions and/or assumptions held by UBS (correlations) regarding real estate, equities, debt, commodities and FX and their related liquidity.</p>	<p>Non-financial impact to UBS (compliance, operational risk and financial crime) from inadequate or failed internal processes, people and systems and/or externally by physical climate events or stakeholder legal action impacting UBS through increasing business continuity, legal and regulatory compliance risk associated with climate-sensitive investments and businesses.</p>	<p>Risk of unfavorable perception or decline of UBS's reputation from the point of view of clients/industries, shareholders, regulators, employees, or the general public which may lead to potential financial losses and/or market share.</p> <p>Is considered in all business activities, transactions, and decisions and as such regarded as an impact.</p>

The table below outlines UBS's vision on how key sustainability and climate risk considerations may be integrated into financial and non-financial risk frameworks.

Vision of overall approach				
Risk management process	Credit risk	Market risk (traded and non-traded)	Non-financial risk (NFR)	Reputational risk
Systematically integrate sustainability and climate risks into the firm's risk identification processes and stress testing framework				
Risk identification and measurement	<p>Transition and physical risk ratings (including company/asset-level scorecards and industry-level heatmaps) enable UBS to assess and monitor material concentrations of exposure to climate risk, including sensitive geographies, sectors and counterparties.</p> <p>Climate risk scenario analysis and stress testing enables UBS to assess risks along different pathways of climate change. This includes the assessment of a range of scenarios with different severities.</p> <p>The scenarios' climate-related macroeconomic, financial, and other variables reflect different levels of physical and transition risk across time horizons up to 30 years. Climate risk stress models translate the scenarios into capital and risk-weighted asset (RWA) impacts where appropriate.</p>	<p>Progressive study of market-based responses to climate risk drivers enables UBS to identify new transmission channels of market risk impacts.</p> <p>Integration of risk ratings to enable risk identification through monitoring potential impact on the value of UBS's positions that may be materially affected by climate-risk-driven price and/or volatility shifts.</p> <p>Custom climate stress modeling enabling UBS to quantify potential losses from changes in market variables, such as interest rates, credit spreads, equity and commodity prices, as well as correlations and volatility. This could include approaches like applying instantaneous stress shocks for climate-specific scenarios.</p>	<p>Assess NFR implications across compliance, financial crime, and operational risk taxonomies including business continuity risk to enable UBS to identify potential deficiencies in internal processes or vulnerabilities to external events.</p>	<p>Clients, new transactions, products and services go through standard review and decision processes prior to UBS conducting business. These processes, in addition to day-to-day risk management, support the identification, assessment and escalation of potential reputational risk.</p> <p>Design and operating effectiveness of the framework relies on inclusion of climate-related risk management processes embedded in the step 1 frameworks below, examples include:</p> <ul style="list-style-type: none"> – Client onboarding (Financial Crime Prevention / Anti-Money Laundering / Know Your Customer); – Sustainability and climate risks; – Suitability and appropriateness review; – New business and complex transaction approval processes; – Third-party risk management and outsourcing and offshoring processes.

Execution of BoD- and GEB-defined risk appetite for sustainability and climate risks, based on identified material risks

Monitoring and risk appetite setting	<p>Integration of climate-related risks (quantitative) into the firm's risk appetite framework, including, but not limited to, climate-related credit limits (considering materiality thresholds), based on risk rating methodologies, at sectoral, geographic and/or divisional levels, and/or carbon budgets and utilization aligned with UBS net-zero implementation targets.</p> <p>Ongoing monitoring of potential new transmission channels of climate-related credit risks to UBS.</p>	<p>Integration into market risk monitoring processes reflecting insights from risk identification and ongoing assessment of exposure developments to industry sectors, sovereign debt, commodity prices, foreign exchanges rates and interest rates.</p> <p>Setting risk appetite against potentially identified material climate-sensitive exposure to sectoral, geographic and/or asset type and timely escalation of potential concentrations.</p>	<p>Monitoring and tracking of global climate-related regulations enabling UBS to understand and anticipate impacts to current operations, such as those addressing greenwashing risks or central bank supervisory expectations. Including dynamic assessment processes to reflect evolving regulatory developments and changes in business activities.</p>	<p>UBS's Risk Appetite Framework ensures that risk-taking at every level of the organization is in line with the firm's strategic priorities, capital and liquidity plans, as well as our pillars, principles and behaviors. The framework takes a comprehensive approach, integrating all material risks across the firm and is designed to protect UBS's franchise and reputation.</p> <p>Established processes within the step 1 frameworks ensure consistent assessment, monitoring and escalation of reputational risk.</p>
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Quantitative and qualitative sustainability and climate risk principles integrated into risk management frameworks and processes

Risk management and control	<p>Integration of climate risk considerations into the credit lifecycle, including onboarding, deal review, collateral valuation and periodic credit processes, enable UBS to mitigate the potential for climate-related credit losses.</p> <p>Driven by standard methodologies (e.g., scorecards), and potential quantitative integration into probability of default, loss given default, risk-weighted asset or qualitative integration into decision-making.</p> <p>Mitigants may include the setting of limits to control or minimize material climate-related credit risks, portfolio management measures (e.g., hedges) and/or of business acceptance criteria.</p>	<p>Integration of climate-related market risk appetite into how UBS controls market risk, which may include assessing climate risk considerations into management systems and processes to mitigate loss potential.</p> <p>Iterative feedback and learning loops between market, credit and liquidity risk management approaches to progressively challenge existing risk control measures.</p>	<p>Embed ESG factors into NFR assessment and control frameworks including enhancements to new business initiatives, client onboarding, oversight of marketing materials related to sustainability, business continuity planning adaptations and/or minimum product standards of sustainability characteristics.</p>	<p>On-going review of the framework design and operating effectiveness and ESG controls embedded in key processes, such as new business controls, suitability, and appropriateness reviews, monitoring and surveillance activities, enables UBS to continuously evolve its reputational risk management capacity.</p>
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Dashboards on climate-driven risk insights, internal and external reporting on climate risk management framework status

Risk reporting and disclosure	<p>Timely reporting of material changes in climate-credit and market-risk identification, quantification, monitoring, utilization of risk appetite, and/or key risk management and control decisions to key decision-makers in UBS (e.g., senior management), reflecting and based on latest-available advanced ESG data and methodologies.</p> <p>Periodic climate-related credit and market risk metrics (e.g., climate-driven delta risk or expected credit loss from climate-sensitive loans) are integrated in standard internal risk reports for example at the Group, significant Group entities, and/or business divisional levels.</p> <p>Automation of risk metrics into external disclosure processes, accompanied by materially relevant information on climate risk identification, monitoring (e.g., new transmission channels), exposure trends and mitigating actions.</p>	<p>Roll-out independent ESG data assurance to our Sustainability Report initially (to be extended to other Sustainability Dashboard metrics on risk-based approach over time) and SOX 302 style certification by senior management on our Sustainability Report.</p>	<p>A consolidated view across the Group of all high inherent reputational risks cases that have been raised through the reputational risk review process is provided as inputs into the Group Risk Report on a quarterly basis.</p>
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Our plan for liquidity risk

We aim to integrate identified material risks into our internal liquidity risk management framework. We recognize climate risk drivers may transmit to liquidity adequacy through our ability to raise funds, liquidate assets, or indirectly through our customers' demands for liquidity (e.g., given a market or physical climate shock).

We plan to assimilate insights gained from our efforts to quantify and integrate climate-related credit and market risks, to collectively determine how liquidity risks may be more accurately captured. We see the integration of climate risk into the liquidity risk management (as with other climate-driven risks) as an iterative, improving the quality of data, analytics and insights over time, as further described in the "ESG data" section below.

Note: As climate risk analysis is a novel area of research, with methodologies, tools and data availability still evolving, we will continue to develop our risk identification and measurement approaches.

Integrating sustainability and climate risk into other risk categories – progress in 2022

Credit risk

As part of the integration of climate considerations in credit risk, we began designing an internal playbook to guide business divisions on UBS-specific best practices for integrating climate into processes, policies and frameworks. We established a baseline of climate-credit impacted processes and procedures for the Group and business divisions and began discussions towards adapting existing controls to reflect climate considerations.

We conceptualized a company-/asset-level sustainability and climate risk scorecard (i.e., a climate and environmental risk rating addressing transition risk, physical risk and nature-related risk) at the level of counterparties and assets (e.g., issuers and real estate collateral, amongst other types). To enable implementation, we further enhanced methodologies for climate risk drivers and began a firm-wide development of supporting IT infrastructure, data process modeling, prototyping with select and material portfolios, and business process integration.

We also identified new climate risks for Personal & Corporate Banking's cash-flow-based lending and the Investment Bank's commercial lending portfolios and modelled additional non-realized credit losses of a minor scale associated with the impact of climate change and climate change policy. By expanding the climate risk heatmap methodology to cover traded products, issuer risk and collateral we identified potential concentrations of climate risk on a broader scope of our firm's balance sheet. We systematically monitored climate-sensitive sectors for the potential increase of exposure to sectors that may be prone to higher default rates and/or devaluation.

In line with the risk appetite set by our Board of Directors (the BoD) pertaining to net zero, we established a quantified risk appetite in key sectors, achieved with a novel carbon budgeting and utilization methodology. The risk appetite was syndicated with the Chief Risk Officers (CROs) of Personal & Corporate Banking and the Investment Bank and ratified by the Group Executive Board (the GEB) for implementation in 2023.

Market risk (traded and non-traded)

A working group of cross-divisional market risk experts is developing methodologies to assess potential for concentration of climate-related market risks and examining our firm's assumptions on market risk correlations and liquidity. We conducted an initial analysis to assess the sensitivity of industry sectors in our firm's balance sheet to transition risk, which helped define data-sourcing requirements vis-à-vis market risk infrastructure. Issuer and methodological coverage of a range of external ESG data providers has been analyzed in relation to climate-related market risk transmission channels. In addition, we gave market-risk-relevant design input for internal baseline and adverse climate stress scenarios. This included a 2023 plan to design instantaneous shocks for market-risk-relevant stress of our firm's balance sheet while accounting for structural product considerations and time horizons.

Non-financial risk

We enhanced the Group-wide regulatory tracking process to incorporate relevant coverage for sustainability- and climate-related changes to laws, rules and regulations across global jurisdictions. Sustainable product guidelines (for bonds, lending and investments) and greenhouse gas (GHG) emissions trading guidelines were provided for implementation in 2023. We also implemented new environmental crimes dimensions in the financial crime prevention (FCP) country risk model, which feeds into processes such as client risk rating and risk appetite monitoring. Updates to our New Business Initiative process included ESG / sustainable investing product considerations in business submission and associated control function assessments. Additionally, we assessed the impact from climate-related operational disruptions (e.g., physical climate disruptions) into our business continuity management (BCM) and operational resilience framework.

Reputational risk

We assessed the design of the reputational risk framework to be generally robust in terms of roles and responsibilities, escalation requirements, as well as review and approval authorities for sustainability-related risks. The reputational risk dashboard now captures the key risk indicators on a quarterly basis including Financial Crime Prevention, Sustainability and Climate Risks, Client Complaints, New Business, Reputational Risk Cases metrics.

ESG data

To support the SCR initiative's efforts on risk management adaptation, and the firm's broader business interests in sustainable products and services, we established a centralized governance and related process for ESG data procurement and management. A newly formed team is mandated to ensure consistency and controlled deployment throughout the Group. To support these efforts, the SCR initiative managed the comprehensive range of ESG data requirements across risk methodology. We did this by engaging relevant model owners and vetting data providers against a rigorous rubric and were therefore able to reduce redundancies and streamline inputs for credit, market, treasury, and liquidity risk stress models. This effort culminated with most major data providers coming online towards the end of 2022, with some procurement processes in late-stage sign-offs.

Sustainability and climate risk identification and measurement

UBS considers sustainability and climate-driven risk drivers from changing climate and/or environmental conditions (physical and/or nature-related risks). These risk drivers expose banks and the broader financial system to climate and environmental change through both micro- and macroeconomic transmission channels.

By combining expert and industry-based views of how sustainability and climate risks may transmit into financial (e.g., credit losses) and non-financial impacts (e.g., operational disruptions), and with UBS-specific product information, we developed an in-house materiality-driven approach to climate risk identification and applied it across all products, services and operations.

On an annual basis, our SCR unit coordinates and updates a systematic materiality assessment of sustainability and climate-driven risks, in accordance with the ISO 14001 standard. In 2022, our SCR unit further advanced the materiality assessment methodology, leveraging internal and external expert guidance (e.g., by the Basel Committee on Banking Supervision). The assessment was designed to include climate and nature-related risk considerations, incorporate quantitative measurements (e.g., heatmap outcomes), and adapt to transmission channels identified as of December 2022. This includes income and wealth impacts on our own assets and/or counterparties, such as households, corporate clients or sovereign clients, subsequently affecting their value and/or creditworthiness; and science- and business-based ratings of transition, physical, and nature-related risks (e.g., climate-risk-driven scoring of our own assets and counterparties and heatmapping).

› Refer to the “Appendix 2 – Strategy” section of this report for details about our climate-related materiality assessment

UBS approaches climate risk identification by integrating climate risk drivers, expert-based views on their transmission channels, and climate risk methodologies (e.g., risk scores and heatmaps). This enables a materiality-driven approach to climate risk management.

We aim to systematically identify sustainability and climate risks at divisional and cross-divisional levels, both through the sustainability and climate risk-driven materiality assessment described above, and increasingly through their integration into the firm-wide traditional risk identification process. This is also applied to significant Group entities under UBS Group AG. These climate risk methodologies help us take a materiality-driven approach, directly structuring our climate risk management strategy by:

- identifying concentrations of climate-sensitive exposure that have higher than average vulnerability to climate risk drivers;
- allowing UBS to prioritize resources with respect to detailed risk analysis and management actions;
- supporting the delivery of a client-centric business strategy where our firm supports clients with climate transition (i.e., adaptive) finance, identifying clients that could benefit from related UBS products and services; and
- providing information to senior management to support decision making at all stages of credit granting, market making, and investment selection processes, along with decision-useful information in our external disclosures to stakeholders.

Transition risk heatmap

Transition risk covers the adjustment to an environmentally sustainable economy, including changes in public policies, disruptive technological developments and shifts in consumer and investor preferences.

Our transition risk heatmap methodology is based on a risk-segmentation process, dividing and rating economic sectors and industry sub-segments that share similar risk vulnerability characteristics.

These are then scored and rated according to their vulnerability to climate policy, low-carbon technology risks and revenue or demand shifts under an immediate and ambitious approach to meeting the well-below-2°C Paris goal. We are able to use these risk ratings to support identification of potential climate-sensitive concentrations. The ratings in the heatmap are bands of scores (from 0 to 1), and reflect the levels of risk that would likely occur under an ambitious transition (in a short-term time horizon).

The current transition risk heatmap shows that our exposure to activities rated as having high, moderately high or moderate vulnerability to climate transition risks is relatively low (as a percentage, in 2022 compared with 2021). Most year-on-year fluctuations (2021 to 2022) were in the energy sector, specifically in oil and gas midstream and downstream segments, caused by rising energy prices, as the Russia–Ukraine war tightened global energy supply. Despite these fluctuations, we have continued to reduce our exposure to climate-sensitive sectors.

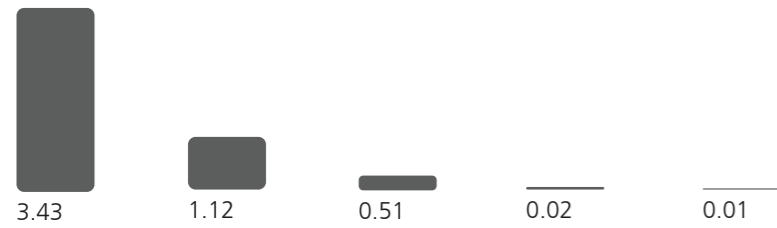
Climate risk heatmap (transition risk)^{1,2}

In USD billion

5.08

Moderately high

Industrials Fossil fuels Utilities Real estate Agriculture



Industrials

1.90	Pharmaceuticals
1.02	Chemicals
0.51	Cement or concrete manufacture

Fossil fuels

0.54	Wholesale/trade: crude oil and natural gas
0.40	Integrated oil and gas
0.11	Conventional oil (on-/offshore)
0.08	Gas processing (incl. LNG)

Utilities

0.51	Electricity from high-carbon fuels (regulated)
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Real estate

0.02	Commercial real estate
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Agriculture

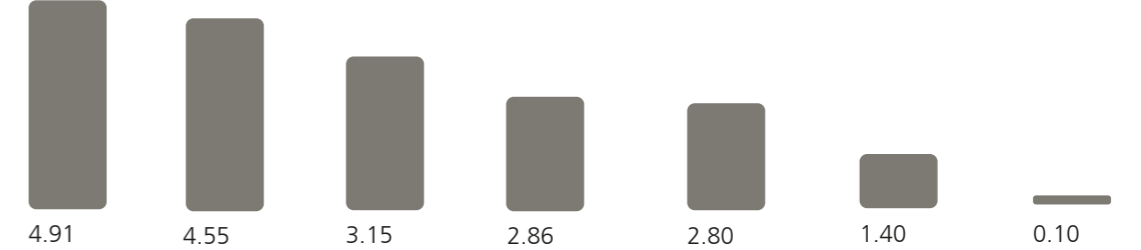
0.01	Livestock – beef extensive grazing
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0.02
High
Fossil fuels
0.02 Shale gas
0.00 Refining and marketing

19.77

Moderate

Fossil fuels Industrials Real estate Transportation Metals and mining Agriculture Utilities



Fossil fuels

4.70	Wholesale/trade: refined petroleum products
0.21	Downstream oil and gas distribution
0.00	Transportation and storage (gas)

Industrials

2.62	Machinery and related parts manufacturing
1.00	Consumer durables manufacturing
0.93	Plastics and petrochemicals manufacture

Real estate

1.76	Construction of buildings and related activities
1.39	Commercial real estate

Transportation

1.70	Airlines – cargo
0.49	Land-based shipping (trucks)
0.48	Transportation parts and equipment supply
0.10	Autos, high-carbon (few EVs, many SUVs)
0.06	Airlines – commercial
0.02	Sea-based shipping, high-carbon

Metals and mining

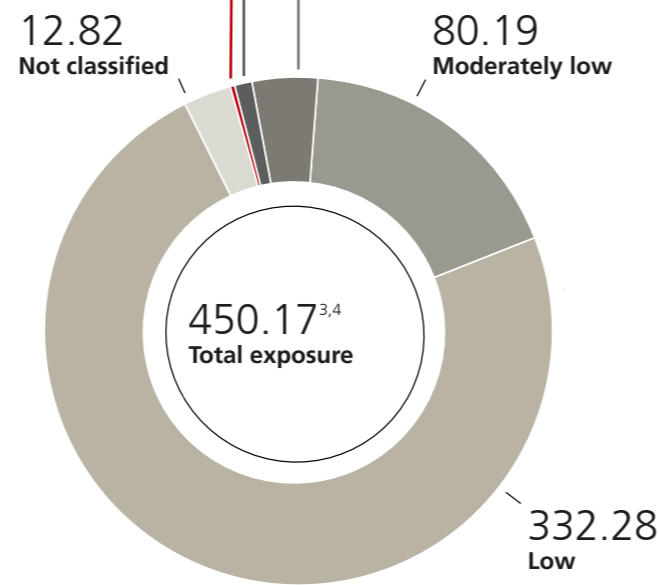
2.44	Conglomerates (incl. trading)
0.26	Production of other mined metals and raw materials
0.09	Production of steel/iron

Agriculture

1.40	Food and beverage production
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Utilities

0.08	Wastewater treatment
0.02	Electricity from moderate-carbon fuels (regulated)



¹ Consists of total loans and advances to customers and guarantees, as well as irrevocable loan commitments (within the scope of expected credit loss), and are based on consolidated and standalone IFRS numbers.

² Climate-related risks are scored between 0 and 1, based upon sustainability and climate risk transmission channels, as outlined in the Methodology Appendix. Risk ratings represent a range of scores across, 5 risk rating categories: low, moderately low, moderate, moderately high, and high. Climate-sensitive exposure metric is determined based upon the top 3 out of 5 rated categories: high to moderate. Sectors, such as fossil fuels, are further segmented to categories reflecting a range of risk vulnerabilities from high to moderate, within the sensitive sector.

³ Total exposure calculation is subject to rounding to two decimal places, hence potential deviation from actual.

⁴ Methodologies for assessing climate-related risks are emerging and may change over time. As the methodologies, tools, and data availability improve, we will further develop our risk identification and measurement approaches, including updated geospatial analysis of properties securing financing with UBS (real estate) and better understanding how private lending (e.g., Lombard) activities may result in direct financial impacts to UBS. Not classified represents portion of UBS business activities where methodologies and data are not yet able to provide a rating. Lombard lending rating is assigned based on the average riskiness of loans.

Physical risk heatmap

Physical risk arises from the impact of weather events and long-term or widespread environmental changes.

Our physical risk heatmap methodology groups corporate counterparties based on exposure to key physical risk factors, by rating sectoral (sectoral average risk distribution), geographic (vulnerability and adaptive capacity) and value chain (sectoral average risk distribution) vulnerabilities in a climate change trajectory, in which no additional policy action is taken. These are then scored for the potential for financial loss in the short-term time horizon.

Ratings from low to high are based on a weighted average score (from 0 to 1), given by double-weighting sector and geography, and single-weighting value chain. Scores are given by the following inputs:

- the counterparty's sectoral activity (e.g., primary energy extraction presents higher physical risks than banks due to its average geographic footprint and vulnerability to financial losses in the short term from physical risk hazards);
- the counterparty's geographical location (e.g., countries in Southeast Asia tend to be higher risk than those in Western Europe, with some exceptions reflecting the potential for national economic resilience and subsidy to economic activities threatened by climate change); and
- the potential disruption to a counterparty's value chain, where relevant, (both its supply chain and distribution channels again reflecting the sectoral average geographic footprint and vulnerability).

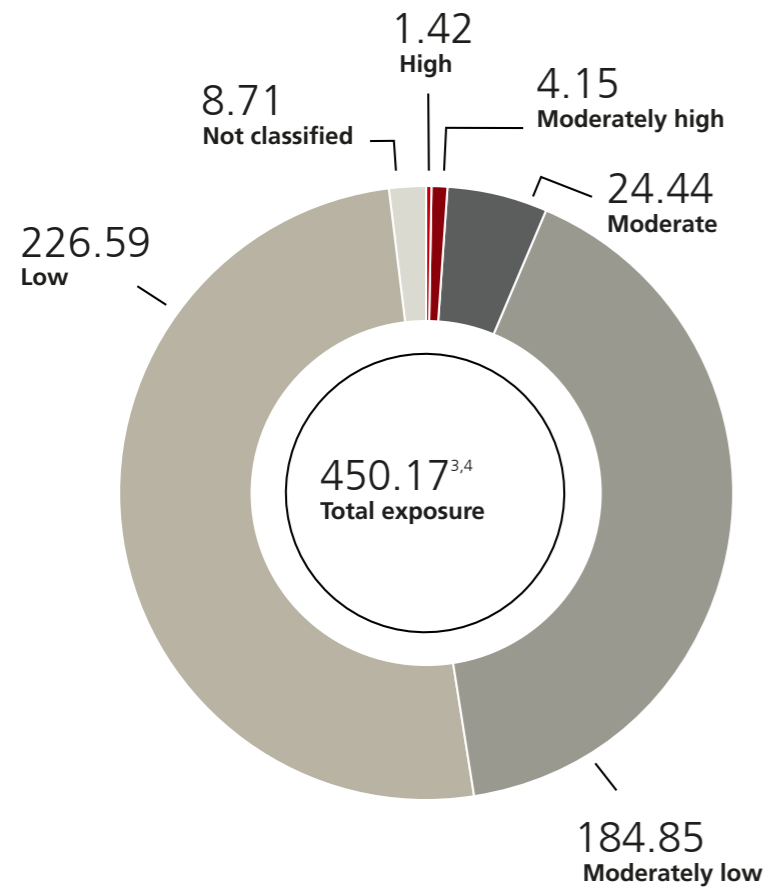
We will continue to enhance our methodology in 2023, with relevant subject matter experts (e.g., country risk experts) and enhanced vendor data sources (e.g., systematic integration of geospatial tools and data).

Our current physical risk heatmap shows that we have relatively low exposure to activities rated as having high, moderately high or moderate vulnerability to physical climate risks. Key concentrations of exposure include high volumes of real estate lending in Switzerland. Most of our lending is to the financial sector, which by its nature has a lower physical climate risk. Key exceptions are lending to property insurance companies or lending in higher-risk regions, such as South Asia.

The chart below shows the location-specific risk distribution compared with the spread of physical risk across sectoral risk ratings versus country (risk domicile, see above) risk ratings. The size of the circle indicates the relative lending exposure.

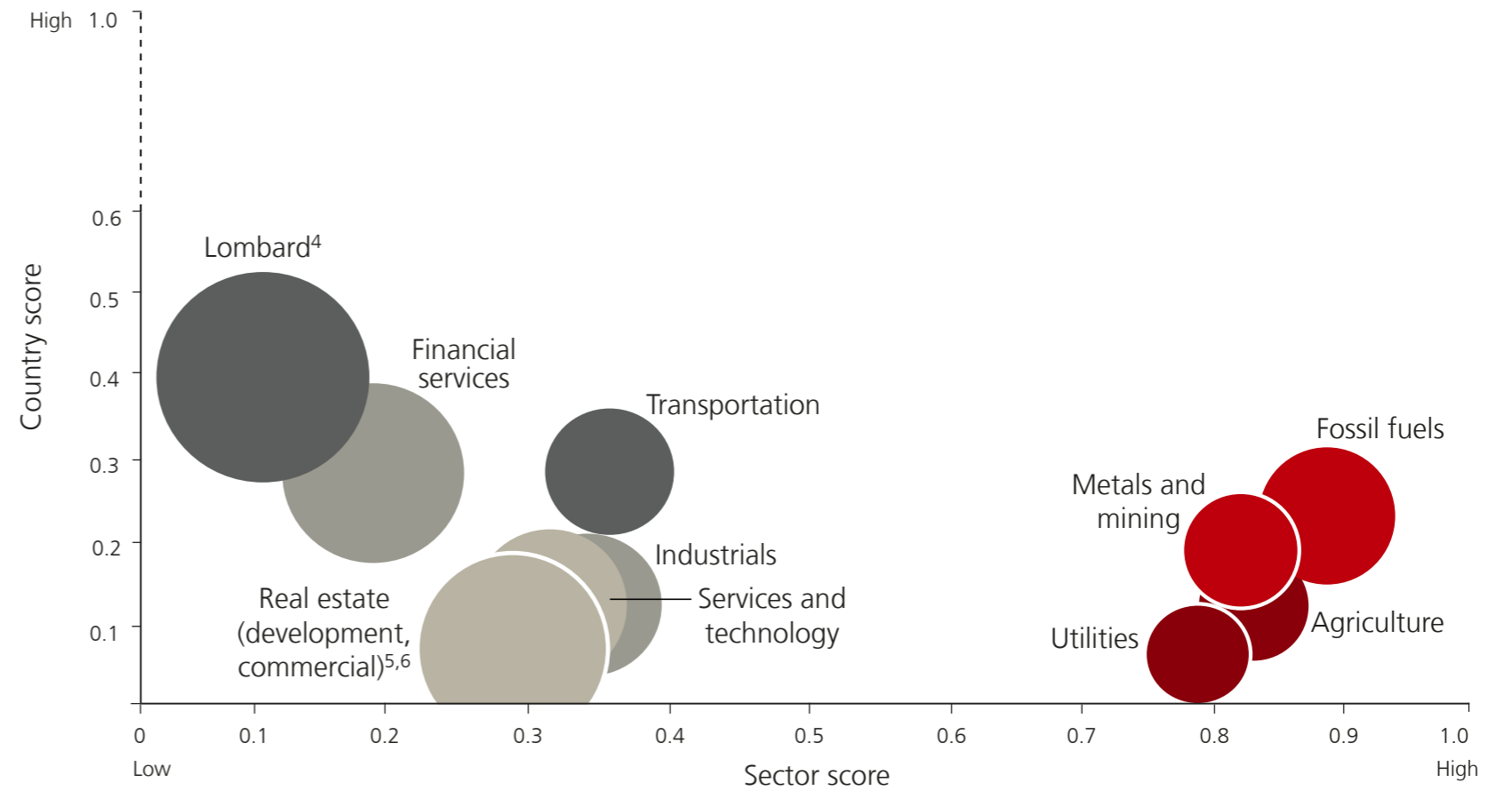
Climate risk heatmap (physical risk)^{1,2}

In USD billion

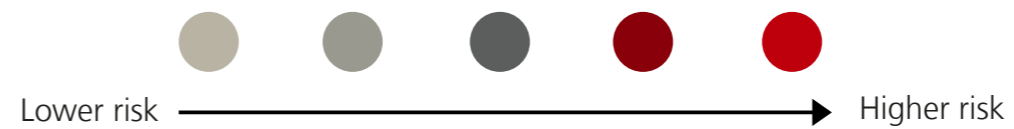


Physical risk by sector and geographic (country) scores

Marker size indicates relative exposure magnitude



Average country and sector score



¹ Consists of total loans and advances to customers and guarantees, as well as irrevocable loan commitments (within the scope of expected credit loss), and are based on consolidated and standalone IFRS numbers.

² Climate-related risks are scored between 0 and 1, based upon sustainability and climate risk transmission channels, as outlined in the Methodology Appendix. Risk ratings represent a range of scores across, 5 risk rating categories: low, moderately low, moderate, moderately high, and high. Climate sensitive exposure metric is determined based upon the top 3 out of 5 rated categories: high to moderate. Sectors, such as fossil fuels, are further segmented to categories reflecting a range of risk vulnerabilities from high to moderate, within the sensitive sector.

³ Total exposure calculation is subject to rounding to two decimal places, hence potential deviation from actual.

⁴ Methodologies for assessing climate-related risks are emerging and may change over time. As the methodologies, tools, and data availability improve, we will further develop our risk identification and measurement approaches, including updated geospatial analysis of properties securing financing with UBS (real estate) and better understanding how private lending (e.g., Lombard) activities may result in direct financial impacts to UBS. Not classified represents portion of UBS business activities where methodologies and data are not yet able to provide a rating. Lombard lending rating is assigned based on the average riskiness of loans.

⁵ Residential real estate is not given a sector score, therefore not included in this chart, however, is rated "low" based on periodic geospatial analysis.

⁶ UBS has identified select properties in its portfolio that are vulnerable to acute climate hazards, however portfolio-level risks are inherently low, given the integration of such information into UBS's loan underwriting processes.

Nature-related risk

Since 2021, our firm has been a member of the Taskforce on Nature-related Financial Disclosures (the TNFD). The TNFD is a market-led, science-based and government-backed initiative. It was formed to develop a risk management and disclosure framework for organizations to report and act on evolving nature-related risks, with the aim of supporting a shift in global financial flows away from nature-negative outcomes and toward nature-positive outcomes.

Since 2018, we have also been a member of the UNEP-FI working group to develop a natural capital dependency and impact methodology, also known as Exploring Natural Capital Opportunities, Risks and Exposure (ENCORE). In 2022, UBS piloted a new quantification approach for natural capital risk based on nature-related dependency data in the Exploring Natural Capital Opportunities, Risks and Exposure (ENCORE) tool developed by the Natural Capital Finance Alliance (the NCFA) and the World Conservation Monitoring Centre (the UNEP-WCMC). The nature-related risk metric measures our exposure to nature-sensitive economic sectors that are vulnerable to financial impacts caused by the disruption of ecosystem services.

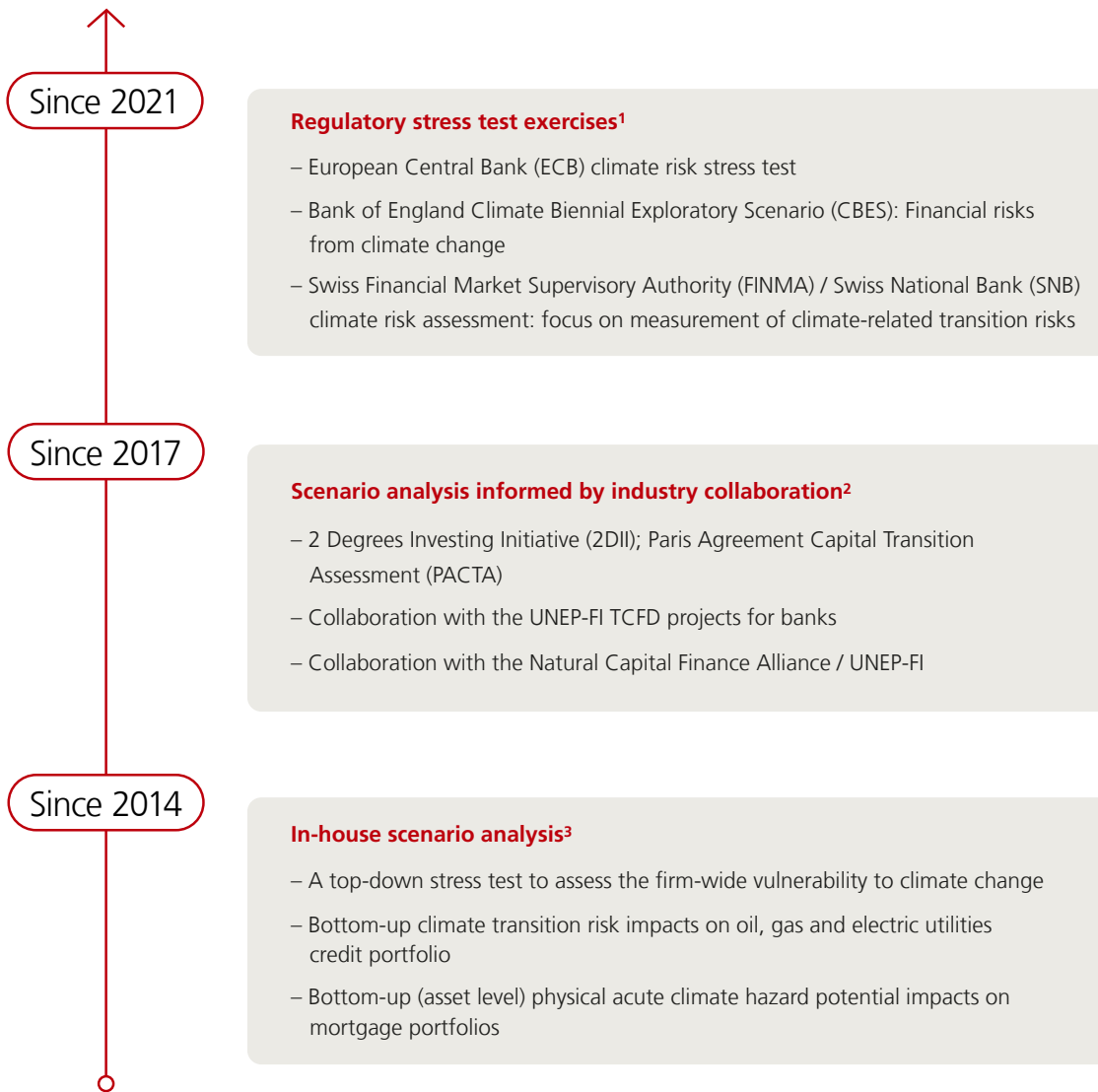
The ENCORE tool assigns a materiality rating to production processes to assess their potential dependencies on ecosystem services. The dependency ratings range from high to low and consider the potential loss of functionality of a production process and financial loss, if an ecosystem service is disrupted. Our SCR unit has assigned each primary industry code (GICS) a mapping to an ENCORE-specific production process (or its closest proximate process), subject to three rounds of subject matter expert review and challenge. The maximum rating of a group of production processes (defined as an ENCORE-specific subsector) then defines the dependency rating for each industry code. Exposure values are then aggregated and summarized by rating. Risk ratings from ENCORE are translated to integral scores and scored based on a normalized cumulative distribution function.

Our pilot nature-related risk metric shows that the Group-wide lending exposure of corporate counterparties to sectors with moderate or high-risk ratings for nature-related risk is relatively low, at 9.8%. The table under climate risk monitoring and risk appetite shows the nature dependency risk ratings and exposure by sector.

› Refer to the “Appendix 3 – Risk management” section of this report for more on our approach to nature

Climate scenario analysis

We use scenario-based approaches to assess our exposure to physical and transition risks stemming from climate change. We have introduced a series of assessments performed through industry collaborations in order to harmonize approaches for addressing methodological and data gaps. We have performed top-down balance sheet stress testing (across the Group), as well as targeted, bottom-up analysis of specific sector exposures covering short-, medium-, and long-term time horizons.



¹ Please refer to *Regulatory scenario analysis and stress test exercises*.

² Please refer to *Scenario analysis informed by industry collaboration*.

³ Please refer to *In-house scenario assessments* in our Sustainability Report 2021.

Note: Climate risk analysis is a novel area of research, and, as the methodologies, tools, and data availability improve, we will further develop our risk identification and measurement approaches.

› Refer to the “Appendix 3 – Risk management” section of this report for details on our climate scenario analysis, and to our Sustainability Report 2021, pages 52–53.

Regulatory scenario analysis and stress test exercises

UBS first participated in regulatory scenario analysis and stress test exercises in 2021, namely the Bank of England (BoE) 2021 Climate Biennial Exploratory Scenario (CBES): Financial risks from climate change; and the Climate Risk Stress Test (CST) of the European Central Bank (the ECB).

For the 2021 CBES exercise, the BoE used exploratory scenarios to investigate a range of climate risks stemming from climate change. The CBES exercise consisted of three 30-year climate risk scenarios, with varying degrees of severity (early policy action, late policy action and no additional policy action). It included an assessment of management actions in response to scenario results, as well as a counterparty-level analysis and a qualitative questionnaire. Overall, the scenario analyses showed mild losses and low exposure of climate-sensitive segments for business booked in UBS AG, London Branch. UBS as a firm was not formally required to participate in the exercise (as we are not a UK-headquartered bank), but volunteered to participate in order to learn from the effort given our footprint in the UK.

Throughout 2022, we engaged with a range of regulatory surveys and other requests for information from supervisors around the globe. We also participated in industry efforts to evaluate regulatory exercises to date. We will continue leveraging these learnings, as they improve testing methodologies.

During the first half of 2022, we participated in the CST exercise to assess banks' preparedness for dealing with financial and economic shocks stemming from climate risk. The CST exercise included a self-assessment questionnaire, climate risk metrics and stress test projections. The scope of the exercise covered UBS Europe SE, which contributed starting point data for supervisory top-down assessments. Due to the ECB's proportionality principle, we were not asked to provide bottom-up stress test projections. Overall, the exercise showed that UBS Europe SE has low exposure to climate risks.

We enhanced our capabilities for assessing risks and vulnerabilities from climate change in 2022, fostered by deliveries regarding the aforementioned supervisory stress tests, as well as internal developments in climate risk scenario analysis and stress testing.

We also contributed to the NGFS's work exploring the potential for risk differentials among assets due to climate change. We joined industry efforts to evaluate regulatory exercises to date. This included the IIF report "Navigating Climate Headwinds," which examined learnings from 20 global institutions on regulatory climate scenario analysis and stress test exercises.

In 2022, we also began developing a climate risk scenario analysis and stress testing framework. The framework aims to measure our exposures to climate risks in order to understand the impact of climate change on our business model and manage potential risks to our capital position. To support this, we have been developing internal climate risk scenarios covering transition and physical risks. In addition, we are in the process of developing corresponding climate risk models for major risk types, including credit risks and non-financial risks.

Scenario analysis informed by industry collaboration

In 2020, we were one of the pilot banks testing the Paris Agreement Capital Transition Assessment (PACTA) methodology. This methodology provides an assessment of a bank's credit-financed activities in relation to the global shift to a low-carbon economy. We studied the alignment of select climate-sensitive sectors in our corporate credit portfolio with Paris Agreement benchmarks.

One of the results shown by the PACTA for lending assessment was that the fuel mix in UBS's power utilities credit portfolio was significantly less carbon-intensive than the global corporate economy, as of 2019. As an outcome of the collaboration between UBS and 16 other international banks, academia and experts, a PACTA for Banks Methodology Document was published.

In 2022, we participated in the PACTA climate alignment test focused on assessing listed investments (including equities and bonds), mortgages and direct real estate portfolios. The 2022 PACTA results for this portfolio were compared with the aggregated results of all participating banks' portfolios.

A detailed report of the PACTA 2022 climate alignment test for the Swiss financial market is available from the Swiss Federal Office for the Environment (FOEN). It promotes industry learning and supports information flow on progress made and efforts still needed. Overall, the test results have confirmed findings from our previous in-house assessment on climate risk. So far, we have not identified significant climate-related financial risk on our balance sheet. This is explained by our firm's relatively small lending book in climate-sensitive sectors and the availability of insurance where we have relevant exposures to such sectors (e.g., Swiss mortgage lending book).

› Refer to bafu.admin.ch/bafu/en/home/topics/climate/info-specialists/climate-and-financial-markets/pacta.html for more information on the PACTA 2022 climate alignment test

Climate risk monitoring and risk appetite

In 2022, we expanded our suite of climate risk metrics in response to evolving industry and regulatory guidance. This included the further enhancement of both transition and physical risk heatmap methodologies, the introduction of a nature-related risk metric, and the expansion of legal-entity-level climate risk metrics.

› Refer to our transition and physical risk heatmaps above

The current inventory of UBS's exposure to climate-sensitive activities (transition, physical and nature-related risks) at the sector level is summarized in the tables below. Exposures may appear either under one or more of the risk types, as the methodologies are distinct in their approach and application and should not be added up as one total exposure figure. Climate risk analysis is a novel area of research, and, as the methodologies, tools and data availability improve, we will further develop our risk identification and measurement approaches.

Risk exposures by sector^{1,2}

Sector / Subsector	Exposure		Transition risk			In scope of net-zero target (%) ⁵	Physical risk			Nature-related risk ⁶		
	2020–2022 trend	2022 (USD billion)	2022 climate-sensitive exposure ³	2022 risk-rating category ³	2020–2022 trend in risk profile ⁴		2022 climate-sensitive exposure ³	2022 risk-rating category ³	2020–2022 trend in risk profile ⁴	2022 nature-related sensitive exposure ³	2022 risk-rating category ³	2020–2022 trend in risk profile ⁴
Agriculture												
Agriculture, fishing and forestry	↓	0.3	0.0	Moderately low	↑		0.3	Moderate	↓	0.2	Moderate	↓
Food and beverage	↓	3.2	1.4	Moderate	↓		2.3	Moderate	↓	1.3	Moderately low	↓
Financial services												
Financial services	↑	46.9	0.0	Low	↓		7.1	Moderately low	↓	0.7	Low	→
Industrials												
Cement or concrete manufacture	↑	0.5	0.5	Moderately high	↓	98	0.5	Moderate	↓	0.5	Moderately low	↓
Chemicals manufacture	↓	1.0	1.0	Moderately high	↓		1.0	Moderate	↑	0.5	Moderate	↑
Electronics manufacture	↓	1.8	0.0	Moderately low	↓		0.1	Moderately low	↑	0.5	Moderately low	↓
Goods and apparel manufacture	↑	2.1	1.0	Moderate	↓		0.9	Moderately low	↓	1.2	Moderate	↓
Machinery manufacturing	↓	2.9	2.6	Moderate	↓		0.1	Moderately low	↓	2.3	Moderate	↓
Pharmaceuticals manufacture	↑	1.9	1.9	Moderately high	↓		0.2	Moderately low	↓	1.7	Moderate	↓
Plastics and petrochemicals manufacture	↓	0.9	0.9	Moderate	↓		0.8	Moderate	↓	0.4	Moderately low	↓
Metals and mining												
Conglomerates (incl. trading)	↓	2.4	2.4	Moderate	↓		0.4	Moderately low	↓	0.0	Moderately low	↓
Mining and quarrying	↓	0.4	0.0	Moderately low	↓		0.4	Moderately high	↓	0.4	Moderately low	↓
Production	↑	0.4	0.4	Moderate	↓		0.1	Moderate	↑	0.3	Moderate	↓
Fossil fuels												
Downstream refining, distribution	↑	0.3	0.3	Moderate	↑		0.3	Moderate	↓	0.0	Moderately low	↓
Integrated	↓	0.4	0.4	Moderately high	↓	100	0.4	Moderate	↓	0.0	Moderately low	↓
Midstream transport, storage	↑	0.0	0.0	Moderate	↓		0.0	Moderate	↓	0.0	Low	↓
Trading	↑	5.2	5.2	Moderate	↓		5.2	Moderately high	↓	0.0	Moderately low	↓
Upstream extraction	↓	0.1	0.1	Moderately high	↓	95	0.1	Moderate	↓	0.0	Moderately low	↓
Real estate												
Real estate development and management	↓	5.6	1.8	Moderately low	↓		0.8	Moderately low	↓	5.5	Moderately low	↓
Residential ²	↑	158.9	0.0	Low	→	99	0.0	Low	→	0.0	Not Classified	→
Commercial ²	↑	47.1	1.4	Moderately low	↓	97	1.7	Low	↑	21.0	Moderately low	↑
Services and technology												
Services and technology	↓	19.6	0.0	Low	↓		3.0	Moderately low	↓	2.1	Low	→
Transportation												
Air transport	↓	1.8	1.8	Moderate	↓		1.1	Moderate	↓	1.8	Moderate	↓
Automotive	↓	0.4	0.1	Moderately low	↓		0.0	Moderately low	↓	0.4	Moderate	↓
Parts and equipment supply	↓	0.5	0.5	Moderate	↓		0.1	Moderately low	↓	0.4	Moderately low	↓
Rail freight	↓	0.7	0.0	Low	↓		0.2	Moderately low	↓	0.7	Moderate	↓
Road freight	↓	0.5	0.5	Moderate	↓		0.2	Moderately low	↓	0.0	Moderately low	↓
Transit	↓	0.2	0.0	Moderately low	↓		0.1	Moderately low	↓	0.0	Moderately low	↓
Water transport	↓	0.4	0.0	Moderately low	↓		0.4	Moderate	↓	0.4	Moderately low	↑
Utilities												
Other	↓	0.2	0.1	Moderately low	↑		0.1	Moderate	↓	0.2	Moderately high	↑
Secondary energy production	↑	2.0	0.5	Moderately low	↓	91	2.0	Moderate	↓	1.5	Moderate	↓
Secondary energy trading	↓	0.0	0.0	Moderately low	↓		0.0	Moderate	↓	0.0	Moderately high	↑
Private lending												
Lombard ^{2,7}	↓	137.3	0.0	Low	↓		0.0	Moderately low	↓	0.0	Low	→
Private lending, credit cards, other ²	↓	4.1	0.0	Not Classified	→		0.0	Not Classified	→	0.0	Not Classified	→
Total	↓	450.0	24.9	Moderately low	↓		30.0	Moderately low	↓	44.0	Moderately low	↓
<i>of which sensitive exposure (%)</i>			5.5				6.7			9.8		

¹ Consists of total loans and advances to customers and guarantees, as well as irrevocable loan commitments (within the scope of expected credit loss), and based on consolidated and standalone IFRS numbers, in USD billion. Metrics and trends are calculated and restated based on 2022 methodology, across three years of reporting, 2020 to 2022. ² Methodologies for assessing climate- and nature-related risks are emerging and may change over time. As the methodologies, tools, and data availability improve, we will further develop our risk identification and measurement approaches, including further and updated geospatial analysis of properties securing financing with UBS (real estate) and better understanding how private lending (e.g., Lombard) activities may result in direct financial impacts for UBS. For physical climate risks, UBS has identified select properties in its real estate portfolio that are vulnerable to acute climate hazards. However, real estate rating is assigned based on the riskiness of loan counterparties or qualitative estimates leveraging internal studies. ³ Climate- and nature-related risks are scored between 0 and 1, based upon sustainability and climate risk transmission channels, as outlined in the methodology Appendix. Risk ratings represent a range of scores across five risk-rating categories: low, moderately low, moderate, moderately high, and high. Climate- or nature-sensitive exposure metric is determined based upon the top three out of five rated categories: high to moderate. Legend on risk codes: not classified means the respective category of risk rating is not classified and its range of risk profiles scores 0%; low means the category of risk rating is low and its range of risk profiles scores ≤19%; moderately low means the category of risk rating is moderately low and its range of risk profiles scores >19% and ≤39%; moderate means the category of risk rating is moderate and its range of risk profiles scores >39% and ≤59%; moderately high means the category of risk rating is moderately high and its range of risk profiles scores >59% and ≤79%; high means the category of risk rating is high and its range of risk profiles scores >79% and ≤100%. ⁴ A material change in risk profile (discrete risk score, weighted average per sub-sector) is considered as >5% shift up, or down. ⁵ Calculated as % of total exposure to the sub-sector, overall net-zero targets cover 45.6% of UBS lending, as defined in footnote 1. ⁶ Nature-sensitive metric is provided as a proof-of-concept, as part of an ongoing collaboration between UBS and UNEP-FI. UBS continues to collaborate to resolve methodological and data challenges, and seeks to integrate both impacts to and dependency on a changing natural and climatic environment, in how it evaluates risks and opportunities. ⁷ Lombard lending rating is assigned based on the average riskiness of loans.

Climate risk appetite

Our sustainability and climate risk policy defines the qualitative risk appetite for climate risk and is continuously improved. Details of climate-related standards in the energy and utilities sectors can be found in the sustainability and climate risk policy framework.

- › **Refer to the sustainability and climate risk policy framework in the “Appendix 3 – Risk management” section of this report for further details about our sustainability and climate risk governance**

Climate risk management and control

Our standard financial and non-financial risk processes ensure that we identify, assess, approve and escalate material climate risks in a timely manner. We define key responsibilities, processes and tools applicable to the business divisions and Group Functions as part of our climate risk program.

In 2022, we continued our climate risk-related training for employees. Our SCR unit delivered awareness training that included climate risk aspects to our business divisions and Group Functions. Our SCR specialists also provided education sessions with a specific focus on net zero, while in previous years our Head SCR delivered a quarterly risk speaker series focusing on sustainability and climate risk. In addition, we offered, in collaboration with the UNEP-FI Program, a comprehensive set of training sessions (21 in total) focusing on the Task Force on Climate-related Financial Disclosures (the TCFD) roadmap to our employees.

Climate risk reporting

We automated the climate transition risk heatmap for periodic internal risk reporting and introduced a physical risk heatmap. Since then, the climate risk heatmap has been included in quarterly internal risk reports for the Group, as well as key entities and the business divisions. This fully automated process includes banking products, traded products, issuer risk and collateral exposures to climate risk (transition risk only). During 2023 we expect to extend this internal reporting to cover physical risk. The development of internal and external climate risk disclosures will continue in the coming years in the context of our climate risk program in order to address regulatory expectations and provide leading practice in this space.

Our investment management approach to climate risks

Our approach in Asset Management

Our overall strategy for managing climate risks is to integrate risk data and insights into our investment management processes. In our public markets investments, this begins with assessing ESG issues based on our ESG Material Issues framework, which identifies the most relevant issues per sector making the connection to key value drivers that may impact the investment thesis across sectors. We have updated our ESG Material Issues framework with a sector-based view of exposures to physical and transition climate risks.

To further facilitate the integration of sustainability factors (including climate risks) into investment decisions, Asset Management has a proprietary ESG Dashboard using data sets from a variety of external ESG data providers, which generates a risk signal across several risk dimensions. This is available to investment teams via a dashboard giving a structured, holistic view of ESG risks. During 2022 we onboarded additional climate physical and transition risk datasets. We have enhanced our proprietary ESG Dashboard with this climate physical and transition risk data, and with alerts to highlight the highest risk issuers.

Nature-related risks, such as water and forest risks, are embedded in the methodologies of our underlying data sources, and our investment teams utilize these ESG factors alongside traditional financial metrics and proprietary ESG sector materiality maps to assess the risk-return profile in the investment process. In 2022, we developed an additional due diligence process that triggers a risk signal based on the presence of controversial activities that conflict with the standards in our sustainability and climate risk framework, including deforestation and forest degradation. Leveraging the risk data insights, research analysts complete a qualitative ESG risk assessment encapsulated in an ESG risk recommendation, informing portfolio manager investment decisions.

We view active ownership as an important tool to manage climate risk of issuers. Asset Management has run a dedicated climate engagement program since early 2018 focused on high emitting sectors to drive stronger integration of climate risk management into business strategies.

Asset Management’s Real Estate and Private Markets (REPM) business also incorporates physical and transition risks into its investment and ongoing management processes. We consider key transition risks using our proprietary in-house ESG Dashboard which assesses over 1,500 of our directly controlled real estate assets’ environmental performance against pathways and targets. We are in the process of refreshing our energy/emission/water/waste reduction targets with help from our sustainability consultants across the world which would apply at portfolio level, supported by individual asset-level action plans towards those targets. Our primary emission reduction

strategies focus on implementing improvement measures to minimize energy demand, improve energy efficiency, installing renewables on site where feasible and procuring green energy from third parties where on-site renewables are not sufficient. We may in the future also employ secondary carbon reduction strategies, including the purchase of energy credits to offset any residual emissions as we approach our net-zero targets.

Natural capital risks are also considered within our real estate and private market investments. We enrolled in the Leading Harvest ESG Management Program. This is a comprehensive set of ESG standards for farm management, with 13 principals and objectives, 33 performance measures and 77 indicators. Compliance is evaluated by independent auditors. One of the 33 performance measures is to use an integrated pest management (IPM) system that utilizes regional best practices to achieve the crop protection objective while also protecting people and the environment.

› **Refer to ubs.com/global/en/assetmanagement/capabilities/sustainable-investing/stewardship-engagement for our approach to stewardship**

On the physical risk side, for our direct investments in real estate, we use a third-party location risk intelligence tool to analyze asset-level physical risk. We use another third-party data provider to inform our assessment of physical risk in our indirect real estate investments. Based on each investment's specific location, these tools allow REPM to identify each asset's potential physical risks under a variety of climate change scenarios and timelines.

During 2022, REPM analyzed its direct real estate assets using the location risk intelligence tool. In 2023, we plan to incorporate these physical risk results for all our GRESB-participating direct real estate funds into our proprietary ESG Dashboard that already considers our transition risk data. This next step will establish a composite physical risk score for each asset which will help us to identify the highest risk assets as a priority for further analysis and assessment. It will also enable us to generate a risk profile for each portfolio based on the risk profile of its underlying assets. Currently we are performing physical risk screening prior to the acquisition of any asset, and annually for assets where we are currently invested. Our purpose is to use information from our dashboard and third-party providers to develop physical climate risk mitigation plans, where needed, for existing real estate assets and new acquisitions. In our indirect real estate activities, we will similarly use third-party data to identify key engagement focus areas in our underlying fund holdings.

As part of the second line of defence controls performed by Group Risk Control, we integrate climate risk in the risk control and monitoring process of Asset Management portfolios. We have developed a risk control dashboard to identify, assess and monitor climate risks. Among other sustainability risk metrics such as ESG scores and risk ratings, the dashboard allows us to monitor the weighted average carbon intensity of portfolios against their respective benchmarks. Through this dashboard, Risk Control provides internal reporting of sustainability risk exposures for further assessment and escalation.

› **Refer to the "Appendix 3 – Risk management" section of this report for more information on our environmental risk analysis for Hong Kong and Singapore**

Our approach in Global Wealth Management



The majority of our discretionary portfolios comprises of investment funds from third-party fund managers and Asset Management where appropriate. Generally, Global Wealth Management acts as an asset allocator and manager of these portfolios but does not control portfolio construction and management within the underlying fund investment solutions. To that end, in the past we engaged with fund partners about climate risk issues, including discussions on readiness with relevance to net-zero commitments and the TCFD. We commit to engage in regular dialogue with our fund partners to ensure that industry best practices are being followed on behalf of our clients and stakeholders.

› **Refer to the "Appendix 3 – Risk management" section of this report for a more detailed discussion of our climate risk assessment as applied to discretionary portfolios managed in Singapore**

Metrics and targets

Overview

Our aspirational goals and progress

Our priorities	Our aspirational goals	Our progress in 2022
Planet, people, partnerships	USD 400 billion invested assets in sustainable investments by 2025.	Increased invested assets in sustainable investments to USD 268 billion (compared with USD 251 billion in 2021).
Planet 	Decarbonization targets for 2030 for financing of the real estate, fossil fuels, power generation and cement sectors (from 2020 levels): <ul style="list-style-type: none"> – reduce emissions intensity of UBS’s residential real estate lending portfolio by 42%; – reduce emissions intensity of UBS’s commercial real estate lending portfolio by 44%; – reduce absolute financed emissions associated with UBS loans to fossil fuel companies by 71%; – reduce emissions intensity associated with UBS loans to power generation companies by 49%; and – reduce emissions intensity associated with UBS loans to cement companies by 15%. 	Calculated progress against pathways for the real estate (commercial and residential), fossil fuel and power generation sectors: ¹ <ul style="list-style-type: none"> – reduced emissions intensity of UBS’s residential real estate lending portfolio by 8% (end of 2021 vs 2020 baseline); – reduced emissions intensity of UBS’s commercial real estate lending portfolio by 7% (end of 2021 vs 2020 baseline); – reduced absolute financed emissions associated with UBS loans to fossil fuel companies by 42% (end of 2021 vs 2020 baseline); and – reduced emissions intensity associated with UBS loans to power generation companies by 12% (end of 2021 vs 2020 baseline). Introduction of an additional decarbonization target for the cement sector, as well as an estimation of the overall financed emissions.
	Align 20% of AuM to be managed in line with net zero (Asset Management). ²	Initiated analysis of revisions to fund documentation and investment management agreements to align with Asset Management’s net-zero-aligned frameworks.
	Achieve net-zero emissions across discretionary client portfolios by 2050 (Asset Management). ³	
	Achieve net-zero energy emissions resulting from our own operations (scopes 1 and 2) by 2025; cut energy consumption by 15% by 2025 (compared with 2020).	Reduced net GHG footprint for scope 1 and 2 emissions by 13% and energy consumption by 8% (compared with 2021); continued implementation of the replacement of fossil fuel heating systems and investing in credible carbon removal projects; achieved 99% renewable electricity coverage despite challenging market conditions.
	Offset historical emissions back to the year 2000 by sourcing carbon offsets (by year-end 2021) and by offsetting credit delivery and full retirement in registry (by year-end 2025).	Continued to follow up on credit delivery and retirement of sourced portfolio.
Engage with key vendors on aiming for net zero by 2035.	Identified “GHG key vendors” (vendors that collectively account for >50% of our estimated vendor GHG emissions) and invited the vendors that accounted for 67% of our annual vendor spend (including all GHG key vendors) to disclose their environmental performance through CDP’s Supply Chain Program, with 66% of the invited vendors completing their disclosures in the CDP platform.	
Partnerships 	Establish UBS as a leading facilitator of discussion, debate and idea generation.	Co-organized, with the Institute of International Finance, the first Wolfsberg Forum for Sustainable Finance. Joined a consortium that is pioneering methods of assessing and maximizing the GHG reduction potential of energy storage. Co-founded Carbonplace, a technology platform for the voluntary carbon market that has the goal of creating a streamlined and transparent market for our clients.
	Drive standards, research and development, and product development.	Co-led the Taskforce on Nature-related Financial Disclosures’ financial-sector-specific working group. Collaboration with two Swiss companies that are pioneering innovative carbon removal technologies. Joined the Partnership for Carbon Accounting Financials (PCAF).

¹ Refer to the “Metrics and targets” section of this report for further information. The inherent one-year time lag between the as-of date of our lending exposure and the as-of date of emissions can be explained by two factors: corporates disclose their emissions in annual reporting only a few months after the end of a financial year; and specialized third-party data providers take up to nine months to collect disclosed data and make it available to data users. Consequently, the baselines for our net-zero ambitions are based on year-end 2020 lending exposure and 2019 emissions data. Our 2021 emissions actuals are based on year-end 2021 lending exposure and 2020 emissions data. ² The 20% alignment goal amounted to USD 235 billion at the time of Asset Management’s commitment in 2021. By 2030, the weighted average carbon intensity of funds is to be 50% below the carbon intensity of the respective 2019 benchmark. ³ The near- and medium-term plans for the achievement of this goal include our Asset Management business division only.

Cautionary note: We have developed methodologies we use to set our climate-related targets and identify climate-related risks and which underly the metrics that are disclosed in this report. Standard-setting organizations and regulators continue to provide new or revised guidance and standards, as well as new or enhanced regulatory requirements for climate disclosures. Our disclosed metrics are based upon data available to us, including estimates and approximations where actual or specific data is not available. We intend to update our disclosures to comply with new guidance and regulatory requirements as they become applicable to UBS. Such updates may result in revisions to our disclosed metrics, our methodologies and related disclosures, which may be substantial, as well as changes to the metrics we disclose.

Key sustainable finance figures

As of 31 December 2022, UBS's SI AuM were USD 268 billion, compared with USD 251 billion at year-end 2021. This represents an increase of 6.5% year on year. SI AuM account for 6.8% of UBS's total invested AuM at year-end 2022, compared with 5.5% at year-end 2021.

Sustainable investments

USD billion, except where indicated	For the year ended			% change from 31.12.21
	31.12.22	31.12.21	31.12.20	
Sustainable investments¹				
Sustainability focus ²	246.9	222.7	127.7	10.9
Impact investing ³	20.7	28.5	13.1	(27.4)
Total sustainable investments^{4,5}	267.6	251.2	140.8	6.5
SI proportion of total invested assets (%)	6.8	5.5	3.4	
UBS total invested assets	3,957.2	4,596.2	4,187.2	(13.9)

¹ We focus our sustainable investment reporting on those investment strategies exhibiting an explicit sustainability intention. ² Strategies that have explicit sustainable intentions or objectives that drive the strategy. Underlying investments may contribute to positive sustainability outcomes through products / services / use of proceeds. Examples include Global Wealth Management's discretionary Manage SI mandate solutions and Asset Management's strategies such as its Global Sustainable Equities product. ³ Strategies that have explicit intentions of generating measurable, verifiable and positive sustainability outcomes. Impact generated is attributable to investor action and/or contributions. Examples include Global Wealth Management's Oncology Impact funds and Asset Management's UBS Engage for Impact or UBS Climate Action funds. ⁴ In 2022, UBS converted funds to the sustainability focus and impact investing categories, in line with corresponding changes to the funds' underlying investment policies. The main impact was on sustainability focus and impact investing strategies in Asset Management of USD 33 billion. Further, we aligned the Global Wealth Management and Personal & Corporate Banking reporting of UBS funds and mandates products to the Asset Management categorization with an impact on sustainable investments of USD 20 billion. ⁵ In 2022, methodology changes related to the application of the Group SI Framework resulted in a decrease in invested assets of USD 10 billion across total sustainable investments.

Key climate- and nature-related achievements

Key thematic areas	Progress in 2022
Governance and strategy	<ul style="list-style-type: none"> Established the Sustainability and Climate Task Force to steer our firm's efforts on climate. Established the Nature Working Group to explore and advance on our firm's nature agenda. Oversaw climate and nature strategy and activities at the highest level of our firm. Continued assignment of environmental, social and governance (ESG)-related goals for all GEB members. Formulated the UBS transition plan to support our own transition and that of our counterparties.
Risk management	<ul style="list-style-type: none"> Further advanced our transition risk and physical risk heatmap methodologies to inform our climate risk management. Engaged with 141 companies on climate. Voted upon climate-related resolutions at 160 companies. Enhanced the UBS climate materiality assessment that maps out material climate-related risks and opportunities.
Metrics and targets	<ul style="list-style-type: none"> Set net-zero target for 2030 for lending to the cement sector. Made progress on the net-zero targets set in 2021 for lending to the fossil fuels, power generation and real estate sectors. Reduced net GHG footprint for scope 1 and 2 emissions by 13%.
External recognition	<ul style="list-style-type: none"> Awarded top ratings and rankings by industry experts: CDP: Climate A List; S&P Global's Dow Jones Sustainability Index: 99% percentile ranking in the environmental dimension; GARP: providing leading practice in climate risk management.

Our climate and nature-related metrics

Evolving our climate-related metrics

We have developed methodologies that we use to set our climate-related targets and identify climate-related risks. These methodologies underly the metrics that are disclosed in this report. Standard-setting organizations and regulators continue to provide new or revised guidance and standards, as well as new or enhanced regulatory requirements for climate disclosures. Our disclosed metrics are based upon data available to us, including estimates and approximations where actual or specific data is not available. We intend to update our disclosures to comply with new guidance and regulatory requirements as they become applicable to UBS. Such updates may result in revisions to our disclosed metrics, our methodologies and related disclosures, which may be substantial, as well as changes to the metrics we disclose.

Our climate targets and ambitions are high level goals that have been set based on the methodologies, data and assumptions that we currently use. Changes to these methodologies, data and assumptions may affect our progress toward intermediate targets and ambitions and the achievability of net zero and other climate goals. Our 2050 net-zero targets, and related ambitions for scope 3 emissions, have a critical dependency on overall progress across all sectors and countries towards net-zero carbon emissions which requires substantial governmental action across many jurisdictions. In the absence of such progress, our goals with respect to scope 3 emissions will not be achievable.

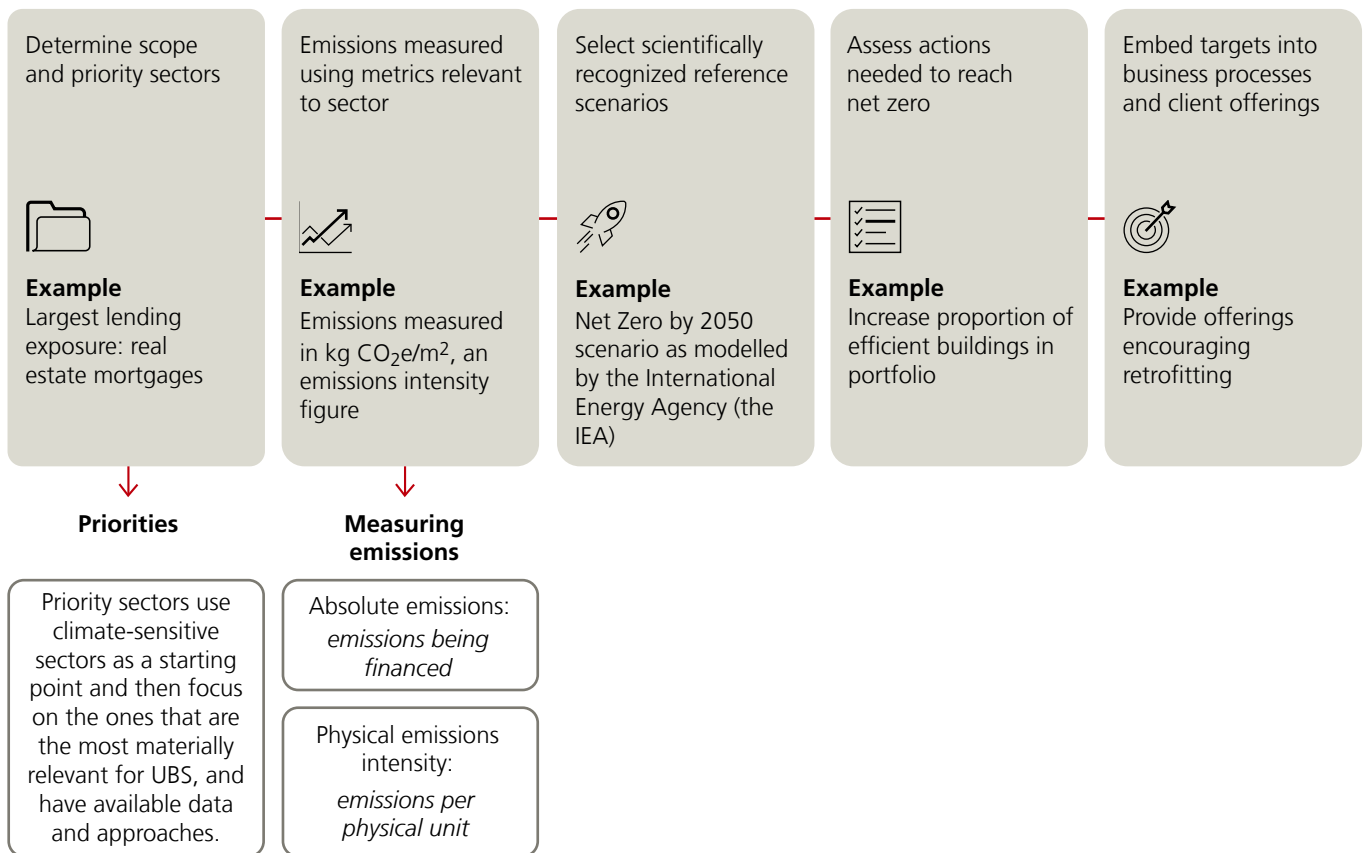
Supporting the net-zero goals of our financing clients

Conscious of the potential adverse financial, liability and reputational risks that can arise from sustainability and climate risks, in 2021 we published our ambition to align our financing portfolio with the objectives of the Paris Agreement. In our analysis, we prioritized sectors that have the highest carbon impact, as per the guidelines of the Net-Zero Banking Alliance (the NZBA), and also applied additional considerations in our prioritization. These include the materiality of the sectors in terms of financial exposure and the availability of data and applicable methodologies in order to estimate baselines and develop pathways toward the goal of net zero. We then set targets for residential and commercial real estate, fossil fuels, and power generation and disclosed these in our Sustainability Report 2021. In 2022, we added a target for cement and also performed additional analysis to establish transparency around the contribution that each sector in our portfolio makes to the total financed emissions associated with our lending portfolio.

The exposure of our lending portfolio to the most carbon-intensive sectors is low relative to that of our peers¹. In addition, the bulk of the exposure in several of these sectors is to parts of the value chain that are not currently in the focus of net-zero target-setting standards. In this way, we mitigate risks while supporting clients preparing for a low-carbon future. We will continue to manage and monitor our climate-related risks and our lending activities and aim to orient our new and existing business efforts toward net zero by 2050. We aim to do this by further strengthening our operating model and increasing our efforts in the field of transition and green finance. We also expect new technologies to emerge, along with policies and actions from governments, which will support the real economy in limiting warming to 1.5°C. We regard such developments as dependencies for us to contribute to meeting the goals of the Paris Agreement.

For financial market participants, net-zero alignment means drawing links between financing activities, clients' carbon emissions and the goals of the Paris Agreement. Our approach has been built upon the guidance of global standard setters such as the NZBA, the Partnership for Carbon Accounting Financials (the PCAF) and the Paris Agreement Capital Transition Assessment (PACTA).

Our approach to alignment



› Refer to the “Appendix 4 – Metrics and targets” section of this report for further information about each of these five steps

¹ Based on an internal analysis using data supplied by the European Banking Authority.

The values shown for our targets take into account the full lending commitments, i.e., outstanding loans and undrawn irrevocable commitments. This offers a more reliable way of steering our credit portfolio toward net-zero ambitions compared to one which is based solely on outstanding exposures. In line with the PCAF guidelines, we also provide data on the emissions associated with outstanding exposures only.

› Refer to the “Appendix 4 – Metrics and targets” section of this report for data on the emissions associated with outstanding exposures

We have calculated the emissions for each sector considering the respective lending portfolio as of 31 December 2020 and are also showing emissions for the portfolio as of 31 December 2021, as a first annual update. The emissions calculations generally use company data from our clients from one year prior, i.e., where available, 2020 emissions of our borrowers are used to calculate our reported emissions for our lending portfolio as of the end of 2021. As market practices evolve, industry or sector pathways are updated and more detailed client information becomes available, we will continue to refine our approach.

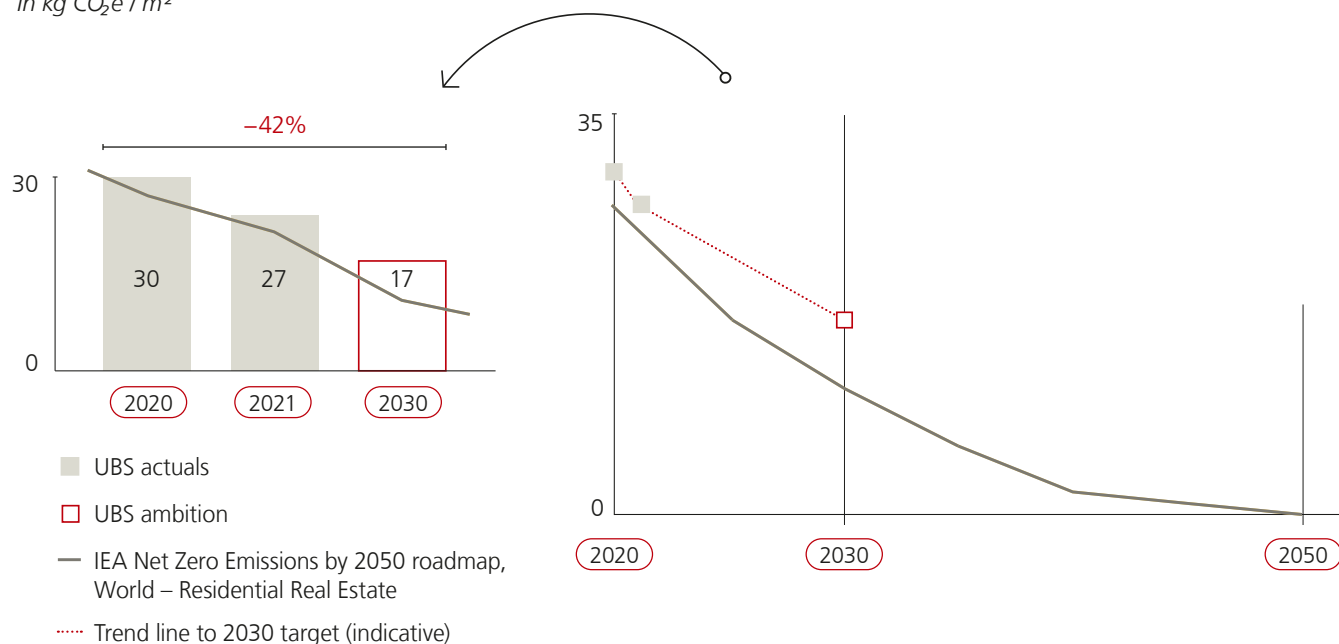
We provide updates on the sectors for which we had disclosed targets in our reporting for 2021, and an overview of our target for cement, which was set in 2022, below.

Residential real estate

UBS remains committed to reducing the emissions intensity (measured in kilograms of CO₂e per m²) for our residential real estate portfolio by 42% by 2030 (compared with 2020 levels).

Emissions intensity residential real estate lending

In kg CO₂e / m²



Our residential real estate portfolio includes mortgages for owner-occupied properties and properties rented out on a non-commercial scale. The trajectory shown covers mortgages in three countries: Switzerland, the UK and the US. Together they represent 99% of UBS’s 2022 residential mortgage loans, with Switzerland accounting for the largest share. Scope 1 and 2 emissions (for example, direct emissions from buildings and indirect emissions of purchased energy) are included, while other emissions in the value chain, such as those related to original construction, are not.

Given client demand, we are expanding our mortgage offering to include new products and services for homeowners seeking to retrofit their properties and make them more energy efficient. For example, in 2022 we launched *UBS Mortgage Energy* in the Swiss market.¹

› Refer to the “Strategy” section of this report for more information about sustainable finance products and services

¹ In December of 2022, UBS adopted guidelines providing an internal global standard for all our products in the categories of sustainable lending, sustainable bonds and GHG emissions trading. During the course of 2023, UBS expects to (re-)assess all its products against these guidelines.

Our proposed targets can, however, only be achieved if governments also support the decarbonization of real estate, for example by incentivizing improved property efficiency and the use of non-fossil fuel heating systems. It is partly because of this dependency that our emissions trajectory is at present above the International Energy Agency (the IEA) Net Zero by 2050 roadmap. We will consider readjusting our reduction pathway to align with new data or developments as they become available.

Currently, different governments are acting at different speeds on decarbonization. This affects the rate at which overall emissions will fall. The reduction in emissions recorded in 2021 is largely attributable to improvements made to the energy efficiency of properties in Switzerland.

UBS hopes to contribute to this reduction by enhancing our mortgage offering, for example by offering products for financing energy-efficient properties, as well as establishing partnerships with real estate specialists outside the financial industry to help our clients with their renovations.

In parallel, during 2022 the majority of UBS’s mortgage client advisors in Switzerland were trained to raise awareness of the advantages and possibilities of refurbishment.

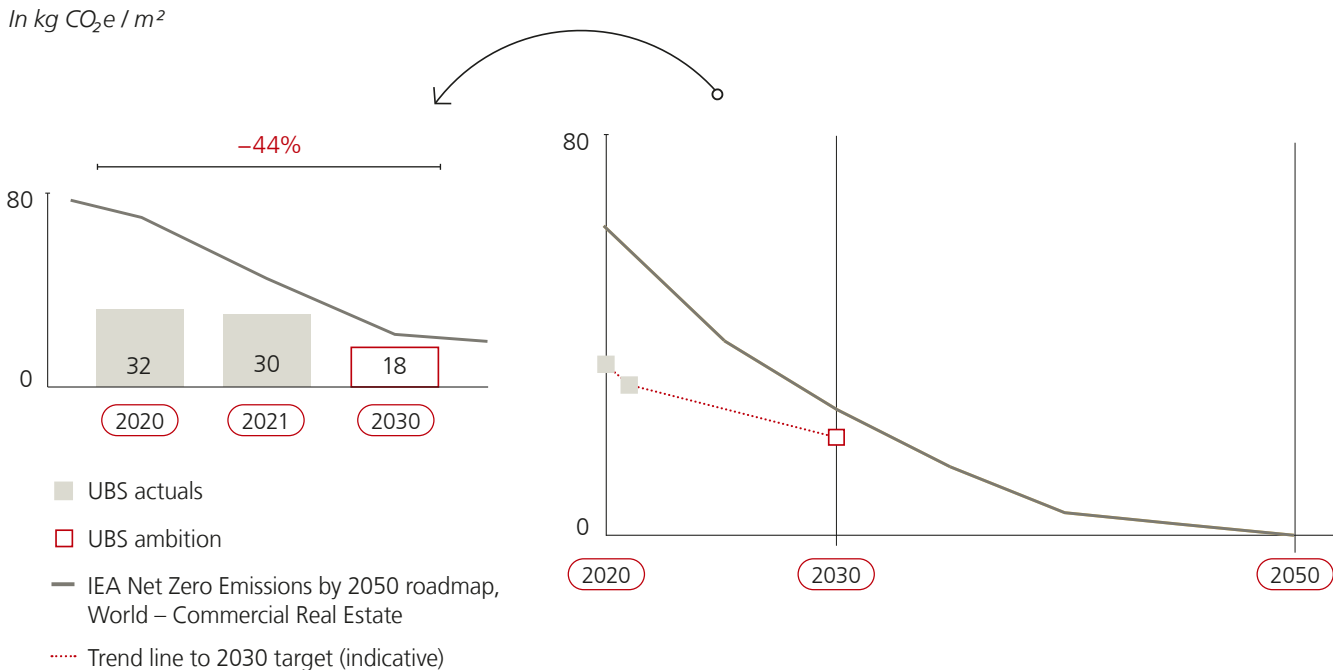
In jurisdictions where energy ratings for residential housing are widely available, further emissions reductions measures can be considered. For example, differentiated mortgage offerings can be offered based on a property’s energy efficiency. We provide this option in the UK, where new mortgages or renewals are now contingent either on a governmental Energy Performance Certificate of A–E (on a scale of A–G) or evidence of plans to attain such ratings.

By contrast, the availability of standardized data on emissions characteristics of residential properties remains very limited in the US. Currently, our estimates for this region are based on statistical data at the state level. We are exploring emerging data sources with greater geographic detail on emissions. We also continue to engage with industry associations and other banks to promote the availability of enhanced data more generally.

Commercial real estate

UBS remains committed to reducing the emissions intensity for our commercial real estate portfolio by 44% by 2030 (compared with 2020 levels).

Emissions intensity commercial real estate lending



Our commercial real estate book includes loans that finance rented-out properties in multi-family homes; and any other income-producing real estate. Switzerland accounts for the majority of the lending, with a smaller share in

the US. As for residential real estate, we include scope 1 and 2 emissions. We base the reduction pathway on our assumptions regarding real estate market developments in combination with our offering, e.g., related to energy-efficient buildings and renovations, as well as actions by governmental bodies.

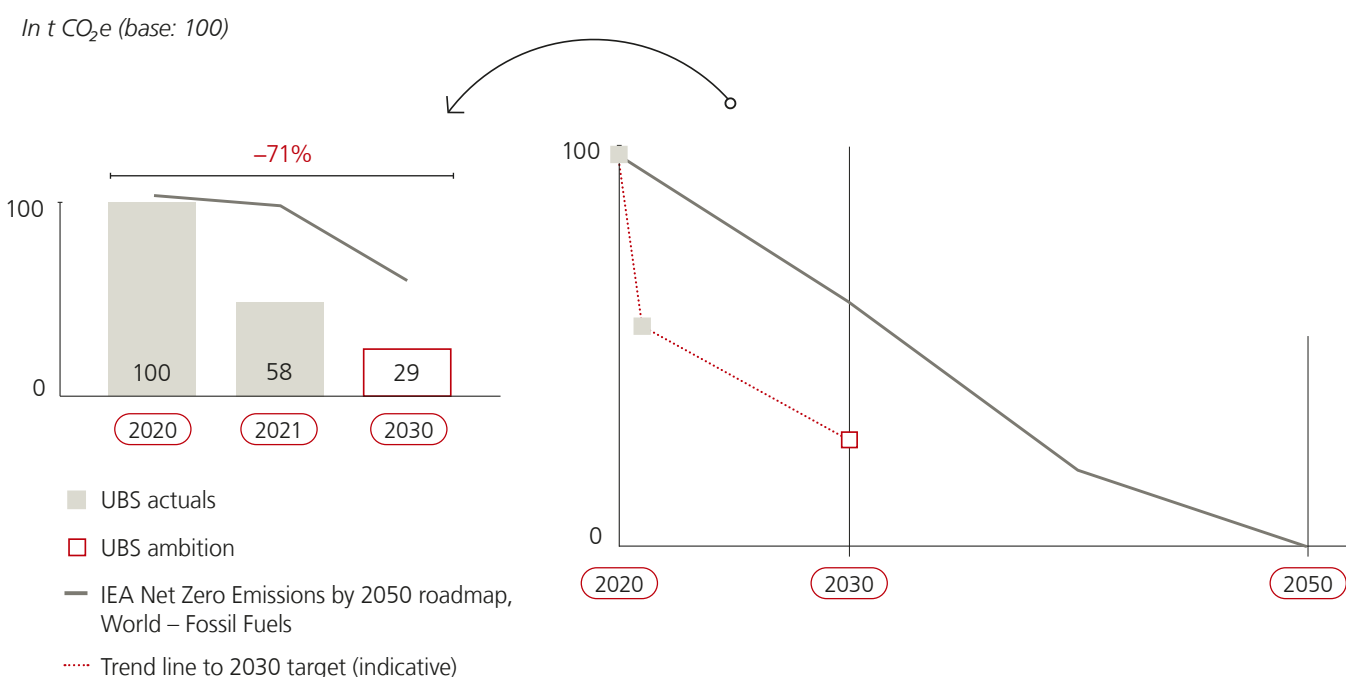
For our Swiss commercial real estate business, new products and services have been developed to support more energy-efficient properties, similar to those for our residential real estate clients. Our client advisors are pivotal in helping clients along this path. That is why we focus on making them aware of sustainability topics and training them on how to advise our clients in the best way possible. In the US, similar observations apply as for residential real estate, with one technical distinction: emissions for commercial real estate are based on statistical values for different building types, rather than on state-level proxies.

Given the importance of data for steering emissions reductions across commercial and residential real estate, efforts to improve data quality will continue in all regions where we finance properties. Periodic adjustments or restatements in future reporting are therefore likely.

Fossil fuels

UBS remains committed to reducing the absolute financed emissions associated with loans to oil and gas companies by 71% by 2030, compared with 2020 levels.

Absolute emissions fossil fuels lending



Our target-setting for this sector is guided by the IEA Net Zero by 2050 scenario. In 2021, more than 85% of our total loan exposure was to clients that have themselves committed to net zero and stated their commitment to achieve the Paris Agreement 1.5°C goals. We continually engage with our clients to support their net-zero transition and offer them our sustainable financing solutions at their choosing, such as loans for which certain aspects (e.g., loan margin) are tied to the achieving of their overall company emission reduction targets. We also provided lending in 2021 to a client to fund the ongoing carbon capture usage and storage (CCUS) conversion of an asset, enabling the client to create carbon capture credits.

› Refer to the “Strategy” section of this report for more information about our sustainable finance products and services

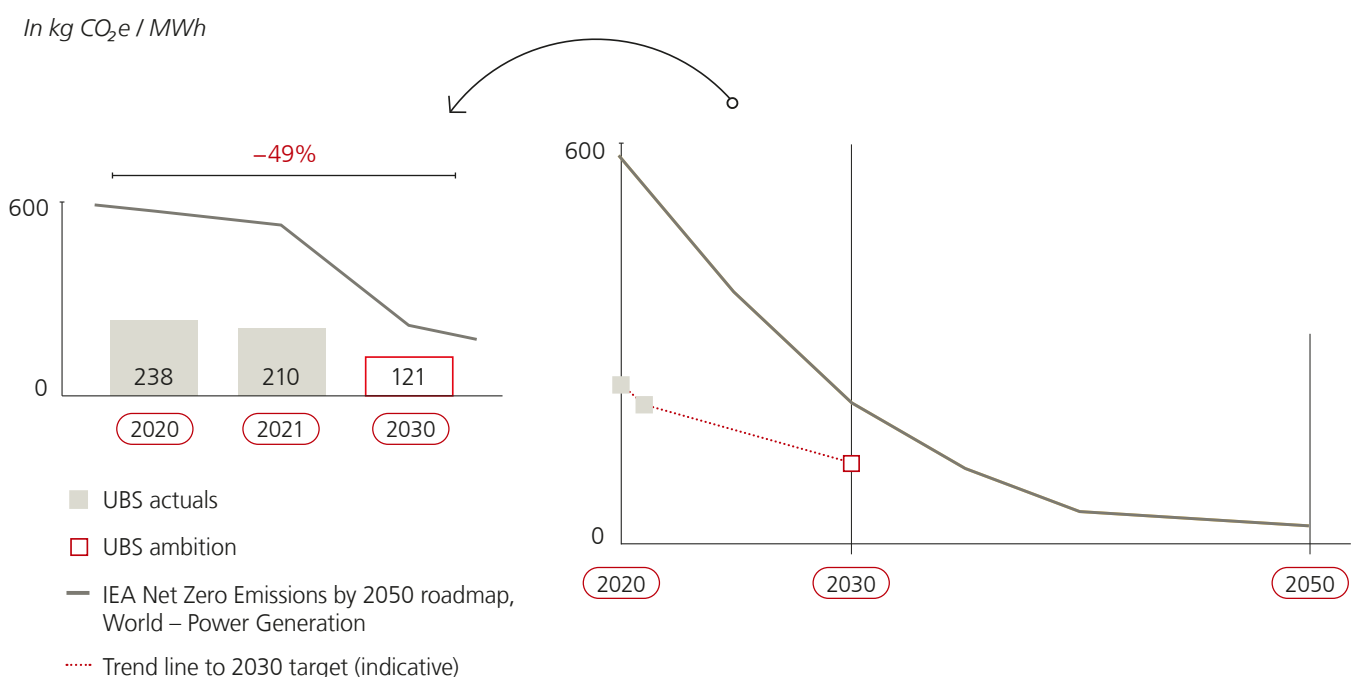
Given the risks associated with climate change and the changing market demand for fossil fuels, we regularly screen fossil fuel-related transactions against our corporate guidelines, and our lending aims to support companies in their transition journeys. Our baseline and target for fossil fuels include scope 1, 2 and 3 emissions. Scope 3 emissions are associated with the combustion of fossil fuels and contribute to the majority of emissions within this sector. For this sector, we have decided to track our progress with an absolute emission metric. As absolute emission metrics are more sensitive to data quality improvements over time, we have decided to index our baseline and target to 100 in order to avoid frequent subsequent restatements.

Our assessment of the fossil fuel sector includes exploration, production and refinery activities, as well as integrated companies operating across the value chain. Our baseline and target exclude activities such as transportation, retailing and trading. Scope 3 emissions measurement methods are yet to be developed for these activities, including in the context of commodity trade finance (CTF). We continue to pay close attention to the development of emissions measurement standards for these areas. We will assess the adoption of standards if applicable, and if they are of sufficient maturity. To ensure progress on emissions reductions in the area of CTF, we have established an internal approach based on the mix of commodities traded. Increasingly, our CTF business aims to be focused on less carbon-intensive or circular-economy commodities, for example, biofuels.

Power generation

We remain committed to reducing the emissions intensity associated with lending to power generation companies by 49% by 2030 (compared with 2020 levels), taking into account scope 1, 2 and 3 emissions.

Emissions intensity power generation lending



Scope 1 emissions account for the majority of emissions from the power generation sector. The intensity metric (kg CO₂e/MWh) monitors emissions related to the production of electricity and promotes the transition toward an increasing share of renewable energy sources.

We have decided to consider scope 1, 2, and 3 emissions. Our baseline and pathway include CO₂e emissions resulting from electricity production. Activities related to the transmission and trading of electricity are not included in our baseline and target.

Our lending to this sector is focused on companies with a considerable share of renewable energy production or a diversified production mix. This high share of renewable energy production, particularly in our home market of Switzerland, has led to our emissions intensity being below the IEA benchmark. An increasing number of clients have themselves committed to net-zero objectives, some of which with accelerated interim targets to achieve net zero by 2040 or 2045. We will continue to support the transition of our clients, while at the same time also facilitating energy supply.

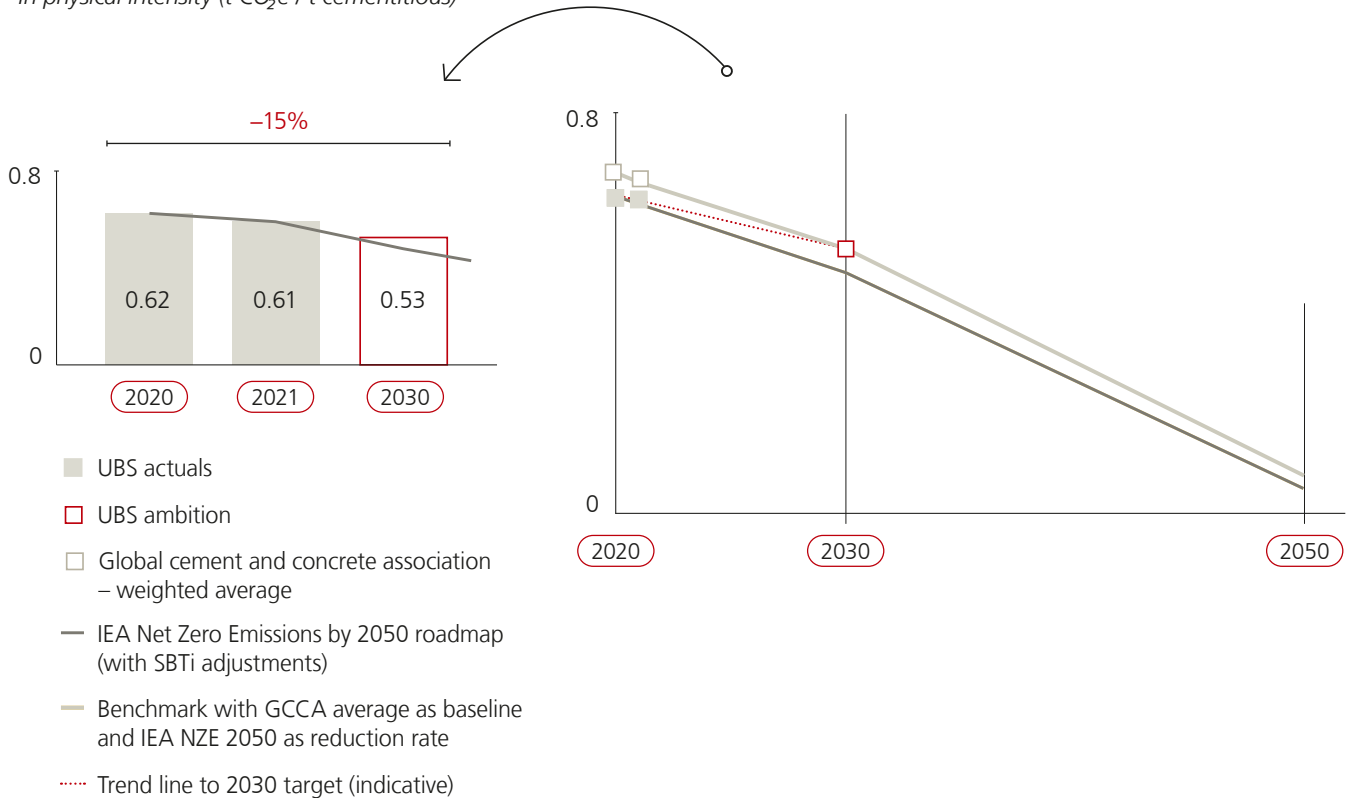
› Refer to the “Strategy” section of this report for more information about our sustainable finance products and services

Cement

In 2022, we committed to reducing the emissions intensity associated with lending to cement companies by 15% by 2030 (compared with 2020 levels), taking into account scope 1 and 2 emissions.

Emissions intensity cement lending

In physical intensity (t CO₂e / t cementitious)



Based on an analysis performed in 2022, we have introduced a net-zero target to reduce scope 1 and 2 emissions for cement by 15% by 2030.

Cement is a priority sector for the NZBA, accounting for approximately 7% of global GHG emissions.² At the same time, cement is recognized as a sector for which emissions have proven particularly hard to reduce. This explains why benchmark emissions scenarios for this sector assume that most of the emissions reductions will need to take place in the longer term, with a significant dependency on technological innovation for the decarbonization to materialize by 2050.

The technical challenges to reduction become evident when observing the evolution of actual emissions for the cement industry compared with the scenarios of the IEA. The scenarios originally established projected a decrease of emissions from 2015 to 2020. In fact, industry actuals ended up rising, partly due to increased real estate demand in regions with less efficient producers. Considering this higher point of departure for 2020, we have established our target pathway for this sector based on the rate of reduction projected by the IEA, but applied to a starting point reflecting the actual industry average for 2020.

Regarding our lending exposure to this sector, we have a relatively small book (USD 0.5 billion in total gross exposure in 2022), with a material share of the exposures concentrated on a small number of clients. We believe our main clients in the cement industry are best in class in terms of ESG disclosures and externally verified emissions reduction targets. The energy transition agenda is front of mind for these clients, driving conversations on strategic options to develop sustainable solutions for the cement industry. Our advisory teams have provided insight into markets and the thinking of investors and asset managers around cement's ESG matters. Given the stated dependency on investments in technological change, we see this sector as of particular importance for collaboration between the financial sector and the real economy.

² Based on information from the International Energy Agency Net Zero by 2050 report, available on <https://www.iea.org/reports/net-zero-by-2050>.

Net-zero targets in relation to UBS lending emissions

	2022		2021						
	Gross exposure (USD billion) ¹	Outstanding exposure (USD billion) ²	Gross exposure (USD billion) ¹	Outstanding exposure (USD billion) ²	Financed emissions, scopes 1 and 2 (mt CO ₂ e) ³	Financed emissions, scope 3 (mt CO ₂ e) ³	PCAF score, scopes 1 and 2 ⁴	PCAF score, scope 3 ⁴	Economic intensity (mt CO ₂ e / USD billion) ⁵
Exposure covered by target									
Real estate									
– Residential real estate	156.9	155.2	152.9	149.7	1.1		4		0.01
– Commercial real estate	45.5	45.0	43.6	43.1	0.4		4		0.01
Fossil fuels (coal, oil and gas) ⁵	0.5	0.0	0.7	0.1	0.1	0.4	3	4	5.10
Power generation	1.8	0.4	1.2	0.5	0.2	0.1	3	5	0.56
Cement	0.5	0.0	0.5	0.0	0.0		2		2.32
Exposure not covered by target									
Other non-financial corporate sectors	49.0	24.4	52.9	25.9	1.3	0.0	5	5	
Total non-financial corporates and real estate mortgages	254.4	225.0	251.8	219.4	3.1	0.5	4	5	
Lombard, financial services, commodity trade finance, private individuals, credit cards	195.8	163.0	207.3	179.2					
Total loans and advances to customers	450.2	388.0	459.1	398.6					

¹ Gross exposure includes total loans and advances to customers and guarantees as well as irrevocable loan commitments (within the scope of expected credit loss). ² Outstanding exposure includes total loans and advances to customers (within the scope of expected credit loss). ³ Based on outstanding exposure. Refer to section "Appendix 3 – Climate-related methodologies – lending" for details on the calculation methodologies. ⁴ PCAF scores shown represent weighted average based on outstanding exposures. ⁵ Commodity Trade Finance excluded.

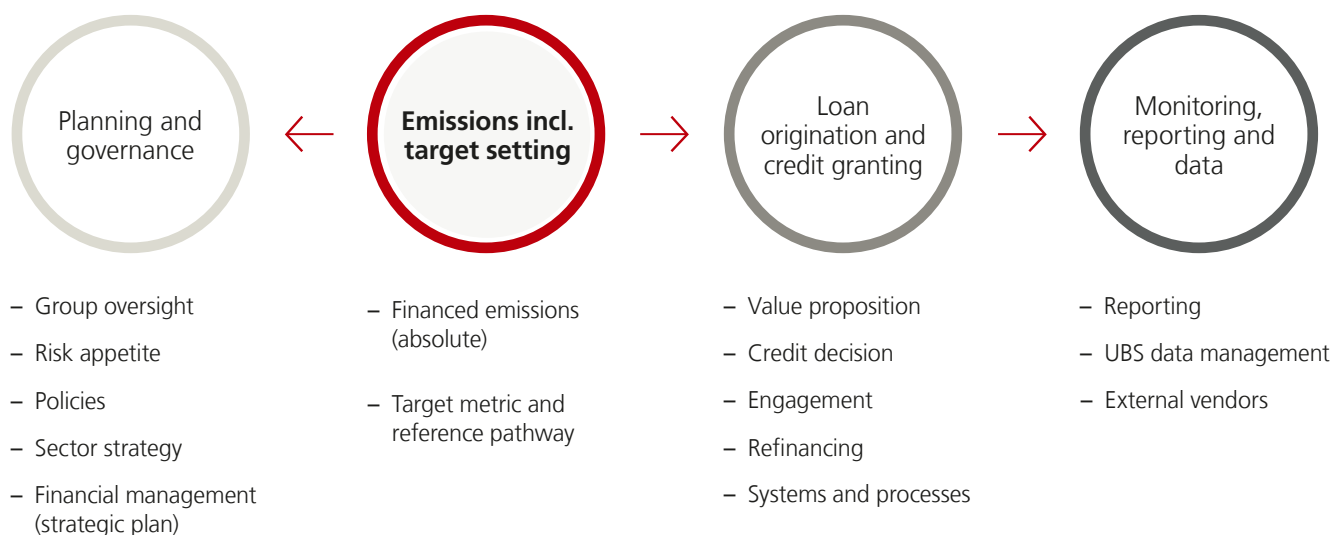
The sectors for which interim targets have been set represent USD 205.3 billion, or 46%, of the USD 450.2 billion in total gross exposure for 2022, and 81% of the USD 254.4 billion in gross exposure for which data and methodologies are available to estimate emissions. These sectors account for 2.2 metric megatons (mt) of CO₂e emissions financed, or 63% of the total financed emissions of 3.6 mt (3.1 mt for scopes 1 and 2 and 0.5 mt for scope 3). This amounts to the first approximation of our total financed emissions. We expect these numbers to be restated over time as the availability and quality of data improve.

A significant share of the remaining 37% of our estimated total financed emissions relates to lending to sectors outside of the NZBA's current scope. As further discussed in Supplement 3, "Climate-related methodologies," the gross exposure for the remaining sectors in the NZBA's current scope (transportation, aluminum, steel and agriculture) is USD 5.5 billion. However, only USD 0.7 billion of that total is to parts of the value chain currently addressed by net-zero target-setting approaches (e.g., PACTA for Banks and the World Business Council for Sustainable Development). Parts of the value chain that are not within the scope of these methodologies are considered to have less decision-making power or capacity to reduce carbon emissions. In addition, physical emission intensity metrics are often not relevant for these parts of the value chain. As a result, the potential for setting meaningful net-zero targets for lending to further sectors is at present limited.

› Refer to the "Appendix 4 – Metrics and targets" section of this report for further details about the above statements and calculations

As can be seen in the table above, a significant share of our gross exposure (USD 195.8 billion) is to areas such as Lombard, financial services firms and CTF. Guidelines and methodologies for all of these areas have yet to be developed. We are evaluating methodological options for assessing Lombard loans from a sustainability perspective.

Building blocks of the sustainable lending operating model



Supporting the net-zero goals of our investing clients

Asset Management

In 2020, our Asset Management business division became a founding member of the Net Zero Asset Managers initiative (the NZAMI) and published its net-zero interim target, committing to align 20% of total assets under management (AuM) to be managed in line with net zero by 2030.¹

During 2022 we made progress across the foundational pillars required to deliver on this target. This included enhanced data sourcing and governance, developing asset-class-specific net-zero-aligned frameworks, and extending our long-standing climate engagement program. During 2023, we intend to implement revisions to fund documentation and investment management agreements to align with our net-zero-aligned frameworks. We also aim to launch our corporate engagement program on natural capital in 2023.

› Refer to the “**Appendix 4 – Metrics and targets**” section of this report for Asset Management’s methodology for defining net-zero-aligned investment portfolios

We continue to invest in the necessary data and infrastructure to support management and monitoring of portfolios, issuer alignment and real economy decarbonization.

We recognize that approaches to achieving net zero are likely to evolve over time as data availability and quality continue to improve. Currently, our target setting is focused on carbon-intensity metrics. We draw on a wide variety of data sources to inform our assessment of climate-related risk and opportunities. Over time we expect to enhance our decarbonization approach with additional metrics, such as external verification, temperature alignment, climate solutions and scope 3 metrics.

The transition of investment portfolios will require real-economy emission reductions. We see our active ownership strategy as a powerful tool in influencing corporate behavior to achieve real-economy outcomes. We have had a dedicated climate engagement program in place since 2017 to address climate-related risks with measurable progress tracked. The program is focused on driving ambitious and credible transition strategies across portfolio holdings. Our net-zero engagement approach is underpinned by taking a sector-specific approach, extending beyond governance and targets into relevant business model objectives. We continue to set increased expectations for companies on target setting, quantified disclosures on decarbonization actions, capital deployment in line with a net-zero pathway, and progress toward stated commitments. We are also widening our engagement coverage to the highest-emitting companies across our investment universe, expanding the range of sectors and geographies.

Alongside these actions, we believe that we have an important role to play in working collaboratively with our clients on climate risk education, providing access to best practices in climate risk management, climate-related opportunities and approaches for net-zero-aligned portfolios. We also recognize that our industry still has a great deal of work to do in developing globally consistent methodologies and disclosures. We are actively participating

¹ The 20% alignment target amounted to USD 235 billion at the time of the commitment in 2021. By 2030, the weighted average carbon intensity of funds is to be 50% below the carbon intensity of the respective 2019 benchmark.

in industry initiatives and other forms of collaboration, such as the Task Force on Climate-related Disclosures (the TCFD), the development of regional best practice climate-related guidance, such as the new Swiss Climate Scores, and the IFRS International Sustainability Standards Board (the ISSB) consultation on climate standards disclosure.

Global Wealth Management

Our Global Wealth Management business division continues to work toward mainstreaming sustainable and impact investments for our private clients. We believe that material sustainability issues matter for financial performance and know that clients have an interest in many of these topics. Our Chief Investment Office (CIO) remains convinced that the net-zero transition will prove to be one of the most consequential investment trends in subsequent decades. We offer advice and solutions that help guide and implement this view to the extent possible and where relevant in line with our fiduciary duties.

In addition, we leverage our knowledge and industry partnerships to explore and develop carbon-focused offerings. This includes the private markets, where we continue to be the partner of choice for leading asset managers for their impact investing vehicles, including those that focus on climate and transition-related opportunities. In 2022, we launched a *Low Carbon Transition* module for use in our My Way offering, and we intend to offer additional modules with an explicit carbon focus.

› **Refer to the “Strategy” section of this report for more information about our sustainable finance products and services**

Reducing our direct climate impact

Our supply chain goal for 2035 is to tackle scope 3 emissions, specifically emissions from purchased goods and services, by engaging with our key vendors to reach net zero. Reaching net zero across our operations not only lowers costs, it also creates the opportunity to extend our client base by becoming the financial provider of choice for those who are working to reduce their own scope 3 emissions. As the frequency and depth of climate regulation increases, prioritizing our alignment to standards such as the TCFD also helps to reduce the risk of business disruption resulting from new climate legislation. Being in a position where we can act rather than react is, in our view, advantageous.

Reducing our environmental footprint

Environmental targets and performance in our operations

We are making good progress toward our targets. Our total net GHG emissions remained at a significantly lower level (-93%) than the baseline year (2004).

Our environmental and greenhouse gas (GHG) reporting has been prepared based on a reporting year from 1 July 2021 to 30 June 2022. This differs from UBS's financial reporting period (1 January 2022 to 31 December 2022).

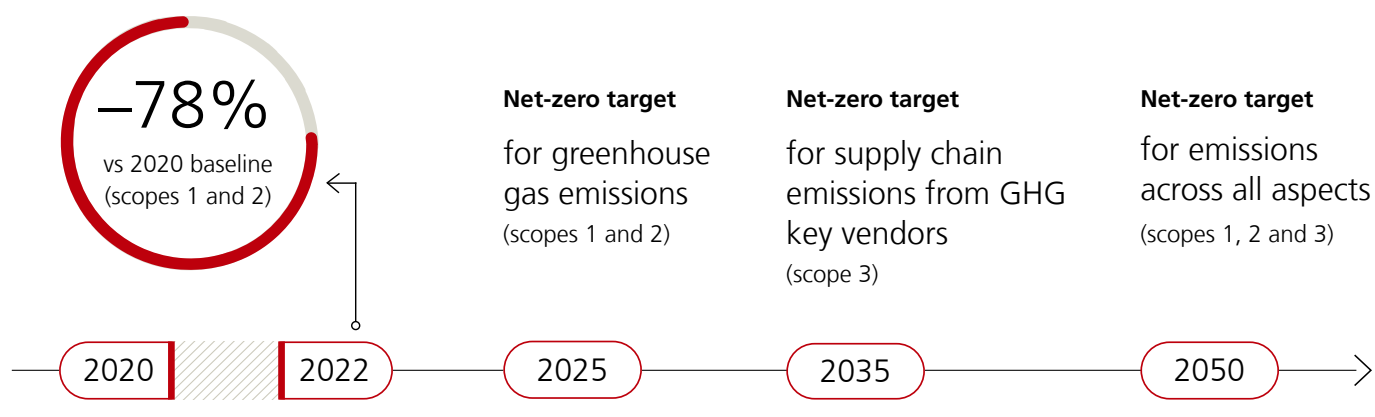
Environmental targets and performance in our operations¹

	GRI ²	2022	% target 2025	Baseline	% change from baseline	Progress / Achievement ³	2021	2020
Total net greenhouse gas emissions (GHG footprint) in t CO ₂ e ⁴	305	25,324		360,501 ⁵	(93)	green	29,936	75,110
Scope 1 and net scope 2 GHG emissions in t CO ₂ e	305	12,443	0	56,246 ⁶	(78)	green	14,300	56,246
Energy consumption in GWh	302	466	(15)	537 ⁶	(13)	green	509	537
Share of renewable electricity (%)	302	99	100	85 ^{6,7}	(1)	green	100	85
Paper consumption in kg per FTE ⁸	301	46	(50)	66 ⁶	(30)	green	50	66
Share of recycled and FSC paper (%)	301	76	100	82 ⁶	(6)	amber	80	82
Waste in kg per FTE ⁸	306	86	(10)	133 ⁶	(36)	green	92	133
Zero waste to landfill (%) ⁹	306	36	0	34 ⁶	8	amber	35	34
Waste recycling ratio (%)	306	51	60	52 ⁶	(99)	amber	52	52
Water consumption in million m ³	303	0.54	(5)	0.70 ⁶	(23)	green	0.54	0.70

Legend: CO₂e = CO₂ equivalents; FTE = full-time employee; GWh = gigawatt hour; kWh = kilowatt hour; km = kilometer; kg = kilogram; t = metric ton

¹ Detailed environmental indicators are available at ubs.com/environment. Reporting period 2022 (1 July 2021 to 30 June 2022). ² Reference to GRI Sustainability Reporting Standards (see also [globalreporting.org](https://www.globalreporting.org)). ³ Green: on track / achieved; amber: improvements required ⁴ GHG footprint equals gross GHG emissions minus GHG reductions from renewable energy and GHG offsets (gross GHG emissions include: direct GHG emissions by UBS; indirect GHG emissions associated with the generation of imported / purchased electricity (grid average emission factor), heat or steam and other indirect GHG emissions associated with business travel, paper consumption, waste disposal and upstream leased assets). ⁵ Baseline year 2004. ⁶ Baseline year 2020. ⁷ 100% renewable electricity was achieved as of July 1, 2020. Due to the environmental reporting period, the full effect of this not displayed until the 2021 reporting period. ⁸ FTEs are calculated on an average basis including contractors. ⁹ In locations where UBS has influence and where alternatives are available.

Greenhouse gas footprint – our journey to net zero



Climate strategy and GHG emissions

Our GHG footprint consists of direct (scope 1) emissions from gas, oil and fuel consumption, indirect (scope 2) emissions from electricity and district heating and other indirect emissions (scope 3) from leased assets, paper, waste and business travel. Air travel emissions have been offset since the year 2007, and we have also voluntarily purchased carbon offsets equivalent to our historical scope 1 and 2 emissions dating back to the year 2000.

We have set ambitious goals to reach net zero for scope 1 and 2 emissions by 2025. Our first priority in reaching this goal is reducing emissions at source. We are accelerating the switch from fossil fuel heating systems to heat pumps or district heating in our real estate and refurbishing our buildings to make them more energy efficient. Our second priority is ensuring that we have enough high-quality carbon removal certificates available from 2025 onward to net the residual emissions. Our focus here is on technology solutions, as we want to ensure that the captured CO₂ is permanently stored. To this end we opted in 2022 to contract more than 80,000 metric tons of carbon removal.

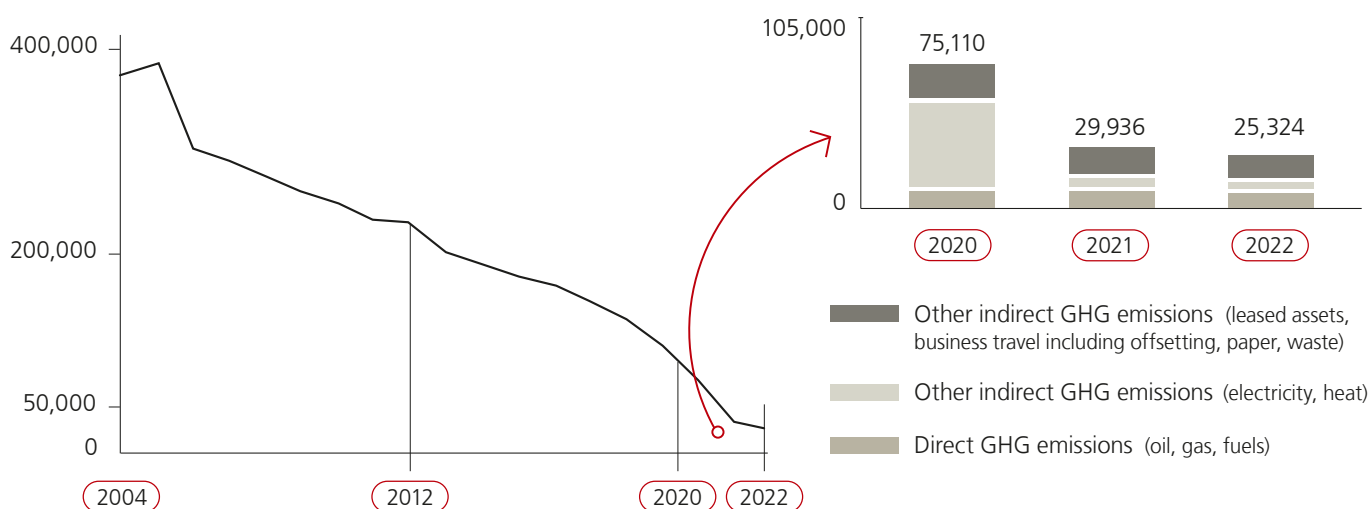
We are working with two Swiss companies, Climeworks and neustark, which are both pioneering innovative carbon removal technologies. While neustark endeavors to remove CO₂ from the atmosphere and permanently store it in

recycled concrete, Climeworks' Orca direct air capture and storage facility in Iceland captures CO₂ directly from the atmosphere and stores it underground in basalt rock for thousands of years. The solution provided by neustark is the first-ever technological carbon removal approach with a Gold Standard-approved methodology. We were also among the five companies joining the NextGen CDR Facility (NextGen) as founding buyers to scale up carbon removal technologies and catalyze the market for high-quality carbon removal.

During the transition phase to net zero by 2025, we are also purchasing carbon offsets that are equivalent to our net scope 1 and 2 emissions, as well as our scope 3 air travel emissions as part of beyond-value chain mitigation. In 2022, we supported a number of nature-based projects, which were verified against the Verra VCS standard and all achieving the additional CCB (climate, community and biodiversity) Standard. These included: Delta Blue Carbon Mangrove restoration in Sindh Province, Pakistan; Southern Cardamom REDD+ forestry protection in Cambodia and Chudu Forestry Regeneration in Xichuan County, southwest China.

UBS's greenhouse gas (GHG) footprint

In metric tons CO₂e



Sustainable real estate

Our commitment to sustainability is evident throughout our real estate footprint and the continual improvement of our sustainable real estate guidelines, a critical step in driving our locations' evolution toward achieving our long-term ambitions. We strive to align our real estate footprint with the needs of our clients, our employees and our businesses. This means rightsizing our portfolio, increasing the collaboration space and transforming our workplace as digitalization redefines the way we do business and use our space. Our buildings are built to the highest standards, as confirmed by our certification by internationally recognized green-building standards.

Total number of LEED certifications in UBS regions

UBS locations	LEED Platinum	LEED Gold	LEED Silver	LEED certified
Switzerland	1	1		
EMEA	5	2		
Americas	5	23	5	4
Asia Pacific	9	9		

› For more details on Leadership in Energy and Environmental Design (LEED) certifications refer to [usgbc.org/projects](https://www.usgbc.org/projects)

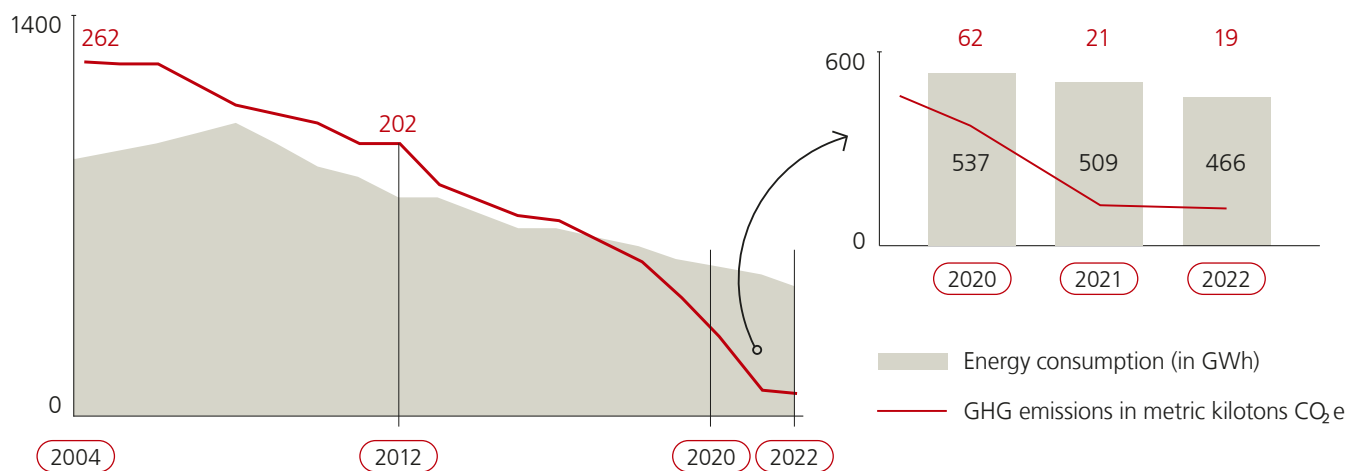
Energy consumption

In 2022, we used 466 gigawatt hours (GWh), an 8% reduction compared with 2021. Our success was mainly driven by firm-wide environmental and energy management measures and the transition to a flexible hybrid working model. To ensure successful implementation of our environmental and energy management measures, as well as for monitoring purposes, we have been externally audited and have had the accuracy of our energy reporting certified (ISO 14064:2018).

We recognize the need to reduce emissions at source and apply an "only use what you need" philosophy. Data centers account for a significant proportion of global carbon emissions. At UBS, our 14 biggest data centers account

for over 38% of our total electricity consumption. Our Sustainable Technology initiative is aimed at reducing that figure and boosting awareness of the issue among technology professionals and other stakeholders. UBS has already committed to a 15% reduction in energy consumption by 2025. A series of flagship consolidation projects will significantly contribute toward that goal.

Energy consumption and related greenhouse gas emissions



Footnote: GHG emission = Direct GHG emissions (scope 1) + Gross indirect GHG emissions (Gross scope 2) – GHG reductions from renewable electricity + GHG emissions from leased assets not included in scopes 1 and 2.

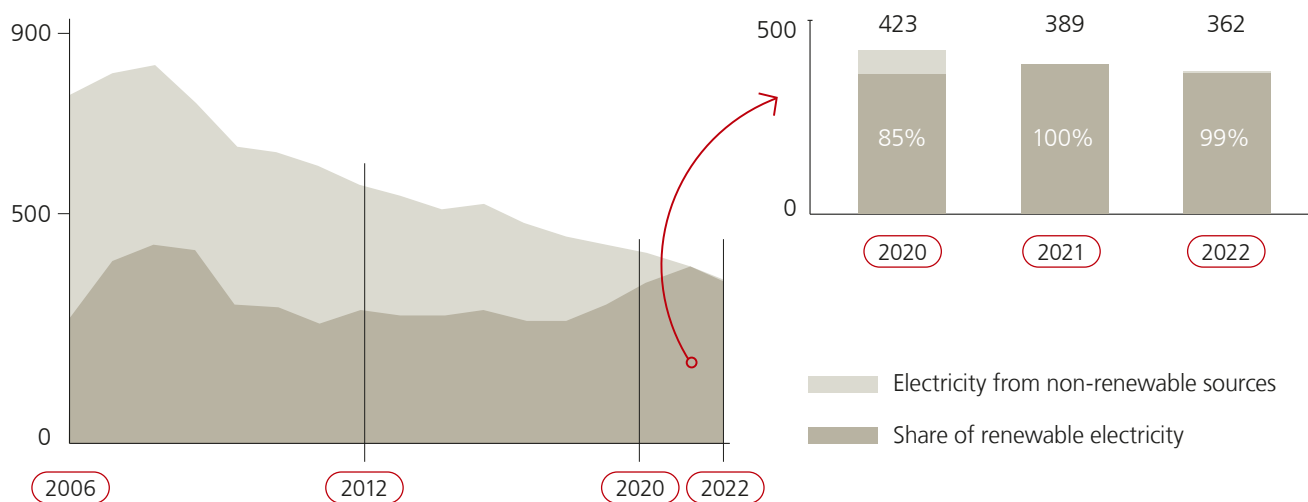
Renewable energy

Since July 2020, 100% of our electricity has come from renewable sources, leading to significant reductions in our GHG emissions. In the reporting period for 2022, we sourced 99% renewable electricity, in line with RE100, despite challenging circumstances. The remaining 1% is a result of local considerations in Qatar, with low renewable electricity production volumes combining with the unusually high demand from the 2022 men's football world cup.

We cover the majority of our consumption with renewable energy products from utilities through long-term agreements or purchase renewable energy credits (RECs). We remain committed to procuring 100% renewable electricity and wherever possible invest in on-site renewables for our strategic sites.

Electricity consumption and share of electricity from renewable sources

In GWh



Business travel and offsetting CO₂ emissions

In 2022, as expected, we saw an increase in business travel as the effects of the pandemic faded. Our commitment is to continue to put sustainability at the heart of our business travel program, and we are still 2/3s below pre-pandemic levels. Through transparent internal reporting of emissions associated with travel, targeted awareness

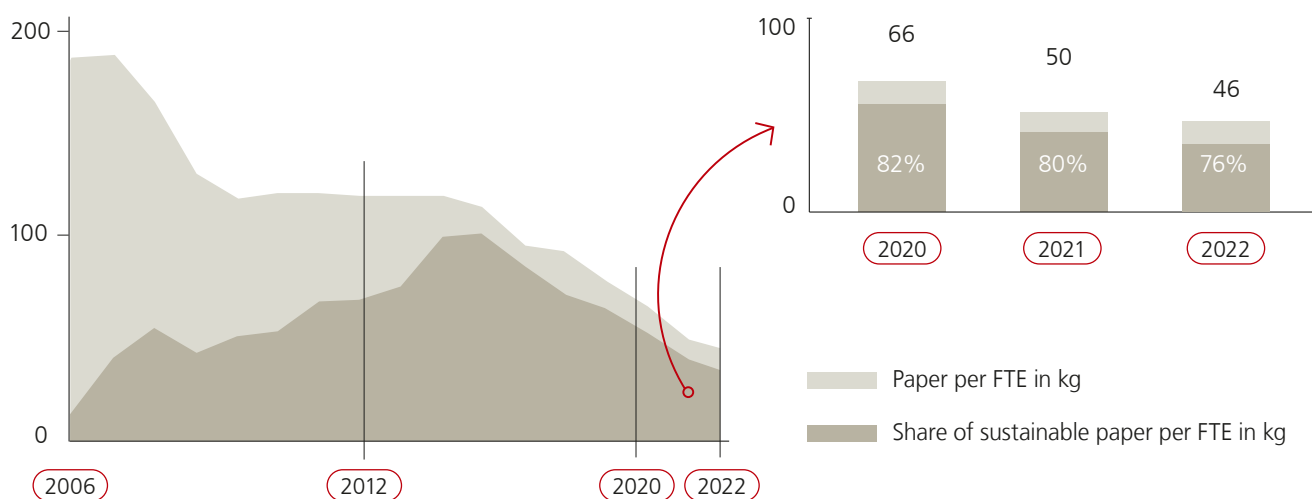
measures and offering the most sustainable travel alternatives, we work to keep the environmental impact of travel at a low level. Since 2007, we have been offsetting all of our CO₂ emissions from business air travel. In 2022, we supported a number of nature-based projects, as set out above.

Paper

We reduced our paper consumption per FTE in 2022 by 8% year on year. Our paper usage consisted of 21% copier / printer paper, 52% client output, 8% publications and the remainder being various paper products. Globally, around 77% of our paper consumption originates from recycled sources or those certified by the Forest Stewardship Council (the FSC).

Paper per FTE

In kg



Note: FTEs are calculated on an average basis including FTEs that were employed through third parties on short-term contracts.

Waste and recycling

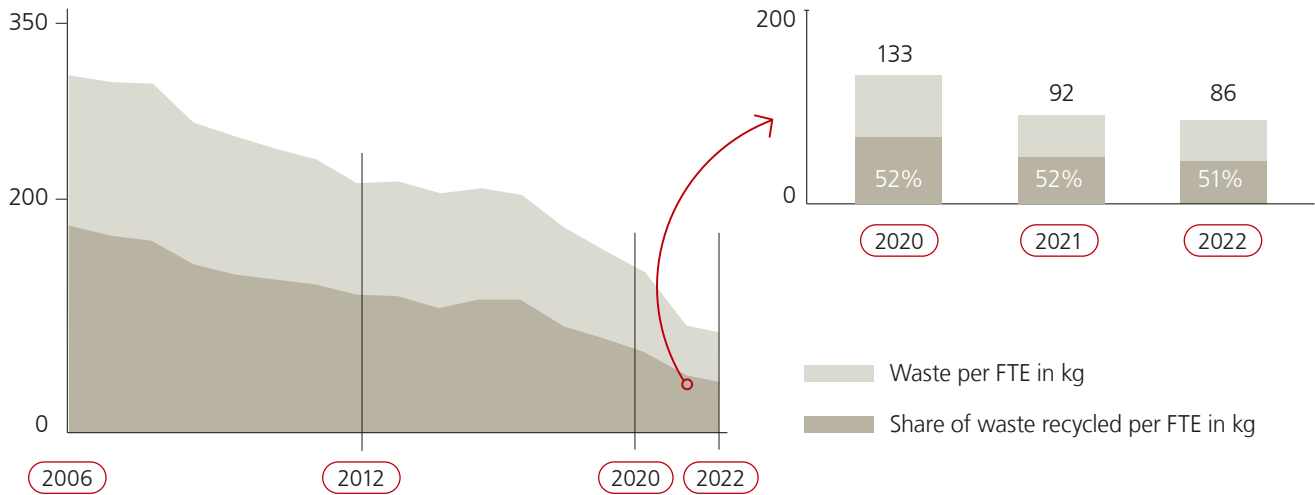
Our ongoing waste reduction activities have enabled us to reduce the amount of waste generated per FTE. The donation, recycling and resale of unwanted office furniture has been made at sites across the globe. We also target a reduction in food waste through close collaboration with our catering partners.

Zero waste to landfill

In 2022, we sent approximately 2,300 metric tons of waste to landfill globally. We are working with local teams to explore opportunities to reduce general waste volumes and divert remaining general waste from landfill, in buildings where UBS has influence and alternatives are available.

Waste per FTE

In kg



Note: FTEs are calculated on an average basis including FTEs that were employed through third parties on short-term contracts.

Water

Helping to address the global water crisis is a key focus of our environmental program. To ensure increased water efficiency in our premises, we continue the implementation of our real estate infrastructure policy. This helps us to accelerate our water savings, through measures such as rainwater collection and aerator taps.

The table below shows our environmental indicators per full-time equivalent employee, with the full table shown on the following page.

Environmental indicators per full-time employee	Unit	2022	Trend	2021	2020
Direct and intermediate energy	kWh / FTE	6,339	↘	6,922	7,596
Business travel	Pkm / FTE	1,142	↑	227	3,749
Paper consumption	kg / FTE	46	↘	50	66
Waste	kg / FTE	86	↘	92	133
Water consumption	m ³ / FTE	7.3	→	7.4	9.9
Greenhouse gas (GHG) footprint	t CO ₂ e / FTE	0.34	↓	0.41	1.06

Legend: FTE = full-time employee; kWh = kilowatt hour; Pkm = person kilometer; kg = kilogram; m³ = cubic meter; t = metric ton
 Note: FTEs are calculated on an average basis including FTEs that were employed through third parties on short-term contracts.

Environmental indicators¹

		2022 ²			2021 ²	2020 ²
		GRI ³	Absolute normalized ⁴	Trend ⁵	Absolute normalized ⁴	Absolute normalized ⁴
Environment	Total direct and intermediate energy consumption⁶	302	466 GWh	↘	509 GWh	537 GWh
	Total direct energy consumption⁷	302	44 GWh	↓	56 GWh	52 GWh
	natural gas		83.5%	→	87.6%	87.7%
	heating oil		10.9%	↑	8.7%	7.5%
	fuels (petrol, diesel, gas)		4.9%	↑	3.1%	4.0%
	renewable energy (solar power, etc.)		0.7%	↗	0.7%	0.8%
	Total intermediate energy purchased⁸	302	422 GWh	↘	453 GWh	485 GWh
	electricity		362 GWh	↘	389 GWh	423 GWh
	electricity from gas-fired power stations		0.035%	↑	0.0%	5.9%
	electricity from oil-fired power stations		0.0%	→	0.0%	1.2%
	electricity from coal-fired power stations		0.001%	↑	0.0%	7.1%
	electricity from nuclear power stations		0.0%	→	0.0%	0.6%
	electricity from hydroelectric power stations		37.1%	↓	54.3%	35.3%
	electricity from other renewable resources		62.9%	↑	45.7%	49.9%
heat (e.g., district heating)		60 GWh	↘	64 GWh	62 GWh	
Share of electricity from renewable sources	302	99.9%	→	100%	85%	
Travel	Total business travel		84 m Pkm	↑	17 m Pkm	265 m Pkm
	rail travel ⁹		5.8%	↓	13.4%	4.5%
	road travel ⁹		8.3%	↓	23.1%	4.1%
	air travel		85.8%	↑	63.5%	91.5%
	Number of flights (segments)		40,493	↑	7,498	124,426
Paper	Total paper consumption	301	3,386 t	↘	3,670 t	4,635 t
	post-consumer recycled		9.7%	↑	1.8%	15.7%
	new fibers FSC ¹⁰		66.8%	↘	77.8%	65.8%
	new fibers ECF + TCF ¹⁰		23.5%	↑	20.3%	18.4%
	new fibers chlorine-bleached		0.01%	↓	0.03%	0.03%
Waste	Total waste	306	6,313 t	↘	6,743 t	9,429 t
	valuable materials separated and recycled		50.7%	→	52.1%	52.4%
	incinerated		12.8%	→	13.3%	14.0%
	landfilled		36.5%	↗	34.6%	33.7%
	Total water consumption	303	0.54 m m³	→	0.54 m m³	0.70 m m³
Greenhouse Gas (GHG)	Direct greenhouse gas (GHG) emissions (scope 1)¹¹	305-1	8,570 t	↓	10,726 t	9,972 t
	Gross location-based energy indirect GHG emissions (scope 2)¹¹	305-2	110,470 t	↘	124,756 t	136,524 t
	GHG reductions from renewable energy ¹²		(106,597) t	↘	(121,182) t	(90,250) t
	Market-based energy indirect GHG emissions (scope 2)¹¹	305-2	3,873 t	↗	3,574 t	46,274 t
	Gross other indirect GHG emissions (gross scope 3)¹¹	305-3	23,344 t	↑	15,683 t	42,350 t
	GHG offsets (business air travel) ¹³		(10,463) t	↑	(47) t	(23,485) t
	Net other indirect GHG emissions (net scope 3)¹¹		12,882 t	↓	15,635 t	18,865 t
	Total gross GHG emissions		142,384 t	↘	151,165 t	188,846 t
Total net GHG emissions (GHG footprint)¹⁴		25,324 t	↓	29,936 t	75,110 t	

Legend: GWh = gigawatt hour; Pkm = passenger kilometer; t = metric ton; m³ = cubic meter; m = million; CO₂e = CO₂ equivalents

¹ All figures are based on the level of knowledge as of January 2023. ² Reporting period: 2022 (1 July 2021 to 30 June 2022), 2021 (1 July 2020 to 30 June 2021), 2020 (1 July 2019 to 30 June 2020). ³ Reference to GRI Sustainability Reporting Standards (see also globalreporting.org). ⁴ Non-significant discrepancies from 100% are possible due to roundings. ⁵ Trend: the respective trend is stable (I) if the variance is less than 5/10/15%, low decreasing / increasing (II, I) if it is less than 10/20/30% and decreasing / increasing if the variance is bigger than 10/20/30% (I, II). ⁶ Refers to energy consumed within the operational boundaries of UBS. ⁷ Refers to primary energy purchased that is consumed within the operational boundaries of UBS (oil, gas, fuels). ⁸ Refers to energy purchased that is produced by converting primary energy and consumed within the operational boundaries of UBS (electricity and district heating). ⁹ Rail and road travel (2020): Switzerland only, (2021; 2022) selected countries where data is available. ¹⁰ Paper produced from new fibers. FSC stands for Forest Stewardship Council, ECF for Elementary Chlorine Free and TCF for Totally Chlorine Free. ¹¹ Refers to ISO 14064 and the "GHG Protocol Corporate Standard" (ghgprotocol.org), the international standards for GHG reporting: GHG emissions reported in metric tons of CO₂e; scope 1 accounts for direct GHG emissions by UBS; scope 2 accounts for gross indirect GHG emissions associated with the generation of imported / purchased electricity (location-based reflects grid average emission factor, market-based reflects emission factors from contractual instruments), heat or steam; gross scope 3 accounts for other indirect GHG emissions associated with business travel, paper consumption and waste disposal. ¹² GHG savings by consuming electricity from renewable sources. ¹³ Offsets from third-party GHG reduction projects measured in CO₂ equivalents (CO₂e). These offsets neutralize GHG emissions from our business air travel. ¹⁴ GHG footprint equals total gross GHG emissions minus GHG reductions from renewable energy and CO₂e offsets.

Appendix

Appendix 1 – Governance

Our sustainability governance – additional information

This overview table provides summary information about key bodies governing and implementing sustainability and climate at UBS, with a particular focus on the Board of Directors (the BoD) and Group Executive Board (the GEB) levels. At the level of the business divisions (BDs) and Group Functions, dedicated management bodies consider sustainability and climate matters as applicable to the (business) focus / mandate of the respective division or function. Pertinent aspects arising from these discussions are reported into the GEB and BoD directly (or via, for example, the Sustainability and Climate Task Force).

› Refer to the “Governance” section of this report for the overarching description of our firm’s sustainability governance

Governance body	Lead and other membership information	Sustainability / climate agenda frequency	Purpose and responsibilities related to sustainability- and climate-related issues	Topics considered in 2022
BoD Corporate Culture and Responsibility Committee (the CCRC)	Chairman of UBS Group AG Permanent guests: Group CEO, Group Chief Risk Officer (the GCRO), GEB lead for sustainability and impact, Chief Sustainability Officer (the CSO), Group General Counsel	Quarterly	<ul style="list-style-type: none"> Supports the BoD in its duties to safeguard and advance the Group’s reputation for responsible and sustainable conduct. Oversees the firm’s sustainability and impact strategy and activities and approves Group-wide sustainability and impact objectives. Reviews the annual Sustainability Report and proposes it to the BoD of UBS Group AG for approval. 	<ul style="list-style-type: none"> Sustainability and impact governance, strategy, and objectives. Net-zero commitment and associated implementation steps. Climate risk program. Regulatory and governmental developments pertaining to sustainability and finance. Sustainability and climate disclosures (including external assurance thereof). Sustainable finance. Sustainability-related memberships.
BoD Risk Committee (the RC)	Non-executive director	At least semi-annually	<ul style="list-style-type: none"> Oversees and supports the BoD in fulfilling its duty to set and supervise an appropriate risk management and control framework. Considers the progress of UBS’s climate risk program, jointly with the CCRC. 	<ul style="list-style-type: none"> Regulatory and governmental developments pertaining to sustainability and finance (jointly with the CCRC). Climate risk program (jointly with the CCRC). Biodiversity (jointly with the CCRC). Human rights (jointly with the CCRC).
BoD Audit Committee (the AC)	Non-executive director	At least semi-annually	<ul style="list-style-type: none"> Provides oversight of financial reporting and internal controls over financial reporting. Provides oversight of the effectiveness of the external and internal audit functions, and the effectiveness of whistleblowing procedures. 	<ul style="list-style-type: none"> Sustainability and climate disclosures (jointly with the CCRC). ESG (environmental, social and governance) metrics and control framework.
BoD Compensation Committee	Non-executive director	Annually	<ul style="list-style-type: none"> Supports the BoD in its duties to set guidelines on compensation and benefits. Approves the total compensation for the Chairman and the non-independent BoD members. 	<ul style="list-style-type: none"> ESG in compensation.
GEB	Group CEO	At least quarterly	<ul style="list-style-type: none"> Reviews the Group’s sustainability and impact strategy and related objectives, as well as proposing strategy and objectives to the CCRC. 	<ul style="list-style-type: none"> Sustainability and impact objectives. Net-zero commitment and associated implementation steps. Climate action plan. ESG data strategy.

Governance body	Lead and other membership information	Sustainability / climate agenda frequency	Purpose and responsibilities related to sustainability- and climate-related issues	Topics considered in 2022
			<ul style="list-style-type: none"> – Signs off on divisional sustainability objectives, in alignment with the GEB Lead for Sustainability and Impact. – Ensures firm-wide execution of the firm's climate strategy, including its net-zero commitment. – Sets the overall risk appetite for the firm and resolves overarching matters relating to sustainability and climate risk (SCR). 	
Group Sustainability and Impact (GSI)	GEB Lead for Sustainability and Impact	Ongoing	<ul style="list-style-type: none"> – Led by the GEB Lead for Sustainability and Impact, who has the responsibility for driving the firm's sustainability and impact strategy, in agreement with fellow GEB members. – Supports the GEB Lead for Sustainability and Impact with carrying out her responsibilities. – Consists of the Chief Sustainability and Social Impact offices, headed by the CSO and the Head Social Impact, respectively, with the CSO responsible for driving the implementation of the Group-wide sustainability and impact strategy, and the Head Social Impact responsible for driving and implementing the firm's social impact strategy. 	<ul style="list-style-type: none"> – Implementation of sustainability and impact strategy. – Climate action plan. – Net zero. – Inclusive growth. – Nature and biodiversity. – ESG data architecture. –
Sustainability and Climate Task Force	GEB Lead for Sustainability and Impact CSO	Quarterly	<ul style="list-style-type: none"> – Oversees implementation of the Climate Action Plan, including the integration of climate-related regulation into business operations. – Oversees the Net-Zero Program, which is coordinated by the Net-Zero Steering Group. – Is supported by the Sustainability and Climate Implementation Group, which (monthly) brings together the key experts and practitioners from the business divisions and Group Functions. 	<ul style="list-style-type: none"> – Establishment and implementation orchestration of the firm's climate action plan, further integrating the TCFD recommendations and other climate-related matters throughout the Group.
Group Risk Control (GRC)	GCRO	Ongoing	<ul style="list-style-type: none"> – Develops and implements principles and an appropriate independent control framework for SCR within the firm and is responsible for its integration into the firm's overall risk management and risk appetite frameworks. – Oversees SCR activities, including the climate risk program. 	<ul style="list-style-type: none"> – Continued development of the climate risk program and the SCR policy framework.
ESG Disclosure Forum	Sustainability CFO	Every six weeks	<ul style="list-style-type: none"> – Identification, oversight and coordination of sustainability-related reporting and disclosure requirements. 	<ul style="list-style-type: none"> – Review and analysis of forthcoming / evolving sustainability disclosure regulations and their pertinence to the firm.
ESG Data and Methodology Forum	ESG Chief Data Officer (Chief Sustainability Office)	Monthly	<ul style="list-style-type: none"> – Develops and implements UBS's ESG data strategy in line with the firm's overall data strategy. 	<ul style="list-style-type: none"> – Adoption of ESG data and metrics governance. – Implementation of group-wide market data sourcing and mastering strategy. – Development of high-quality and re-usable ESG data sets. – Definition of a strategic ESG data & reporting architecture.
Sustainability and Climate Risk Program	CRO for Sustainability	Ongoing	<ul style="list-style-type: none"> – Integrates sustainability and climate risks into the firm's risk management framework and standard processes. 	<ul style="list-style-type: none"> – Further implementation of a multi-year transformation initiative to focus on delivering to regulatory expectations of climate risk into risk management and stress-testing frameworks.
Nature Working Group	Head External Engagement (Chief Sustainability Office)	Every three weeks	<ul style="list-style-type: none"> – Considers nature / biodiversity policy, regulatory and market developments. – Supports the business divisions and Group Functions in developing nature- and biodiversity-related activities. 	<ul style="list-style-type: none"> – Update of 2021 Statement on Nature. – Beta releases of the Taskforce on Nature-related Financial Disclosures.

Governance body	Lead and other membership information	Sustainability / climate agenda frequency	Purpose and responsibilities related to sustainability- and climate-related issues	Topics considered in 2022
				<ul style="list-style-type: none"> – Policy, regulatory and market developments connected to the COP 15 Biodiversity meeting.
Sustainable Finance Group	CSO Convened by Lead Sustainable Finance Group (Chief Sustainability Office)	Monthly	<ul style="list-style-type: none"> – Discusses sustainable finance activities and initiatives across the firm, bringing together key sustainable finance and investing leads from the business divisions. – Supports and orchestrates development of cross-divisional sustainable finance business initiatives, as well as enabling capabilities. 	<ul style="list-style-type: none"> – Sustainable finance market, industry and regulatory key trends and developments. – Sustainable finance business priorities 2022 and objectives 2023. – Sustainable finance product guidelines and framework. – Commercial themes and initiatives. – Sustainable finance product / solutions offering. – Sustainable finance metrics and reporting (internal / external). – Sustainability training.
Sustainability Advisory Group	CSO Convened by Head External Engagement (Chief Sustainability Office)	Monthly	<ul style="list-style-type: none"> – Discusses sustainability initiatives across the firm, bringing together key sustainability leads from Group Functions. 	<ul style="list-style-type: none"> – Risk frameworks for sustainable finance. – Partnerships for key sustainability related activities (e.g., net zero). – Communications activity and other stakeholder engagement.
CDIO Management Team	GEB Lead for CDIO	Semi-annually at least	<ul style="list-style-type: none"> – Oversees CDIO strategy for operational sustainability. – Reviews environmental performance of the firm. – Signs off on operational sustainability objectives and targets. 	<ul style="list-style-type: none"> – Sustainability objectives for 2023. – ISO 14001 external audit results. – Climate action plan.
GCS Management Forum	Head of CDIO Group Corporate Services (GCS)	Quarterly	<ul style="list-style-type: none"> – Oversees GCS strategy for operational sustainability. – Reviews environmental performance of the firm. – Proposes operational sustainability objectives and targets for sign-off to the CDIO management team. 	<ul style="list-style-type: none"> – Operational action plans for the individual global environmental goals. – Sustainability objectives for 2023. – Result from ISO 14001 external audit. – Climate action plan.
Sustainable Finance Forum Personal & Corporate Banking (P&C) / Wealth Management Switzerland (WMCH)	Chief Operating Officer P&C and Region Switzerland jointly with the Chief Risk Officer P&C	Quarterly	<ul style="list-style-type: none"> – Oversees and facilitates the sustainability strategy and its implementation across the Personal & Corporate Banking segments and Wealth Management Switzerland, in alignment with the goals and ambitions of the Group. – Reviews supporting strategic sustainability partnerships and collaborations. – Fosters alignment and collaboration across segments and aligned functions. 	<ul style="list-style-type: none"> – Net zero. – Sustainable lending operating model.
AM SI Prioritization Forum	Head of Sustainable Investing, Executive Team functional heads	Quarterly, ad-hoc as required	<ul style="list-style-type: none"> – Steers and guides the SI strategy program within AM. – Sets key priorities, direction and key decisions to be adhered to by the SI program. – Provides guidance on strategic alignment of ESG-related regulatory requirements. 	<ul style="list-style-type: none"> – Net zero. – Product shelf. – Impact capability. – Client reporting. – Regulatory disclosure.
Asset Management (AM) Stewardship Committee	Head of Investments	Quarterly, ad-hoc as required	<ul style="list-style-type: none"> – Provides oversight of the proxy voting standards / process and corporate governance practices in accordance with the Asset Management proxy voting policy and procedures. 	<ul style="list-style-type: none"> – Approved and resolved where needed, proxy votes proposed to deviate from UBS Proxy Voting policy guidelines.
AM SI Methodology Forum	Head of Sustainable Investing	Quarterly, ad-hoc as required	<ul style="list-style-type: none"> – Provides oversight of methodology / investment process criteria applied in the Sustainable Investing framework (including exclusions, ESG integration, sustainable focused and impact offering) across investment areas. 	<ul style="list-style-type: none"> – Regulatory investment process criteria. – Policy updates. – Net zero and other frameworks / methodologies.

Governance body	Lead and other membership information	Sustainability / climate agenda frequency	Purpose and responsibilities related to sustainability- and climate-related issues	Topics considered in 2022
Global Wealth Management (GWM) SI/II Forum	Chief Investment Office (CIO)	Quarterly	<ul style="list-style-type: none"> – Drive the Global Wealth Management SI/II franchise. – Acknowledge ambitions. 	<ul style="list-style-type: none"> – Provided input into various aspects of the franchise, including products and strategy. – Ambition setting.
GWM Sustainability Scores Methodology Board	CIO	At least annually	<ul style="list-style-type: none"> – Discuss and decide on material changes to the methodology underlying the CIO sustainability scores. 	<ul style="list-style-type: none"> – Development of SDG-alignment scores. – Further integration of climate-related data in CIO sustainability scores.
Investment Bank (IB) Management Team	President Investment Bank	At least quarterly	<ul style="list-style-type: none"> – Reviews the Investment Bank's sustainability strategy and related objectives, including DE&I, climate, etc. – Monitors the Investment Bank's progress against its sustainability strategy and related objectives. – Monitors the Investment Bank's execution of the firm's overall climate strategy, including the net-zero commitment. 	<ul style="list-style-type: none"> – Diversity, equity and inclusion. – Sustainability strategy and progress. – Net-zero commitment and associated implementation steps. – Changes to SCR policy. – Regulatory developments pertaining to sustainability and finance. – Non-financial risks in relation to Sustainable Finance. – Sustainable finance. – Training and employee awareness regarding sustainability and sustainable finance.

Appendix 2 – Strategy

We are committed to continuously improving and enhancing UBS’s sustainability performance. This appendix provides further details about the strategic components set out in the “Strategy” section of this report.

Helping to achieve our strategy by working with key climate- and nature-related organizations

Initiative	UBS role / activity	Key outcome of initiative in 2022	UBS contribution / commitment
Task Force on Climate-Related Financial Disclosures (the TCFD)	Member of the TCFD, which includes 31 members from financial and non-financial companies and is supported by over 4,000 organizations from more than 100 countries.	Publication of 2022 TCFD status report marking five years since publication of TCFD recommendations. Over 3,900 organizations have pledged support for the TCFD with a combined market capitalization of USD 26 trillion. Response by the TCFD to the rules proposed by the SEC to enhance and standardize climate-related disclosures for investors.	Contributed to the activities of the TCFD, including its 2022 status report.
Taskforce on Nature-related Financial Disclosures (the TNFD)	Member of the TNFD, which includes 40 members from financial and non-financial companies.	Beta versions of TNFD risk management and disclosure framework including first draft sector specific guidance for financial institutions.	Contributed to the formulation of the first set of TNFD recommendations and chaired the financial-sector-specific working group of the TNFD.
Net Zero Asset Managers initiative (the NZAMI)	Founding member of the NZAMI, which includes 291 asset managers managing over USD 66 trillion of assets under management (AuM).	Completed first round of annual disclosure of signatories’ approach and progress on net zero investing using the CDP framework. Initiative increased to 301 signatories with USD 59 trillion assets under management (AuM) by year end.	Among the first round of asset managers to complete annual disclosure requirement. Target to align 20% of Asset Management’s AuM to be managed in line with net zero.
Net-Zero Banking Alliance (the NZBA)	Founding member of the NZBA, which includes 122 banks committed to aligning their lending and investment portfolios with net-zero emissions by 2050.	Developed guidelines, frameworks, methodologies and timelines for net-zero implementation in the global banking sector.	Active participant in working groups on sectoral target-setting, data and methodologies, and financing and engagement. Committed to publishing ambitious intermediate targets for priority sectors within 18 months of signing, and for all, or a substantial majority of, the carbon-intensive sectors, where data and methodologies allow within 36 months of signing, and to regularly reviewing targets in line with NZBA guidelines.
Glasgow Financial Alliance for Net Zero (the GFANZ)	Founding member of the GFANZ, which includes 550+ members from all industries in the financial sector, mobilized around common goal of supporting net zero transition.	Issuance of first progress report and voluntary set of recommendations and guidance for financial institutions to use when developing and implementing credible, high-ambition strategies for achieving net zero. Ongoing advocacy for credible economy-wide targets and pathways, as well as supporting policies, to drive net zero transition.	Active involvement in working groups, including those on public policy, portfolio alignment and financial-sector transition plans.
Institute of International Finance (the IIF) Sustainable Finance Working Group (the SFWG)	Chair and member of the SFWG catalyzing work by the IIF on sustainable finance for its 400 financial-sector corporate members from 60 countries.	Produced two major policy reports. The first, “Integrity through Alignment: A 2022 Roadmap for Global Standards and Market-led Approaches in Sustainable Finance” was the second in a series exploring the need for further alignment on sustainable finance policy and regulatory approaches globally. The second, “Navigating Climate Headwinds,” summarized the experiences of more than 20 banks across eight jurisdictions with regulatory climate-risk scenario analysis exercises and provided recommendations on how to take forward regulatory and supervisory activity. Initiated a series of transition finance and transition planning workshops to share experiences among IIF member firms and policymakers and regulators globally. Initiated annual Wolfsberg Forum for Sustainable Finance (WFSF).	Chair of the SFWG and its working program providing leadership and steering to the IIF activities. UBS helped found and hosted WFSF at its Wolfsberg UBS Center for Education and Dialogue.

Partnership for Carbon Accounting Financials (the PCAF)	Member of PCAF, which is a global partnership of over 340 financial institutions.	Working together with all members to develop and implement common standards for the accounting, reporting and disclosure of GHG emissions associated with financial institutions' lending and investing activities. Publication, in December 2022, of the second version of the Global GHG Accounting and Reporting standard for the financial industry.	Committed to measuring and disclosing the GHG emissions associated with our lending and investing activities in accordance with PCAF standards.
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Our approach to sustainable finance – additional information

Our investing clients and client assets

In our wealth management business, it has been our long-standing view that sustainable investing strategies look beyond environmental, social and governance (ESG) integration. Thus, integrating material ESG information into investment analysis and decisions is increasingly seen as a requirement for all investment management. Exclusions, ESG integration and stewardship are a set of effective tools that can be incorporated not only in sustainable but also conventional investment strategies; however, on their own none of these tools are sufficient to determine a strategy as being sustainable or impact investing.

We have identified six sustainability topics that encompass the major challenges that both impact and are impacted by corporations and governments:

- pollution and waste;
- climate change;
- water;
- people;
- products and services; and
- governance.

These topics are selected on the basis of industry best practices, relevance to company financial outcomes, data availability and reliability, and client feedback on the issues they care most about. For investors seeking to build a sustainable investment portfolio, we recommend looking for companies that do well at managing these topics. Five of the topics (pollution and waste, climate change, water, people, and governance) focus on how well companies manage these issues within their operations and, therefore, reflect the company's operational footprint. The sixth topic (products and services) focuses on whether the company's offering and its supply chain management address sustainability challenges directly, and therefore reflects a more thematic exposure (e.g., an electric vehicle company would be expected to score highly for products and services, but may not necessarily score well for climate change, given its operations around battery production and life cycle management).

The six-topic framework is designed to offer a more simplified and targeted approach to sustainability challenges, and specifically to inform the decisions of private investors. They represent universal sustainability challenges, although the priority of each topic may differ across industries. Additionally, the companies that manage these topics well are not necessarily those with the least-adverse environmental or social impact. In fact, sectors with the greatest exposure to sustainability risk factors often have a greater imperative (regulatory or reputation-driven) to work to minimize their negative impact.

UBS uses these topics to score companies and to provide targeted advice to private clients based on their stated sustainability preferences. For example, when considering corporate financial information and regional and sectoral drivers, investors can use the sustainability scores to help identify potential ESG-related risks or opportunities that were not apparent from their financial analysis. Investors could also use the scores to assess the sustainability profile of their portfolios so as to better understand their exposure to potential sustainability risks and opportunities, as well as to evaluate whether their investments are aligned with their personal values and interests. UBS also sources indicators of whether companies are involved in a range of activities, including environmental ones, such as use of genetically modified organisms, that some investors may consider unacceptable in a sustainable investing portfolio and hence would like to exclude.

Supporting our climate strategy – our climate-related materiality assessment

Methodology for assessing climate opportunities

Considerations related to climate change are increasingly reflected in firms' business planning and operations. Climate-related risks represent financial risks both for UBS itself, as well as for our diversified client base. At the same time, financing and investing in technological, industrial and/or business model innovation aimed at addressing or avoiding the effects from worsening climate change represent commercial opportunities for financial firms such as UBS.

As an example, supporting the global economy's transition to a net-zero state by 2050 will require vast amounts of investment and financing, which banks can help allocate to effective and efficient uses in this context. To quantify this opportunity, we can look to the United Nations Framework Convention on Climate Change (the UNFCCC). It was reiterated during its 27th Conference of the Parties (COP 27) in 2022 that "about USD 4 trillion per year needs to be invested in renewable energy up until 2030 to be able to reach net-zero emissions by 2050 and that, furthermore, the global transformation to a low-carbon economy is expected to require investment of at least USD 4 trillion to USD 6 trillion per year."¹

As elaborated on in further detail below, for UBS, given its capital-light business model, the largest commercial opportunities lie in the climate-related investment space, while essential enablers for all climate-related business initiatives are strong research, data and analytics foundations that support clients' and our own understanding of key trends. We derive these conclusions from a systematic approach aimed at better understanding UBS's future opportunities around climate. On an annual basis, and in line with the Task Force on Climate-related Financial Disclosures (the TCFD)'s recommendations (as set out in the Strategy section of the TCFD recommendations), we are assessing potentially relevant climate-related opportunities for UBS, encompassing commercial products and services, social finance, resource efficiency and energy consumption, operational resilience, as well as green funding.

In doing so, we follow a two-step approach: i) identifying relevant opportunities; and ii) assessing their relative materiality for the Group over the short, medium and longer terms. It is important to note that sustainability overall, and climate specifically, are continuously evolving topics, for example in terms of applicable political and regulatory frameworks, as well as client and market dynamics, implying that our annual assessment always represents a point-in-time analysis and needs to undergo continued challenge and reviews, so as to consistently reflect an accurate representation of our opportunity space in climate.

In the following sections we describe the individual opportunities we have identified across four distinct areas of our business.

Commercial products and services

The starting point for identifying commercially relevant climate-related business opportunities is UBS's annual process to formulate sustainable finance ambitions for each of its four business divisions. This ensures relevant opportunities are systematically screened and selected. In the process, external research and publications are systematically consulted, as are activities among UBS's key peers in order to ensure that the latest client, market, industry and regulatory trends are appropriately reflected. We identify climate-related business opportunities as those that directly or indirectly contribute to one or more of three areas: climate mitigation, climate adaptation or climate transition.

Individual climate-relevant products and services are organized into dedicated categories¹. To ensure sufficient granularity for our survey-based, qualitative materiality assessment by an internal panel of sustainable finance experts, we then break these main categories down into 11 subcategories, each representing a coherent set of related products and services. Our expert panel then assesses the expected materiality of the individual sub-

categories, as well as the time horizon over which these are expected to start contributing materially to UBS's business outcomes. Materiality is hereby assessed along three equally weighted dimensions: i) revenue potential, ii) strategic relevance and iii) the impact on the environment and stakeholders ("double materiality").

The assessment is done in a qualitative manner based on expert judgment in order to take account of the inherent difficulties involved in making more precise and/or quantified assessments on future commercial developments, in

¹ Based on information from the UNFCCC, see https://unfccc.int/sites/default/files/resource/cma2022_L21_revised_adv.pdf

particular in an area such as climate, where regulatory and policy frameworks, as well as market conventions and industry trends, are still subject to considerable change and evolution. It is therefore imperative that we regularly review, reiterate and report on these assessments so as to ensure continuous relevance of the reported results. We have identified below the commercial product and services categories for the assessment:

Climate-related investment products

These products include for example our climate-aware, low-carbon and Paris-aligned funds and ETFs, carbon-referencing structured products and dedicated climate-focused investment modules. We also see opportunities within private-market investment strategies related to climate mitigation, such as battery storage and cold storage.

Carbon-related financial services and products

These include supporting clients in different business lines in identifying and assessing opportunities related to carbon credits (in both compliance and voluntary markets).

Climate-related financing products and solutions

These include green balance-sheet lending to corporate and private clients, structuring and underwriting green bonds for corporate and sovereign issuers, and supporting and financing innovative climate start-ups, as well as green infrastructure finance (e.g., renewable energy).

Advice on strategic climate opportunities

This includes corporate advisory work through the incorporation of climate factors, for example in valuation and analysis, and, more specifically, advising on transactions where climate considerations are clearly identifiable as part of a transaction rationale from the point of view of either an acquirer or a target company.

Thematic research

This includes climate-related in-depth research and thought leadership work, looking across and delving into relevant developments in the real economy and various economic sectors, the financial industry and financial markets, as well as scientific research. As a highly dynamic topic, climate-related research plays a key role in keeping our clients and ourselves on top of relevant developments and key trends.

Data analytics and metrics

These include data-driven analytical tools available in various business lines, which are being continuously developed and further refined to cover in more depth and breadth relevant sustainability- and climate-related aspects. Examples of application include the portfolio management process, quantitative modeling, climate exposure analytics within client reporting and data-powered strategic insights work.

Platforms

These include innovative platform solutions enabling clients to gain access to climate-related products, such as green mortgages and, in the future, voluntary carbon credits. Such platform solutions enable UBS to scale and achieve impact beyond some of our own operational limitations (e.g., balance sheet, geographical reach, own product shelf).

Philanthropy Services and UBS Optimus Foundation

In addition to our commercial offering, our clients have access to solutions helping them realize their philanthropy goals, including climate-related ones. Through our Philanthropy Services teams, we provide grants and social finance investments to climate-related projects under the UBS Optimus Foundation network's environment and climate portfolio of work. The UBS Optimus Foundation network's environmental and climate strategy focuses on two pillars, "Sustainable Land Use" and "Coastal and Marine Ecosystems", and guides the identification and selection of potential opportunities. Our program director for environment and climate assesses and selects these opportunities in terms of their fit with the UBS Optimus Foundation network's environment and climate strategy, the quality of the organization's team and track record, and potential for scale, as well as for expected results in key impact areas, including climate change mitigation efforts (we already actively monitor the share of portfolio assets being allocated to this) and climate change adaptation. They are then reviewed and approved by a senior-level approval committee. Experts from our Philanthropy Services and UBS Optimus Foundation teams provide a summary assessment of the materiality of this portfolio of projects, which is then included in the overall assessment. The following category represents our Philanthropy Services and UBS Optimus Foundation in the assessment:

Social Impact

This includes climate-related philanthropy activities orchestrated by our Social Impact teams.

¹ To guide this assessment, we have used the definition for materiality as provided by the Global Reporting Initiative (the GRI).

Own operations

UBS is committed to reducing its operational impact on the environment and has set clear reduction targets for resource use, as well as formulating ambitious net-zero commitments. Experts from UBS's Group Corporate Services team, responsible for managing UBS's operational footprint, have assessed the materiality of opportunities stemming from efforts in this area. These opportunities can be grouped into three distinct categories: resilience, energy consumption and resource efficiency.

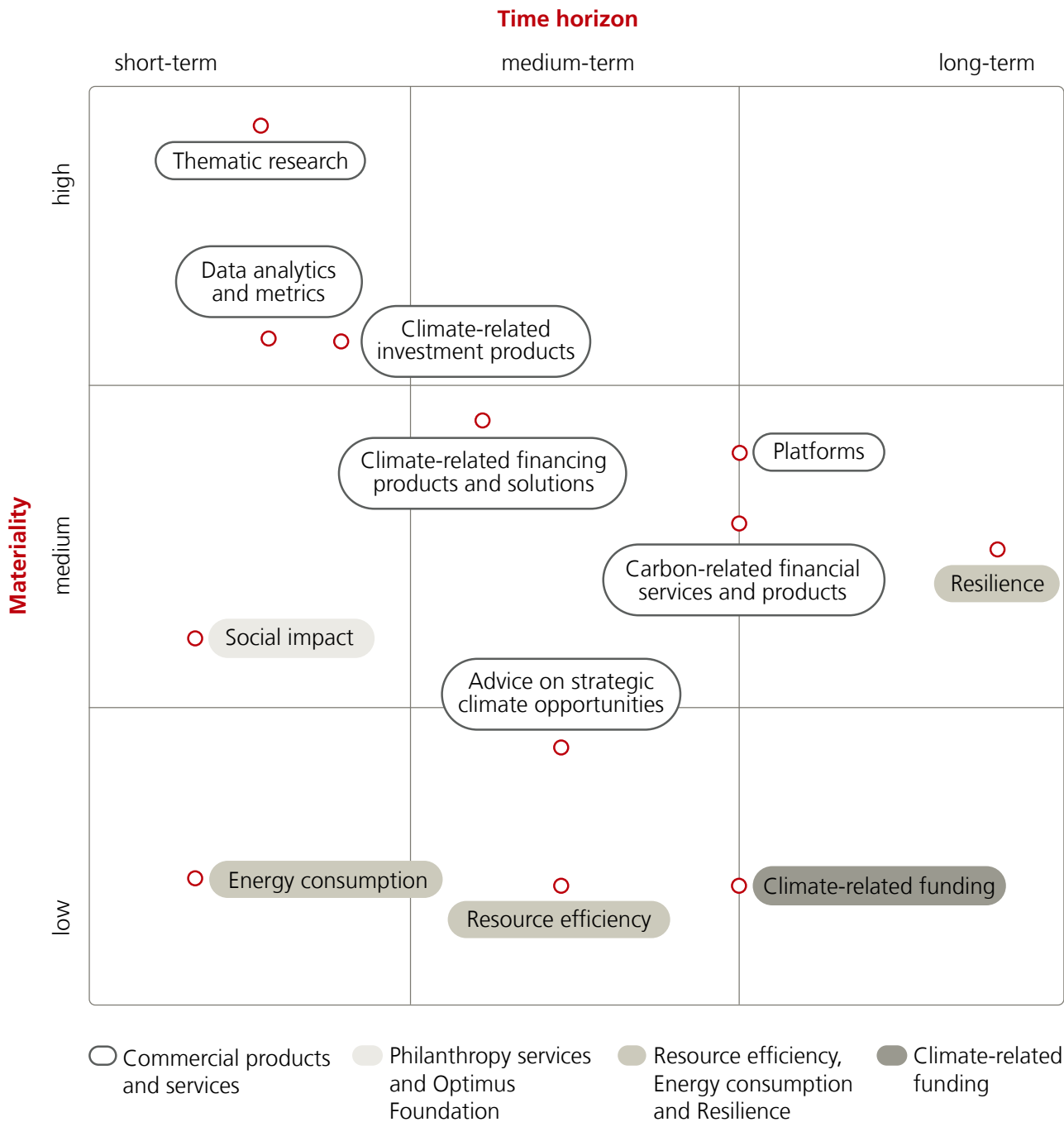
Climate-related funding

UBS, spearheaded by Group Treasury in partnership with relevant business lines, is continually assessing new opportunities for climate-related funding that could contribute to expansion of our investor base or achieving favorable funding costs. As part of this assessment, experts from Group Treasury reviewed the materiality of opportunities for funding, such as green or sustainability-linked bonds.

- › Refer to the **"Strategy"** section of this report for more details about our sustainable and climate finance product offering and achievements in 2022
- › Refer to our Green Funding annual investor report, available at ubs.com/greenbonds

2022 climate-related opportunities materiality results

The comprehensive results for UBS from the different expert assessments are displayed in the infographic below, placing individual categories within low / medium / high materiality and short- / medium- / long-term time-horizon segments. Categories are displayed on a relative scale, with the highest relative degree of materiality seen for thematic research, data analytics and metrics as key enablers for a wide range of other business opportunities with clients. Climate-related investment products are the highest-ranked immediate commercial product opportunity, while resilience is seen as the most important operational opportunity regarding climate matters.



Methodology for assessing climate-driven risks

Climate-related risks are driven from either changing climate conditions (physical risk) or from efforts to mitigate the effects of climate change (transition risk). These climate risk drivers affect banks, the financial system, and the broader economy through both micro- and macroeconomic channels. Underpinning UBS’s materiality-driven approach to managing climate-related risks, the firm undertakes an assessment of how climate-driven risks may result in material impacts (e.g., credit losses or reputational incidences resulting in lost revenues), given UBS’s own specific product footprint. The assessment considers geographic, jurisdictional, and sectoral differentiating factors as well as the full range of climate-related time horizons. The methodology continues to improve as data quality and understanding of transmission channels improve with time.

On an annual basis, the sustainability and climate risk (SCR) unit coordinates a systematic materiality assessment of climate-related risks in accordance with the ISO-14001 environmental management standard. Based on industry collaboration, regulatory guidance, and internal subject matter expertise, ratings are agreed between the SCR unit and respective business division representatives, covering:

- (i) granular definition of transmission channels; and
- (ii) science- and business-based qualitative ratings of climate-driven risks.

Risk rating process

The climate-driven risk assessment, resulting in a risk rating (shown on the Y-axis in the chart below), covers all business divisions and the products and services offered within them. The process is conducted by the SCR unit, in partnership and agreement with relevant business representatives. UBS first evaluates the inherent risk at the product/service level, defining pre-mitigant risk to UBS across financial and non-financial risk types (e.g., credit and market risks for financial and operational, liability, and reputational risks for non-financial). Climate risk drivers that may result in impacts on banks and/or its clients, investees, and assets are decomposed to articulate the discrete channels from which these impacts may materialize. The transmission channel value chain is primarily built as follows:

- 1) climate risk driver (e.g., climate policies, tech for transition);
- 2) transmission impact (e.g., wealth or income);
- 3) channel (e.g., through counterparty, assets, or directly to UBS);
- 4) the type of channel (e.g., corporate debt asset, retail counterparty, etc.);
- 5) impact driver (e.g., credit worthiness);
- 6) impact variable (e.g., probability of default);
- 7) the type of risk (e.g., liquidity for financial, regulatory compliance, or reputational for non-financial);
- 8) primary differentiator (e.g., sectoral concentration in high-risk sectors);
- 9) risk amplifier (e.g., macroeconomic feedback loops);
- 10) mitigants (both internal and external).

These so-called climate risk transmissions channels are defined at the granularity of UBS's climate risk assessment methodologies. For example, climate transition risks that may result in credit losses to UBS (i.e., credit risk), are decomposed to examine how changes in global climate policies, low-carbon technologies, and downstream (consumer and investor) sentiment may affect either the credit worthiness of UBS counterparties and/or affect the value of collateral UBS may hold against existing credit facilities.

The database of transmission channels and narratives are analysed against the range of products and services UBS offers, to determine an initial inherent risk rating. Ratings are given on a qualitative (converted into a quantitative) scale ranging from low (1), moderate stable (2), moderate emerging (2.5) to high (3), and are distributed on a relative basis: risky items against relatively less risky ones across products within a business division, and across risk drivers and types.

Initial ratings are proposed by experienced SCR officers, leveraging in-house expertise, scientific and regulatory publications, news analysis and sector sustainability risk monitoring, and the relevant business model. Business representatives then engage relevant front-office experts to challenge SCR's initial proposal or confirm it. Business divisions undertake their own rating for potential risks arising in their products and services according to a step-by-step procedure of evaluation and ranking, review and approval, and documentation.

Assessments are evaluated on a two-way materiality basis. Both financial and non-financial risk impacts to UBS are evaluated, alongside impacts to the environment, climate, and human rights holders (for the broader SCR assessment). Materiality is assessed for those products and services with higher than average impact and/or risk rating. Items rated as having a potential material risk are mapped to relevant risk controls. The proposed materiality assessment is then provided to UBS's SCR Portfolio Underwriter.

Key aspects included in the holistic analysis, including amplification potential from macro-economic feedback loops (qualitatively included), as well as risk differentiating factors (including geographic, jurisdictional, and/or sectoral concentrations). To layer in the differentiating factors, transmission channels are mapped to a primary differentiator (e.g., geographic location is a key differentiator in determining UBS's exposure to acute climate hazards, whether in UBS's own operations or from our clients). Those differentiators link to existing risk concentration analyses, like climate risk heatmaps for sectoral heterogeneity along with other input factors. Concentrations of exposure to higher-risk geographies, jurisdictions, and/or sectors are given a relative rating in line with the relative rating approach taken in the overall initial risk rating (above) and averaged into the risk and impact rating already given (otherwise referred to below as the "enhanced rating"). Further enhancements planned for 2023 include quantitative integration of macro-economic feedback loops, expansion of traditional risk categories (e.g., include

liquidity), layering of risk mitigants (e.g., structural product considerations, or insurance in the short term), and further academic exploration towards identifying new and enhanced transmissions channels.

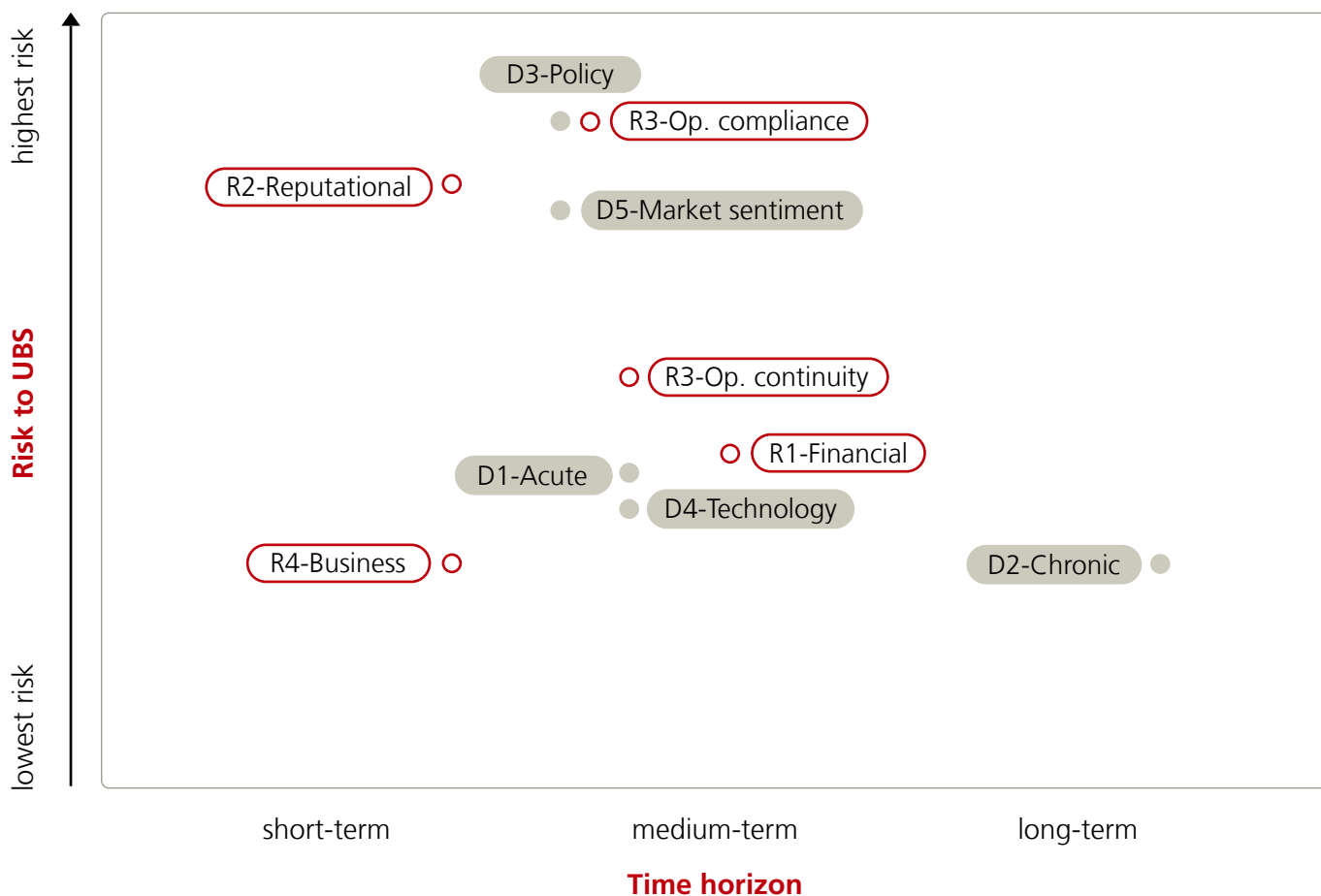
Concerning the time horizon (shown on the X-axis in the chart below), UBS defines short term as less than three years, medium term as three to ten years and long term as beyond ten years. Currently, the most relevant time horizon for risk and impact are determined in agreement with relevant business division representatives, across the transmission channels. This is then given a rating from short to long term, with an ordinal integer assigned respectively. In 2023, we expect to assign an individual rating to each of the three time horizons for each channel and product/service, as to reflect both the complex nature of climate risk timing and its embedded uncertainty.

Final ratings

Enhanced ratings for each transmission channel are obtained by averaging the front-to-back agreed risk rating, impact rating, and SCR-defined differential ratings for each identified channel and relevant product or service. Driving towards a UBS firm-wide assessment, ratings are then further averaged amongst products within business divisions and normalized by the count of products/services, and further averaged amongst the business divisions. Two ratings are produced: 1) a risk rating and 2) a time horizon rating. Given the methodological approach in decomposing transmission channels, we are able to present ratings through multiple lenses, for example from the perspective of the climate risk driver or from the traditional risk category (e.g., credit, market, reputational, etc.).

In the graph below, we show the climate-driven risk ratings by risk driver (grey) and traditional risk type (red). For the traditional risk types, we aggregate results into financial, including both credit and market, and non-financial, including operational risk (relating to either business continuity or regulatory compliance) and reputational risk. This graph tells us that technological change-driven transition risks pose the lowest risk potential to UBS, while market sentiment-driven climate risks pose the highest potential risk (primarily due to UBS product footprint and great uncertainty associated with timing and impact of climate-related market-driven risks). Further analysis with respect to the ratings process defined above shows that due to UBS’s established climate strategy, climate-driven business risks are relatively low, when compared to, for example, inherent reputational risk exposure. Most importantly, and as substantiated by repeated scenario-based climate analyses since 2014, climate-driven financial risks are found to be stable in the mid-term, at moderate.

Climate-driven risks by risk driver and risk type



Physical risk drivers

D1-Acute: Impacts from extreme weather events may affect the value of physical assets that UBS owns and finances, especially in the short- and medium-term time horizons. These impacts should be diligently addressed with regard to UBS's financial risk assessment. We consider the risks to our own physical assets through our comprehensive business continuity planning and physical climate risk identification process.

D2-Chronic: Impacts from incremental climate change may affect the value of physical assets that UBS owns and finances. Incremental changes in climate (e.g., rising temperatures and changes in precipitation patterns) can exacerbate extreme events, making them more frequent and severe, which in turn affects economic output and productivity. Such events could reduce the value of properties held as collateral. We see these potential risks emerging in the long term. Relevance of physical risks equally derives from geographical and sectoral disaggregation. Based on physical risk heatmaps, our exposure to climate-sensitive regions is considered moderately low. Similar conclusions are reached based on the sectoral disaggregation of our businesses.

Transition risk drivers

D3-Policy and regulatory: As a global financial services firm active in wealth management, asset management, investment banking and the provision of services to corporate and institutional clients, our firm can be affected directly and indirectly by new carbon pricing regulation and energy transition policies. These measures can be designed to both constrain the impacts of climate change and/or promote an adaptive response to climate change impacts. They could impact our own operations, as well as the business operations of our corporate clients, given that such clients rely on the firm to finance their activities across a range of sectors. We routinely assess the impact of current and emerging regulation, either directly affecting our operations or indirectly affecting those sectors where we have clients. Assessments and gap-analysis exercises are conducted several times a year, following a standardized identification process defined by the climate risk program. Additionally, regulatory developments are assessed for impacts via quarterly monitoring.

D4-Technological change: Together with corporate clients that rely on UBS to finance their activities in a range of sectors, our firm is both directly and indirectly exposed to technological changes. We analyze these changes, such as the rise of electric vehicle and battery technologies in the automotive sector, or energy storage technology advancement impacts on the power utility sectors, through scenario analysis approaches.

D5-Market sentiment: We have made protecting our clients' assets a strategic pillar in our climate approach. Amid the growing demand for climate-focused products and services, we need to actively respond to market changes driven by the low-carbon transition and our clients' interest in managing climate-related risks. We address this potential risk through our comprehensive sustainability- and climate-focused product and service offering.

Climate-driven risks

R1-Financial: On the credit risk side, we assess the impact to our firm through counterparties: household, corporate, or sovereign income and/or wealth given the ability to repay and service debt (income); or our ability to fully recover value of the loan in the event of a default, due to collateral devaluation (wealth). On the market-risk side, we assess the impact on the value of our financial assets, by altering or revealing new information about potential future economic conditions or the value of real or financial assets, resulting in downward price shocks and an increase in market volatility; that leads to a breakdown in correlations between assets or a change in market liquidity for certain assets.

R2-Reputational: Our reputation may be adversely affected if our climate-related actions and methods are not perceived as meeting existing or future industry standards and best practices. Examples of this would be allegations related to greenwashing or inadequate action on climate change. Increased reputational risks could lead to loss of business and may result in changes in regulations, which in turn could impact our business model.

R3-Operational: Climate-driven operational risk may increase with regulatory compliance and liability (operational compliance) and/or business continuity (operational continuity), associated with climate-sensitive investments and businesses. These can arise internally by inadequate or failed internal processes, people, and systems and/or externally by physical climate events or stakeholder legal action.

R4-Business: Business risk may materialize as client and investor sentiment changes. This could lead to changes in demand for existing and new products and services which could materially impact the bank's revenue performance.

› **Refer to the "Environment" section and the "Appendix 3 – Risk management" section for more details about climate-related risks**

Appendix 3 – Risk management

Our sustainability and climate risk policy framework

Our sustainability and climate risk policy framework is embedded in our culture and it:

- applies across all business divisions, Group Functions, locations, and legal entities;
- is integrated into management practices and control principles and overseen by senior management; and
- supports the transition toward a net-zero future.

Introduction

The firm's Sustainability and Climate Risk (SCR) unit (as part of Group Risk Control), manages material exposure to sustainability and climate risks. It also advances our firmwide SCR initiative to build in-house capacity for the management of sustainability and climate-related risks.

At UBS, sustainability and climate risk is defined as the risk that UBS negatively impacts, or is impacted by, climate change, natural capital, human rights, and other environmental, social, governance (ESG) matters. Sustainability and climate risk may manifest as credit, market, liquidity, and/or non-financial risks for UBS, resulting in potential adverse financial, liability and/or reputation impacts. These risks extend to the value of investments and may also affect the value of collateral (e.g., real estate). Climate risks can arise from either changing climate conditions (physical risks) or from efforts to mitigate climate change (transition risks).

Our principles and standards apply across all business divisions, group functions, locations, and legal entities. They define roles and responsibilities for 1LoD (1st Line of Defense, i.e., client and supplier onboarding, transaction due diligence, periodic know-your-client reviews), for 2LoD (2nd Line of Defense, i.e., sustainability and climate risk transaction assessments), and for the GEB (that sets the sustainability and climate risk appetite standards of the firm). Our work in key societal areas, such as minimizing effects of climate change, protecting the environment and respecting human rights, is part of this. Living up to our societal responsibilities contributes to the wider goal of sustainable development. As a global firm, we take responsibility for leading the debate on important societal topics, contribute to the setting of standards and collaborate in and beyond our industry.

Managing sustainability and climate risk is a key component of our corporate responsibility. We apply a sustainability and climate risk policy framework to all relevant activities. This helps us identify and manage potential adverse impacts on the climate, environment and to human rights, as well as the associated risks affecting our clients and us. We have set standards for product development, investments, financing and supply chain management decisions. We have identified certain controversial activities we will not engage in, and certain areas of concern where we will only engage in under stringent criteria. As part of this process, we are committed to engaging with clients and suppliers to better understand their processes and policies and to explore how climate-, environment- and human-rights-related risks and impacts may be mitigated.

Most recently, UBS has developed guidelines and frameworks for Sustainable Lending, Bond and GHG Emissions Trading Products and services. These guidelines support UBS's growth strategy for sustainable products and services and the work to ensure that sustainability-related criteria is met.

Our commitment

Our commitment to sustainability starts with our purpose. We know finance has a powerful influence on the world. At UBS we reimagine the power of people and investment, to help create a better world for everyone: a fairer society, a more prosperous economy and a healthier environment. That is why we partner with our clients to help them mobilize their capital toward a more sustainable world. It is why we have put sustainability at the heart of our own business too. To help us maximize our impact and direct capital to where it is needed most, we are focusing on three key areas to drive the sustainability transition: planet, people, partnerships.

Some of our key commitments to sustainability include:

1992 – one of the first financial institutions to sign up to the UN Environment Programme bank declaration (the UNEP FI);

2000 – one of the first companies to endorse the UN Global Compact and, in the same year, our firm was a founding member of the Wolfsberg Group of Banks, which was originally set up to promote good practice in combating money laundering;

2002 – CDP founding signatory;

2011 – our firm was a driving force behind the establishment of the Thun Group of Banks, which has published two discussion papers that seek to establish a framework to facilitate the identification of the key challenges and best practice examples for the financial sector's implementation of the UN Guiding Principles on Business and Human Rights (the UNGPs);

2014 – we endorsed the "Soft Commodities" Compact from the Banking Environment Initiative and the Consumer Goods Forum, which reaffirms our commitment to developing and implementing responsible business standards;

2019 – we became a founding signatory of the UN Principles for Responsible Banking (the PRB). The PRB constitutes a comprehensive framework for the integration of sustainability across banks.

Progress made in implementing Group Sustainability and Impact objectives is reported as part of UBS's annual reporting. This reporting is reviewed and assured externally according to the requirements of the Global Reporting Initiative's (GRI) Sustainability Reporting Guideline. UBS is certified according to ISO 14001, the international environmental management standard.

› **Refer to the Sustainability Report's Supplementary Information document for an overview of our external commitments and memberships**

Climate change

Climate change is one of the most significant challenges of our time. The world's key environmental and social challenges, such as population growth, energy security, loss of biodiversity and access to drinking water and food, are all closely intertwined with climate change. This makes the transition to a low-carbon economy vital.

We support this transition through our comprehensive climate strategy, which covers two main areas: managing climate-related financial risks; and taking action on a net-zero future. Underpinning these two main areas are four strategic pillars: protecting our clients' assets; protecting our own assets; mobilizing private and institutional capital; and reducing our direct climate impact.

We were a founding member of the Task Force on Climate-related Financial Disclosures (the TCFD) in 2015, and we continue to support the TCFD's development, with formal representation in the Task Force since 2016. We became a founding member of the Net Zero Asset Managers initiative in 2020 and a founding member of the Net-Zero Banking Alliance in 2021.

Forests and biodiversity

We seek to promote nature-related drivers, including biodiversity, focusing on key stakeholder groups (clients, vendors, employees and society at large). Deforestation and forest degradation can cause loss of biodiversity and negatively impact ecosystems services. As approximately 80%¹ of the world's documented species are found in tropical rainforests, deforestation will impact global biodiversity. Approximately 24%² of global GHG emissions come from the land sector, which is the second-largest source of emissions after the energy sector. Most of those emissions come from land use changes, such as agriculture activities (cultivation of crops and livestock) and deforestation.

Worldwide it is estimated that more than half of forest loss is due to conversion of forest into cropland (mainly for oil palm and soybean production), while raising of livestock is responsible for almost 40%³ of forest loss. It is further estimated that almost 50%³ of all recent tropical deforestation is due to illegal commercial agriculture activities and timber plantations. In human terms, millions of people rely directly on forests (small-scale agriculture, hunting and gathering, and harvesting forest products such as rubber). Yet deforestation continues to cause severe societal problems, impacting traditional communities and sometimes leading to violent conflicts.

Recognizing these risks, we:

- became a member of the Responsible Roundtable on Sustainable Palm Oil (the RSPO) in 2012. RSPO certification is a guarantee that palm oil production is sustainable. Accredited certified bodies perform extensive reviews on palm oil producers to ensure strict compliance with RSPO Principles & Criteria for Sustainable Palm Oil Production.
- endorsed the “Soft Commodities” Compact from the Banking Environment Initiative and the Consumer Goods Forum. In doing so we aim to support the transformation of soft commodity supply chains by expecting producers to be committed to achieving full certification according to applicable sustainability certification schemes, such as the RSPO. We acknowledge that acquiring land without adequate consultation, compensation and consideration of customary land rights (commonly referred to as land grabbing) can significantly impact local communities, often smallholders who primarily rely on subsistence farming to sustain their livelihood.
- have identified and will not engage in certain activities that contribute to deforestation and its related impacts (see the “Controversial activities – where UBS will not do business” and “Areas of concern – where UBS will only do business under stringent criteria” sections of this report).

Our standards

We have set standards in product development, investments, financing and supply chain management decisions. These include the stipulation of controversial activities and other areas of concern we will not engage in, or will only engage in under stringent criteria.

Controversial activities – where UBS will not do business

UBS will not knowingly provide financial or advisory services to clients whose primary business activity, or where the proposed transaction, is associated with severe environmental or social damage to or through the use of:

- world heritage sites as classified by the UN Educational, Scientific and Cultural Organization (UNESCO);
- wetlands on the Ramsar list;
- endangered species of wild flora and fauna listed in Appendix 1 of the Convention on International Trade in Endangered Species;
- high conservation value forests as defined by the six categories of the Forest Stewardship Council (the FSC);
- illegal fire: uncontrolled and/or illegal use of fire for land clearance;
- illegal logging including purchase of illegally harvested timber (logs or roundwood);
- child labor according to International Labor Organisation (ILO) Conventions 138 (minimum age) and 182 (worst forms);
- forced labor according to ILO Convention 29; and
- indigenous peoples’ rights in accordance with IFC Performance Standard 7.

The same standards apply when UBS purchases goods or services from suppliers.

In addition, UBS does not directly or indirectly finance the development, production or purchase of controversial weapons of such companies determined to fall within the “Swiss Federal Act on War Materials.”

On the topic of cluster munitions and anti-personnel mines, UBS does not provide credit facilities to, nor conduct capital market transactions for, companies that are involved in the development, production or purchase of cluster munitions and anti-personnel mines. UBS does not include securities of affected companies in its actively managed retail and institutional funds and in discretionary mandates. UBS draws upon external expertise to decide whether a company is subject to the restrictions imposed by Swiss law.

Areas of concern – where UBS will only do business under stringent criteria

We apply specific guidelines and assessment criteria to transactions with corporate clients engaged in the areas of concern listed below. The guidelines and assessment criteria apply to loans, trade finance, direct investments in real estate and infrastructure, securities and loan underwriting transactions, and investment banking advisory assignments.

¹ Based on information from WWF, available on www.panda.org/discover/our_focus/forests_practice/importance_forests/tropical_rainforest/

² Based on information from the Environmental Protection Agency, available on epa.gov/ghgemissions/global-greenhouse-gas-emissions-data

³ Based on information from the European Parliament, available on europarl.europa.eu/news/en/headlines/society/20221019STO44561/deforestation-causes-and-how-the-eu-is-tackling-it

Transactions in the areas listed below trigger an enhanced due diligence and approval process. In addition to the assessment of regulatory compliance and adherence to UBS's controversial activities standards, as well as consideration of past and present environmental and human rights performance and concerns of stakeholder groups, these transactions require an assessment of the following criteria:

Soft commodities	
Palm oil	Companies must be members of the RSPO and not subject to any unresolved public criticism from the RSPO. Companies must further have some level of mill or plantation certification and be publicly committed to achieving full certification (evidence must be available). Companies must also be committed to "No Deforestation, No Peat and No Exploitation."
Soy	Companies producing soy in markets at high risk of tropical deforestation must be a member of the Roundtable on Responsible Soy (the RTRS), or must apply a similar standard such as Proterra, International Sustainability & Carbon Certification or Cefetra-Certified Responsible Soya, and not be subject to any unresolved public criticism from these standards. When a company is not certified, it must credibly commit to the RTRS or a similar standard, providing a robust time-bound plan or demonstrate a credible commitment toward an equivalent standard, to be independently verified.
Forestry	Producing company must seek to achieve full certification of its production according to the Forest Stewardship Council (FSC) or a national scheme endorsed against the Programme for the Endorsement of Forest Certification (PEFC) within a robust time-bound plan. Producing company must also have fire prevention, monitoring and suppression measures in place.
Fish and seafood	Companies producing, processing or trading fish and seafood must provide credible evidence of no illegal, unreported and unregulated fishing in their own production and supply chain.
Power generation	
Coal-fired power plants (CFPP)	We do not provide project-level finance for new coal-fired power plants globally and only support financing transactions of existing coal-fired operators (>20% coal reliance) if they have a transition strategy that aligns with the goals of the Paris Agreement or if the transaction is related to renewable energy or clean technology.
Large dams	Transactions directly related to large dams include an assessment against the recommendations made by the International Hydropower Sustainability Assessment Protocol.
Nuclear power	Transactions directly related to the construction of new, or the upgrading of existing nuclear power plants include an assessment on whether the country of domicile of the client / operation has ratified the Treaty on the Non-Proliferation of Nuclear Weapons.
Extractives	
Arctic oil and oil sands	We do not provide financing where the stated use of proceeds is for new offshore oil projects in the Arctic or greenfield ¹ oil sands projects, and only provide financing to companies with significant reserves or production in arctic oil and/or oil sands (>20% of reserves or production) if they have a transition strategy that aligns with the goals of the Paris Agreement or if the transaction is related to renewable energy or clean technology.
Coal mining and mountain top removal (MTR)	We do not provide financing where the stated use of proceeds is for greenfield ¹ thermal coal mines and do not provide financing to coal-mining companies engaged in MTR operations. We only provide financing to existing thermal coal-mining companies (>20% of revenues) if they have a transition strategy that aligns with the goals of the Paris Agreement, or if the transaction is related to renewable energy or clean technology.
Liquefied natural gas (LNG)	Transactions directly related to LNG infrastructure assets are subject to enhanced sustainability and climate risk due diligence considering relevant factors such as management of methane leaks and the company's past and present environmental and social performance.
Ultra-deepwater drilling	Transactions directly related to ultra-deepwater drilling assets are subject to enhanced sustainability and climate risk due diligence considering relevant factors such as environmental impact analysis, spill prevention and response plans, and the company's past and present environmental and social performance.
Hydraulic fracturing	Transactions with companies that practice hydraulic fracturing in environmentally and socially sensitive areas are assessed against their commitment to and certification of voluntary standards, such as the American Petroleum Institute's documents and standards for hydraulic fracturing.
Precious metals and minerals	Transactions directly related to precious metals or minerals assets that have a controversial environmental and social risk track record are assessed against commitment to and certification of voluntary standards, such as the International Council on Mining & Metals (ICMM), International Cyanide Management Code (ICMC), the Conflict-Free Smelter Program and the Conflict Free Gold Standard of the World Gold Council, the Responsible Gold Guidance of the London Bullion Marketing Association (LBMA), the LBMA or London Platinum and Palladium Market (LPPM) Good Delivery Lists, the Chain-of-Custody and Code of Practices of the Responsible Jewellery Council, the Fairmined Standard for Gold from Artisanal and Small-Scale Mining of the Alliance of Responsible Mining, the Voluntary Principles on Security and Human Rights, and the International Code of Conduct for Private Security Providers. Transactions directly related to precious metals sourcing, custody, distribution and trading are assessed against precious metals' production by refineries that are listed on the London Good Delivery List (LGD), or the Former London Good Deliver List (FLGD) for precious metals produced up to refineries' removal from the LGD, as maintained by the LBMA and LPPM.
Diamonds	Transactions with companies that mine and trade rough diamonds are assessed on the client's commitment to and certification of voluntary standards, such as the ICMM, and rough diamonds must be certified under the Kimberly Process.

¹ Greenfield means a new mine / well or an expansion of an existing mine / well that results in a material increase in existing production capacity.

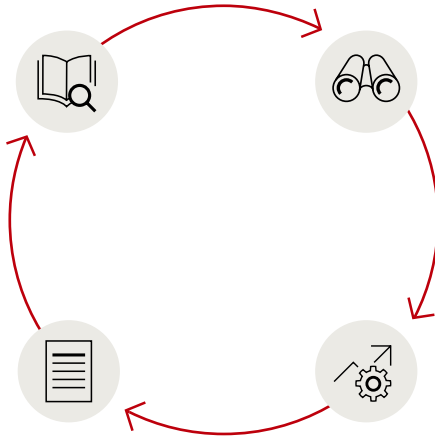
Sustainability and climate risk framework

UBS annually performs a sustainability and climate risk materiality assessment of its products, services and supply chain (in accordance with the ISO 14001 standard and UBS's Risk Control Self-Assessment). Products, services and activities deemed as having high risk are subject to the following framework.

Sustainability and climate risk framework

1 Identification and measurement

Sustainability and climate (physical and transition) risks are identified and their financial materiality is measured



2 Monitoring and risk appetite setting

Exposure to high / moderate risk sectors, emerging risks and regulations is monitored and metrics are reported internally to enable risk appetite setting

3 Management and control

Management and control processes for products, counterparties and transactions ensure material sustainability and climate risks are identified, measured, monitored and escalated

4 Reporting

Key sustainability and climate risk considerations are included in periodic risk reporting

Standard financial and non-financial risk processes ensure that material sustainability and climate risks are identified, assessed, approved and escalated in a timely manner. These include controls during client onboarding, transaction due diligence and product development and as part of the investment decision processes, own operations, supply chain management and portfolio reviews.

Governance

Given the many sustainability- and climate-related challenges globally, these topics will continue to increase in relevance for banks. These developments therefore require regular and critical assessment of our policies and practices, based on an accurate monitoring and analysis of societal topics of potential relevance to UBS.

The management of sustainability and climate risk is steered at the GEB level. Reporting to the Group CEO, the Group Chief Risk Officer is responsible for the development and implementation of control principles and an appropriate independent control framework for sustainability and climate risk within UBS, and its integration into the firm's overall risk management and risk appetite frameworks. The Chief Risk Officer (the CRO) for Sustainability supports the GEB by providing leadership on sustainability in collaboration with the business divisions and Group Functions.

Integration in financial and non-financial processes

- *Client onboarding*: Potential clients are assessed for sustainability and climate risks associated with their business activities as part of UBS's know-your-client (KYC) processes.
- *Transaction due diligence*: Sustainability and climate risks are identified and assessed as part of standard transaction due diligence and decision-making processes.
- *Product development and investment decision processes*: New financial products and services are reviewed before their launch in order to assess their compatibility and consistency with UBS's environmental and human rights standards. Sustainability and climate risks are also considered where relevant as part of the firm's overall ESG approach to investment decision processes and when exercising ownership rights, such as proxy voting, and engagement with the management of investee entities.
- *Own operations*: Our operational activities and employees, and contractors working on UBS's premises, are assessed for compliance with relevant environmental, health and safety, and labor rights regulations.
- *Supply chain management*: Sustainability and climate risks are assessed when selecting and dealing with suppliers. UBS also evaluates goods and services that pose potential environmental, labor and human rights risks during the life cycle (production, usage and disposal) as part of its purchasing processes.

– *Portfolio review*: At the portfolio level, we regularly review sensitive sectors and activities prone to bearing sustainability- and climate-related risks. We assess client exposure and revenue in such sectors and attempt to benchmark the portfolio quality against regional and/or sector averages. Such portfolio reviews give us an accurate aggregated exposure profile and an enhanced insight into our transaction and client onboarding processes. Based on the outcome of these reviews, we can explore ways to improve the future portfolio profile along a range of risk parameters.

Clients, transactions or suppliers potentially in breach of our standards, or otherwise subject to significant climate, environmental and human rights controversies, are referred to our SCR unit, which approves or rejects the cases after assessing their compliance with the firm's risk appetite standards. Advanced data analytics on companies associated with such risks is integrated into the web-based compliance tool used by our staff before they enter into a client or supplier relationship, or a transaction. The systematic nature of this tool significantly enhances our ability to identify potential risk.

In 2022, 2,834 referrals were assessed by our SCR unit, of which 93 were rejected or not pursued, 397 were approved with qualifications and 365 were pending. An increased focus on biodiversity and nature-related risk was also observed through the 466 assessments focused on the agribusiness sector. The overall number of SCR referrals decreased by 3% compared with 2021.

› Refer to the Sustainability Report's Supplementary Information document for climate and nature-related SCR cases studies

Sustainability and climate risk assessments

	For the year ended			% change from
	31.12.22	31.12.21	31.12.20	31.12.21
Cases referred for assessment¹	2,834	2,919	2,168	(3)
by region				
Americas	548	496	373	10
Asia Pacific	729	631	551	16
Europe, Middle East and Africa (excluding Switzerland)	481	556	223	(13)
Switzerland	1,076	1,236	1,021	(13)
by business division				
Global Wealth Management	151	278	170	(46)
Personal & Corporate Banking	1,151	1,345	933	(14)
Asset Management	11	24	56	(54)
Investment Bank	1,443	1,162	977	24
Group Functions ²	78	110	32	(29)
by sector³				
Agribusiness ⁴	466	536	406	(13)
Chemicals ⁵	134	133	97	1
Financial ⁶	438	283	168	55
Infrastructure ⁷	142	148	90	(4)
Metals and mining	481	615	492	(22)
Oil and gas	350	318	354	10
Technology ⁸	144	190	141	(24)
Transport	85	80	60	6
Utilities	204	225	186	(9)
Other ⁹	390	391	174	0
by outcome¹⁰				
approved ¹¹	1,965	1,988	1,696	
approved with qualifications ¹²	397	396	349	
rejected or not further pursued ¹³	93	106	119	
pending ¹⁴	365	49	9	
assessed ¹⁵	14	380	0	

¹ Transactions and client onboarding requests referred to the SCR function. ² Relates to procurement / sourcing of products and services. ³ Amendment in sector calculation: sectors calculated based on first assessed entity. ⁴ Includes, e.g., companies producing or processing fish and seafood, forestry products, biofuels, food and beverage. ⁵ Includes e.g. chemical and pharmaceutical companies. ⁶ Includes, e.g., banks, commodity traders, investments and equity firms. ⁷ Includes e.g., real estate and construction and engineering companies. ⁸ Includes technology and telecom companies. ⁹ Includes, e.g., aerospace and defense, general industrials, retail and wholesale. ¹⁰ "By outcome" 2022 data is from 25 January 2023. Outcomes from 2021 and 2020 were also recalculated. ¹¹ Client / transaction / supplier transactions approved at SCR. ¹² Client / transaction / supplier subject to an SCR assessment and approved with qualifications. Qualifications may include ring-fencing of certain assets, conditions toward client / supplier or internal recommendations. ¹³ Client / transaction / supplier subject to an SCR assessment and rejected or not further pursued. ¹⁴ Decision pending. Except for few cases still in progress from 2021 and 2020, all 2019 pending cases have been closed and reallocated to the other outcome categories. ¹⁵ Assessed companies related to portfolio reviews.

Climate- and nature-related risk methodologies and scenarios

This section provides an overview of the methodological approaches taken in developing our sustainability and climate risk (SCR) analytics, including detailed information on the methodology documentation, commensurate with the materiality and complexity of the heatmaps.

Climate risk methodologies

We have developed climate- and nature-related risk methodologies, which rate cross-sectoral exposures to SCR sensitivity, on a scale from high to low. Following a risk segmentation approach, these methodologies define “climate- (or nature-) sensitive” exposures by aggregating the top three out of five risk ratings (absolute, in USD) over the total lending exposure to customers (on- and off-balance sheet, percent).

Transition risk heatmap

We have based our transition risk heatmap methodology on dividing economic sectors with similar risk characteristics into risk segments and rating those segments according to their vulnerability to (i) climate policy, (ii) low-carbon technology risks and (iii) revenue or demand shifts under an immediate and ambitious approach toward meeting Paris-Agreement goals. As a result, the ratings in the heatmap reflect the levels of risk that would likely occur under an ambitious transition (in a short-term time horizon).

This climate risk heatmap rates UBS’s cross-sectoral gross financial exposures to climate-transition sensitivity from high to low (sensitivity for financial impacts to the creditworthiness and/or value of corporate entities and real estate assets) through a risk segmentation process. We base our ratings upon climate risk ratings determined by ratings agencies, regulators, and expert consultants and are further developed by UBS. The rating given may be considered a proxy for the likelihood (e.g., a “high” rating for most fossil fuel sectors), while our exposure classification to those ratings (and sub-sectors) may be considered a proxy for inherent risk.

Our findings show very low exposure to high-risk economic activities / subsectors (energy sector credit risk), while a low exposure to moderate activities / subsectors (climate-sensitive sector credit risk). We derived the methodological approach for the transition risk assessment from an active collaboration with the UNEP FI and Oliver Wyman.

Physical risk heatmap

We developed our physical risk heatmap methodology in-house to reflect the vulnerability to physical risk and to climate change (acute and chronic) across the regions (Switzerland, North America, Europe and Central Asia, Latin America and the Caribbean, East Asia and Pacific, the Middle East and North Africa, and sub-Saharan Africa), as well as sectors and related value chain risk factors, which are derived from a range of academic and expert sources per the external sources listed below. As a result, the ratings in the physical risk heatmap reflect the levels of risk exposure that would likely occur under an ambitious transition (in a short- time horizon).

The physical risk heatmap methodology groups corporate counterparties based on exposure to key physical risk factors, by rating sectoral (sectoral average risk distribution), geographic (country vulnerability and adaptive capacity), and value chain (sectoral average risk distribution) vulnerabilities in a climate change trajectory, in which no additional policy action is taken and scored for the potential for financial loss in the short-term time horizon. The metric sums normalized scores for sector (average geographic footprint used as proxy in lieu of asset-level data), location (country of risk domicile), and value-chain exposures. Ratings from low to high are based on a weighted average score (from 0 to 1), given by twice the weight for sector and geography, and once for value-chain (as it partly is included in sectoral and geographic scores).

Scores are given by the following inputs:

- the counterparty’s sectoral activity (e.g., primary energy extraction presents higher physical risks than banks due to the sector’s average geographic footprint and vulnerability to financial losses in the short term from physical risk hazards);
- the counterparty’s geography, represented by the main country of risk domicile. For example, countries in Southeast Asia tend to be higher risk than those in western Europe, with some exceptions, reflecting the potential for national economic resilience and subsidy to economic activities threatened by climate change; and
- the potential disruption to a counterparty’s value chain, where relevant (both its supply chain and distribution channels again reflecting the sectoral average geographic footprint and vulnerability).

	Transition risk	Physical risk
Methodology	Expert-based transition risk ratings obtained from the UNEP-FI and Oliver Wyman for sectors (e.g., energy, and agriculture and forestry), as well as industry segments are rated to a score (between 0 and 1) and then multiplied with each other to obtain a final transition risk score ranged within a rating (low / moderately low / moderate / moderately high / high). The scores and ratings are mapped to the predetermined scope of financial exposures, which are adjusted for country / energy mix (Switzerland and the Investment Bank).	Calculated by averaging the cumulative distribution function transformation of the normalized version of the physical risk score / rank obtained from the respective indices. This score is ranged within a rating (low / moderately low / moderate / moderately high / high). The scores and ratings are mapped to the predetermined scope of financial exposures.
Timelines	Short-term (0–3 years)	Short-term (0-3 years)
Scenario	Ambitious transition meeting <2°C objectives	Business as usual
Interpretation	Reflect levels of risk and likelihood of financial impact and exposure based on scenario	Reflect level of risk and likelihood of financial impact and exposure based on scenario
Examples	“High” for most fossil fuel sectors, “Moderate” for some transport sub-sector	“High” for energy in Southeast Asia, “Moderate” for energy in Switzerland

Nature-related risk methodology

With this metric we measure our firm’s risk exposures within sectors with a moderate to high dependency on natural capital, as defined through the ENCORE (Exploring Natural Capital Opportunities, Risks and Exposure) methodology. ENCORE identifies economic activities that are most vulnerable to financial impacts due to their dependency on ecosystem services and maps production processes within economic sectors to ecosystem services dependencies and potential impacts on natural capital assets.

We are piloting this methodology, toward consideration of different approaches of quantifying both dependency and impact on natural-related topics, in advance of the pertinent Taskforce on Nature-related Financial Disclosures (the TNFD) discussions. Our nature-related risk metric:

- can be used to identify sectors and segments that are potentially vulnerable to disruption of ecosystem services, which, in turn, enables resource prioritization for detailed bottom-up risk analysis (*risk identification*);
- can be mapped to a portfolio to see how material is the dependency on nature-related risks, supporting the strategic decision-making process to reduce risk exposures (*strategic prioritization*); and
- can serve as a useful guide when thinking about sensitivities to various risk drivers, especially in sectors that the firm has not previously assessed, providing decision-useful information in internal reports to executive and board leadership and external disclosure to stakeholders (*risk assessment*).

Calculation logic

The natural capital risk heatmap identifies our firm’s exposure to companies in sectors where activities are vulnerable to disruption of ecosystem services due to dependency on the natural environment. Our SCR unit mapped the ENCORE database to UBS industry codes / GIC 2.0. Respective ratings were then assigned to the GIC 2.0 sectors / subsectors. The ratings for ecosystem services dependencies of a sector considers the potential (i) loss of functionality of a production process; and (ii) financial loss, if the ecosystem service is disrupted. Production processes are organized under subsectors, to which UBS GIC 2.0 sectors are mapped, and ratings given to the subsector represent the maximum risk rating amongst production processes, for each ecosystem service, for each subsector. The score ranges from 5 (high dependency) to 1 (low dependency). Scores are summarized (added) and standardized on a normal cumulative distribution function. Our firm’s exposure classification to those ratings (and subsectors) may be considered a proxy for dependencies to ecosystem services. The metric of dependency / total lending exposure (as a percentage) is calculated in line with the climate sensitive metric.

Scenarios used by UBS

We use scenario-based approaches to assess our exposure to physical and transition risks stemming from climate change. A table in our Sustainability Report, available on ubs.com/gri, summarizes the scenarios used by UBS.

Information pertaining to environmental risk management regulations in APAC

Governance

The board of directors and senior management of UBS Asset Management (Hong Kong) Limited (“UBSHK”) and UBS Asset Management (Singapore) Ltd. (“UBSSG”) are informed and kept updated on climate- and environment-related risks, respectively. These risks are reviewed by the following bodies in UBSSG and UBSHK:

- Asset Management executive team and global heads: The Asset Management executive team at global level is responsible for the overall strategic considerations of integration of climate risks connected to the division’s investment activities, governance and controls.
- Board of directors of UBSSG / UBSHK: The board of directors is the governing body of UBSSG or UBSHK and is responsible for following the overall direction from the global level as well as the supervision and implementation of climate-related risks. It assumes ultimate responsibility for the conduct, operations and financial soundness of the respective entity, including quarterly meetings to monitor climate-related risks.
- Designated management-level positions: The responsibilities of designated management include ensuring the development, implementation and review of framework, policies, and metrics and allocating adequate resources with appropriate expertise. Regular management meetings are held to monitor the status and progress of efforts to manage climate-related risks.

Our investment and risk management approach to climate risks

Our overall strategy for managing climate risks is to integrate risk data and insights into our investment management processes. This begins with assessing environmental, social and governance (ESG) issues based on our ESG Material Issues framework, which identifies the most relevant issues per sector making the connection to key value drivers that may impact the investment thesis across sectors. We have updated our ESG Material Issues framework with a sector-based view of exposures to physical and transition climate risks.

During 2022 we onboarded additional climate physical and transition risk datasets. We have enhanced our proprietary ESG Dashboard with this climate physical and transition risk data, and with alerts to highlight the highest risk issuers. This enables research analysts to incorporate physical and transition climate risks into their qualitative ESG risk assessments and resulting ESG risk recommendations, informing portfolio manager investment decisions.

Data and Metrics

During 2022 we onboarded additional climate physical and transition risk datasets to support ongoing enhancements to our investment management and risk management processes. We have also enhanced our proprietary ESG Dashboard with this climate physical and transition risk data, and with alerts to highlight the highest risk issuers. At a portfolio level, our global risk system provides transparency around GHG emissions.

- Physical risk arises from the impact of weather events and long-term or widespread environmental changes. High physical risks imply high probability of a company’s assets value reduction or production interruption. Our climate physical risk assessment considers events such as heat/cold wave, water stress, flooding, sea-level rise, hurricanes and wildfires, and results in a composite physical risk score. An issuer’s score is measured from 1 to 100, and is an aggregate (weighted average) of risk scores linked to individual assets measured across the climate hazards.
- Transition risk covers the adjustment to an environmentally sustainable economy, including changes in public policies, disruptive technological developments and shifts in consumer and investor preferences. One of the ways we assess transition risk is using an “Earning at risk” approach, which analyzes the unpriced carbon cost to a company as % of its EBITDA (Earnings before interest, taxes, depreciation, and amortization).

In line with the Securities and Futures Commission's circular on the management and disclosure of climate-related risks by fund managers and the Monetary Authority of Singapore's environmental risk management guidelines, we have implemented a multi-scenario analysis for physical and transition risks. Physical risks feature different temperature increase scenarios and transition risks consider different carbon price development scenarios. The scenarios are analyzed for various time horizons up to 2050 which can be used to determine future climate-related risk in investment portfolios. As part of the second line of defense controls performed by Group Risk Control for UBS funds subject to the Hong Kong, Singapore, or Taiwan risk regulations, guidelines, codes, circulars, etc., we integrated climate risk in the risk control and monitoring process including scenario analysis as described above.

For some of our portfolios, the assessment of climate-related risks is not possible in the investment management and risk management processes due to lack of data. For these portfolios, risk assessments will incorporate climate physical and transition risks as data becomes available.

Discretionary portfolios managed in Singapore (Global Wealth Management)

Risk identification

Our environmental risk framework for Global Wealth Management's discretionary portfolios managed in Singapore (and booked there or in Hong Kong) focuses on climate risk data from specialized data providers and is based on exposure to climate sensitivity, from high to low, across physical and transition risks. Identification of material environmental risks is achieved by scenario analyses on mid- and longer-term impact. It is run on our underlying investment models across different climate outcomes, based on weighted portfolio sensitivities to physical and transition risks.

For physical risk, we consider as our central scenario representative concentration pathways (RCP) 4.5 (reflecting expected global warming of 2–3°C by 2100) and associated modeled physical risk implications on asset values by 2030. Additionally, we perform scenario analysis on RCP 2.6 (below 2°C) and RCP 8.5 (more than 4°C under a business-as-usual scenario) into the longer term (2050).

For transition risk, we see carbon earnings at risk as the most directly quantifiable and comparable metric across industry sectors globally, reflecting the reach and complexity of our portfolios. We perform scenario analysis based on three carbon price trajectories (low, medium, high) across four time horizons: short (2025) to long-term (2050), with medium (2030) as our central scenario. Outside of carbon earnings at risk, we recognize the existence of technological, policy and market risks. However, these can vary greatly across sectors and countries. As a result, it is difficult to apply a consistent and credible analysis that remains objective to our global portfolios.

The identification of the middle-of-the-road pathway and 2030 as the central scenario balances multiple factors, namely: the relevance of financial projections, current decarbonization policies and implementation rates, and the need for near-term checkpoints within long-term climate action. For both physical and transition risk, in addition to highlighting portfolios with material sensitivity in high-risk scenarios, we monitor the weighted portfolio sensitivity based on the central scenario.

Data and Disclosure

All climate data projections and models are sourced at the issuer level from S&P Trucost and aggregated by UBS. For physical risk, sensitivities are assessed by S&P Trucost based on issuers' known asset locations and estimated value. For transition risk, earnings sensitivity to carbon is projected under various carbon pricing trajectories in different regions. In both cases, the projections are built upon publicly reported company data, restricting coverage to corporate issuers, which form the bulk of our portfolios. Consequently, exposure to sovereigns or structured products, for example, are not covered at this point. This framework will be reviewed at least annually and progressively enhanced as data availability increases and industry practices develop.

In June 2022, we expanded our coverage of climate risk monitoring to discretionary investment portfolios managed by Global Wealth Management in Singapore, in line with the Monetary Authority of Singapore (MAS) Guidelines on Environmental Risk Management for Asset Managers. Our environmental risk analyses to identify and monitor material risks within our discretionary portfolio strategies managed in Singapore are conducted and reported on an annual basis.

Global Wealth Management has developed a governance and control framework to ensure quality and consistency of data and ongoing monitoring of identified risks, reviewed by regional and global oversight forums and risk committees. We are also working closely with our data providers to continuously enhance the quality of data available to us.

As part of the 2022 environmental risk analysis, the majority of strategies had no material physical risks identified. However, our transition risk analysis highlighted select strategies with elevated mid-term exposure which are being monitored, and have been reviewed and acknowledged by the relevant governance bodies.

At this point in time, climate risk analyses would not be used to inform capital evaluation either at the asset allocation or instrument selection levels within Global Wealth Management, due to investment scope, limitations of data availabilities, modeling uncertainties and implementation hurdles. The majority of our discretionary portfolios comprise of investment funds from third-party fund managers, including Asset Management where appropriate. Generally, Global Wealth Management acts as an asset allocator and manager of these portfolios but does not control portfolio construction and management within the underlying fund investment solutions. Therefore, on top of developing a climate risk assessment management framework based on underlying investment holdings, we are looking to understand the climate risk management practices established by the managers of the underlying funds.

To that end, in the past we communicated with our fund partners about climate risk issues, including the extent to which environmental / climate risk management processes have been developed and implemented by fund partners, with relevance to the MAS Guidelines on Environmental Risk Management for Asset Managers. We commit to continue having regular communications with our fund partners on the development of environmental / climate risk management processes.

Climate risk data remains a nascent area, and best practice standards or norms have yet to be developed. This results in gaps in data coverage, and the use of proxy or estimation techniques which are known. Financial models typically project up to three years in advance, with significant deterioration in visibility beyond one year. As such, long-term projections used to generate data even for 2030 involve high degrees of uncertainty.

Our overall investment decision-making process is largely driven top-down. While corporate-level data sourced from S&P Trucost has been identified as the best prevailing solution for Global Wealth Management portfolios given its credibility, complexity and reach, the bottom-up dataset is not immediately applicable to integration into Global Wealth Management investment processes without the use of significant aggregation and proxies.

Appendix 4 – Metrics and targets

Our transition plan

Our transition plan is a prioritized plan of action following the aspirations outlined in our net-zero and beyond strategy to achieve net-zero carbon emissions in our own operations and our business activities (as set out in our commitments to the Net Zero Asset Managers (NZAMi) initiative and the Net-Zero Banking Alliance (NZBA)) while supporting our clients through their own transitions to net zero. The structure of our plan follows the recommendations of the Glasgow Financial Alliance for Net Zero (GFANZ) outlined in the “Financial Institutions Net-zero Transition Plans” guidelines. GFANZ published these guidelines, to which UBS contributed during their development, at the 27th session of the Conference of the Parties of the UNFCCC (COP 27).

UBS contributed to the development of these guidelines. This forms part of our engagement with our peers in the financial services industry in order to determine how best to support and finance clients’ transition to a low carbon economy. Contributing to such frameworks, including also by the NZBA, in turn forms an important basis for developing our own approach to transition finance.

We believe the GFANZ guidelines to be comprehensive and relevant for the financial sector, but will also continue to monitor other potential emerging standards. Our action plan touches on numerous aspects of our Sustainability Report (SR22), which are referenced in the table below.

› Refer to gfanzero.com/our-work/financial-institution-net-zero-transition-plans/ for GFANZ’s recommendations

#	Theme	Principles	Key activities engaged by UBS and where to find more information
Foundation			
1	Objectives and priorities	<p>Conscious of the potential adverse financial, liability and reputational risks that can arise from sustainability and climate risks and in response to client needs:</p> <ul style="list-style-type: none"> – We are focused on supporting the transition toward a net-zero future, with the goal of limiting global warming to 1.5° C. – We aspire to achieve net-zero greenhouse gas emissions resulting from across our business by 2050. In line with this commitment, we will reduce the carbon footprint of our loan book across sectors that account for a sizable share of our credit portfolio and financed emissions and have set intermediate net-zero targets for 2030 for the following sectors: fossil fuels, power generation, real estate and cement. – We are committed to directing capital toward the low-carbon transition through investments, and by helping our financing clients to achieve their climate targets. – We provide our investing clients with the choice they need to meet their sustainability and impact objectives, including climate impact where that is their priority and in line with our fiduciary duties. – We aspire to lead by example, and have committed to net zero for scope 1 and 2 emissions by 2025, prioritizing emission reduction at source. 	<ul style="list-style-type: none"> – See SR22 – “Our aspirational goals and progress” subsection for a description of our financing reduction targets for 2030 and Asset Management (AM)’s target to align 20% of total assets under management (AuM) to be in line with net zero. – See SR22 – “Our climate roadmap” subsection for a description of the steps we intend to take toward net zero until 2050 and for our net-zero strategies and approaches to reduce emissions from our financing, investment and own operations. – See SR22 – Appendix 5 – “Objectives 2023” subsection for more details about our objectives aligned to the mid- and long-term targets. – See SR22 – “Managing sustainability and climate risks” subsection and SR22 – Appendix 1 – “Climate-related materiality assessment” subsection for an overview of our reviews of risks, opportunities in the climate materiality assessment and impacts expected from implementation. – See SR22 – Appendix 3 – “Reducing our environmental footprint – additional information” subsection for more details about impact reduction and carbon offset purchases in the context of our own operations.

Implementation strategy		
2	Products and services	<ul style="list-style-type: none"> – We help our clients assess, manage and protect their assets from climate-related risks by offering innovative products and services in investment, financing and research and through our climate risk disclosure. – We are continually developing and refining sustainable solutions and approaches that help clients manage their exposures to climate change risk. – We will continue to manage and monitor our climate-related risks and our lending activities and aim to orient new and existing business efforts toward net zero by 2050. We aim to do this by further strengthening our operating model and increasing our efforts in the field of transition and green finance. – In AM, during 2023, we intend to implement revisions to fund documentation and investment management agreements to align with our net-zero-aligned frameworks. We continue to invest in the necessary data and infrastructure to support management and monitoring of portfolios, issuer alignment and real economy decarbonization. – Our Global Wealth Management (GWM) business division continues to work toward mainstreaming sustainable and impact investments for our private clients. <ul style="list-style-type: none"> – See SR22 – “Our approach to sustainable finance” subsection, for examples of our sustainable finance offering, including products and services launched in 2022. – See SR22 – Appendix 1 – “Sustainable finance at UBS – additional information” subsection for a selected list of the products and services we offer to support our net-zero transition strategy and SR22 – Appendix 1 – “Climate-related materiality assessment” subsection to see how we incorporate climate considerations into our product development and strategy. – See SR22 – “Outlook for net zero for lending” subsection and SR22 – “Supporting the net-zero goals of our investing clients” subsection for information on our net-zero alignment approach.
3	Activities and decision-making	<ul style="list-style-type: none"> – Our Group Risk Control unit manages our sustainability and climate risk (SCR) program to further integrate SCR into our various risk management frameworks and related processes. We are further strengthening our operating model to ensure we monitor and steer our clients’ assets and our own assets effectively. The operating model encompasses the processes we follow to aim to align new and existing business toward net zero by 2050. – We are integrating our net-zero targets as part of standard financial and non-financial risk processes to ensure that material sustainability and climate risks are identified, assessed, approved, and escalated in a timely manner. These integrations cover processes across client onboarding, transaction due diligence, product development and investment decision processes, own operations, supply chain management, and portfolio reviews. <ul style="list-style-type: none"> – See SR22 – “Managing sustainability and climate risks” subsection for a description of our risk processes and our climate risk program (including the board-set risk appetite, a carbon utilization measurement conceptualized in 2022 and aligned with our net-zero implementation and targets, and a company / asset-level transition and physical risk scorecard). – See SR22 our sustainability report’s Supplementary Information for “Informing and evolving our strategy – our materiality assessments” subsection for sustainability and climate risk assessment of products, services and activities deemed as having high risk.
4	Policies and conditions	<p>Our comprehensive and long-standing SCR policy framework:</p> <ul style="list-style-type: none"> – applies Group-wide to relevant activities, including client and supplier relationships; – is integrated into management practices and control principles and overseen by senior management; – supports transition toward a net-zero future; and – focuses on priority sectors and activities and other sectors that are carbon high-emitting (or otherwise harmful to the climate), to define business boundaries in line with our net-zero ambitions and priorities. <p>We will continue to enhance and refine our SCR policy framework in line with the evolving regulatory guidance and market practices.</p> <ul style="list-style-type: none"> – See SR22 – Appendix 2 – “Our sustainability and climate risk policy framework” subsection setting our standards including “Controversial activities – where UBS will not do business” and “Areas of concern – where UBS will only do business under stringent criteria”. – See SR22 – Appendix 2 – “Forests and biodiversity” subsection describing our view on deforestation and forest degradation. – See our <i>Asset Management Sustainability Exclusion policy</i> for details about AM’s exclusion approaches where we exclude individual companies or industries from a portfolio, either because their activities do not meet certain ESG criteria, and/or they do not align with the client’s values and/or UBS’s.
Engagement strategy		
5	Clients and portfolio companies	<ul style="list-style-type: none"> – We work alongside our clients and portfolio companies to support their efforts to transition in line with the Paris Agreement-aligned 1.5°C net-zero pathways. We proactively and constructively provide feedback and support to our corporate clients on their net-zero-aligned transition strategies, plans and progress. – For transition of investment portfolio, we see our active ownership strategy as a powerful tool in influencing corporate behavior to achieve real-economy outcomes. We have had a dedicated climate engagement program in place since 2017 to address climate-related risks with measurable progress tracked. Similarly, and in line with our intermediate net-zero targets for 2030, we engage with our corporate clients on these matters. <ul style="list-style-type: none"> – See SR22 – “Sustainable investing for our clients” subsection for details about how we approach active ownership and a selection of our engagement programs. – See SR22 – “Supporting the net-zero goals of our investing clients – Asset Management” subsection for our dedicated climate engagement program. – See our Asset Management Stewardship Report and our <i>Global Stewardship Policy</i> for information about our active approach to stewardship as a crucial part of any sustainable investing strategy across asset classes through engagement, proxy voting and advocacy, enabling us to work with firms to influence behaviors, drive changes and achieve better outcomes.
6	Industry	<ul style="list-style-type: none"> – We proactively engage with peers in the industry to: i) as appropriate and in line with local rules and regulations, exchange transition expertise and collectively work on finding solutions to common challenges; and ii) represent the financial sector’s views cohesively to external stakeholders, such as clients and governments. <ul style="list-style-type: none"> – See SR22 – Supplementary Information document – “Evolving and informing our strategy – our contributions to the advancement of sustainability” subsection for how we engage with stakeholders on key climate topics on a regular basis. – See SR22 – Supplementary Information document – “Supporting our strategic goals – our engagement in partnerships” subsection for how we take action both on our own and in partnership with other large investors, standard setters, regulators, political parties, our clients and our peers, as well as our communities and our own employees and how we advance sustainability in the financial sector.
7	Government and public sector	<ul style="list-style-type: none"> – We proactively engage in political initiatives relating to climate-related issues based on our climate strategy and net-zero planning. We focus our engagement around an orderly transition that is aligned with the Paris Agreement. – We actively participate in political discussions to share our expertise on proposed regulatory and supervisory changes across regions on a regular basis in our key markets.

Metrics and targets

8 Metrics and targets	<ul style="list-style-type: none"> – We support the goals of the Paris Agreement which includes aligning our own operations and business activities with the pathway of a five-step net-zero plan to: (i) measure carbon emissions; (ii) define a roadmap and set targets; (iii) reduce climate impact; (iv) finance climate action and support the transition of our clients; and (v) communicate and engage. – We have established a suite of metrics and targets to drive execution of our net-zero transition plan and monitor the progress of our results in the near, medium and long term. 	<ul style="list-style-type: none"> – See SR22 – “Our aspirational goals and progress” subsection for a description of our aspirational goals pertaining to the planet and progress in 2022. – See SR22 – “Reducing our environmental footprint” subsection for a description of how we will manage any residual scope 1 and 2 emissions that cannot be mitigated through reducing at source. – See SR22 – “Monitoring the environmental impact of our supply chain” subsection, SR22 – “Managing our supply chain responsibly” for our actions pertaining to our supply chain. – See SR22 – Appendix 3 – “Climate-related methodologies – net zero approach for our financing activities” subsection for further information about our methodology, targets and sector-by-sector approach and metrics. – See SR22 – Appendix 3 – “Climate-related methodologies – net zero approach for our financing activities” subsection, and SR22 – Appendix 3 – “Climate-related methodologies – defining net-zero aligned investment portfolios” subsection for a description of assumptions, scope, uncertainties and key methodologies associated with the transition plan, as well as our view on carbon sequestration.
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Governance

9 Roles, responsibilities and remuneration	<ul style="list-style-type: none"> – Our climate strategy and activities are overseen at the highest level of our firm. The Board of Directors’ Corporate Culture and Responsibility Committee is the body primarily responsible for corporate culture, responsibility and sustainability including climate). It oversees our sustainability and impact strategy and activities and approves Group-wide sustainability and impact objectives. – Our Group Executive Board (the GEB) Lead for Sustainability and Impact steers our efforts on sustainability (including climate). ESG-related goals are also assigned for all GEB members. We have established a Sustainability and Climate Task Force to implement our firm’s climate strategy and to monitor progress against that strategy. – We are continuously improving the governance, execution and control of the processes in place to support our net-zero efforts. 	<ul style="list-style-type: none"> – See SR22 – “Our sustainability governance” subsection for a description of how UBS governs its sustainability and climate strategy. – See SR22 – “Pay our people fairly and equitably” subsection and our UBS Compensation Report 2022 at ubs.com/annualreporting for information about how sustainability objectives are included in the scorecards for our Group CEO and members of the GEB that impact the relevant performance assessment and compensation decisions. – See SR22 – Appendix 5 – “Independent assurance report by Ernst & Young” subsection for the independent assurance report by EY.
10 Skills and culture	<ul style="list-style-type: none"> – To support the development and implementation of our net-zero transition plan, we implement a change management program and ensure alignment and embed the plan into the organization’s culture and practices, as well as providing support to individuals so that they have sufficient skills and knowledge to perform their roles. – We provide specialized and awareness training sessions on sustainability and climate risk. For example, in 2022 we continued our climate risk-related training for our employees and also delivered awareness training across our business divisions and Group Functions that includes climate risk aspects. 	<ul style="list-style-type: none"> – See SR22 – “Climate risk management and control” subsection for details about training provided to employees with regard to climate risk. – See SR22 – Appendix 2 “Sustainability-related training and raising awareness” subsection for details about how we engage in education and awareness raising for staff, clients and local communities, regarding corporate responsibility and sustainability topics and issues.

Climate-related methodologies – net-zero approach for our financing activities

As part of our *net-zero commitment* (available on ubs.com/gri) in April 2021, we pledged to set targets that further align our financing activities with the Paris Agreement and became a founding member of the Net-Zero Banking Alliance (the NZBA). Collaborative organizations such as the NZBA or the Partnership for Carbon Accounting Financials (PCAF) are gradually developing pertinent standards and guidelines or expanding on existing ones. However, currently divergence continues to exist in how financial institutions approach the matter. At UBS, we strive to achieve appropriate levels of comparability and consistency throughout the measurement and reporting of our carbon footprint.

› Refer to the “Appendix 2 – Strategy” section of this report for an overview of key climate- and nature-related organizations

In this section, our focus is on our net-zero approach for our financing activities and the process we are following to define the sectoral ambitions for our lending portfolio. It also details pertinent climate-related methodologies and scenarios used in this process.

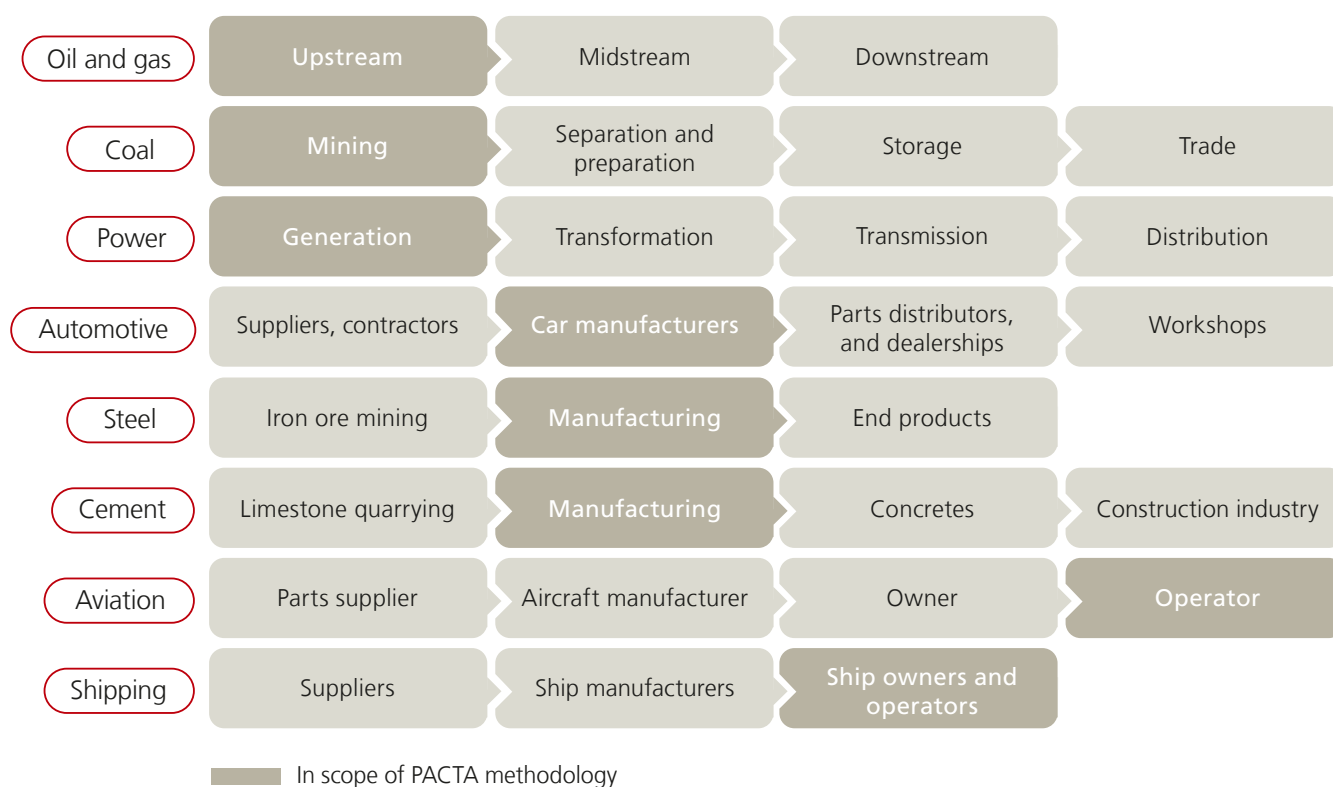
Scope and boundaries

The scope covered by our net-zero ambitions and a first assessment of the overall emissions associated with UBS's corporate lending and real estate mortgages. Our net-zero ambitions are based on the full lending commitment made to our clients. This includes our outstanding loans, as well as undrawn irrevocable commitments, i.e., amounts that we would be obliged to provide if requested by a counterparty. In our view, this is the most relevant approach to measure and steer our lending portfolio toward our ambitions. The preliminary assessment of total financed emissions is calculated based on our outstanding lending exposure in line with PCAF guidance.

We recognize that capital markets facilitation also plays an important role in the financing of our clients. These transactions are therefore subject to our sustainability and climate risk (SCR) policy framework but are currently not part of our net-zero analysis. There is currently no accepted industry-wide standard on how to account and aggregate carbon emissions facilitated by capital market activities. We are engaging with standard setters such as PCAF on emerging approaches in order to consider those activities in our future ambitions.

For non-financial corporate loans, we have prioritized the climate-sensitive sectors recommended by the NZBA where we have material financial exposure and where methodologies and metrics exist to measure and steer the transition toward net zero. In addition, our net-zero approach is closely aligned to the methodology outlined by Paris Agreement Capital Transition Assessment (PACTA) white paper. As such, we have considered parts of the value chain within climate-sensitive sectors that hold the bulk of the impact on the climate system and where the decision-making power or capacity to reduce carbon emissions directly or indirectly resides.

Part of the sectors' value chains in scope



Source: PACTA for Banks Methodology document – climate scenario analysis for corporate lending portfolios – version 1.2.1.

Metrics

Scope 1, 2 and 3 greenhouse gas emissions

As defined in PCAF standards¹, greenhouse gas (GHG) emissions accounting refers to the processes required to consistently measure the amount of GHGs generated, avoided or removed by an entity, allowing it to track and report these emissions over time. The emissions measured are the seven gases mandated under the Kyoto Protocol and to be included in national inventories under the United Nations Framework Convention on Climate Change (the UNFCCC): carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF₆) and nitrogen trifluoride (NF₃). For ease of accounting, these gases are usually converted to and expressed as carbon dioxide equivalents (CO₂e).

According to PCAF's GHG Protocol Corporate Accounting and Reporting Standard (the GHG Protocol), direct emissions are emissions from sources owned or controlled by the reporting company. Indirect emissions are emissions that are a consequence of the operations of the reporting company but that occur at sources owned or controlled by another company.

Direct and indirect emissions are further categorized by scope and distinguished according to the source of the emissions and where in an organization's value chain the emissions occur. The three scopes defined by the GHG Protocol – scopes 1, 2 and 3 – are briefly described below:

- Scope 1: Direct GHG emissions that occur from sources owned or controlled by the reporting company, i.e., emissions from combustion in owned or controlled boilers, furnaces, vehicles, etc.
- Scope 2: Indirect GHG emissions from the generation of purchased or acquired electricity, steam, heating, or cooling consumed by the reporting company. Scope 2 emissions physically occur at the facility where the electricity, steam, heating, or cooling is generated.
- Scope 3: All other indirect GHG emissions (not included in scope 2) that occur in the value chain of the reporting company. Scope 3 can be broken down into upstream emissions that occur in the supply chain (for example, from production or extraction of purchased materials) and downstream emissions that occur as a consequence of using the organization's products or services.

¹ PCAF (2022). The Global GHG Accounting and Reporting Standard Part A: Financed Emissions. Second Edition.

The GHG Protocol further categorizes scope 3 emissions into 15 upstream and downstream categories. For banks such as UBS, emissions financed via lending activities fall under scope 3 downstream emissions, more precisely under Scope 3 category 15.

Financed emissions reported under scope 3 category 15 include apportioned scope 1 and 2 emissions of the counterparties or assets being financed. Scope 3 is included for certain sectors where methodologies and data are widely available. We have included scope 3 emissions in our assessment of the fossil fuel, power generation and automotive sectors.

Absolute financed emissions

Financed emissions represent the carbon emissions of our corporate clients attributed to UBS. Following PCAF guidance, the attribution factor is the fraction of UBS's loan exposure to the client's enterprise value including cash (EVIC) or the sum of equity and debt for private companies.

$$\text{Corporate financed emissions} = \sum \left(\text{Corporate emissions} \times \frac{\text{Financing to corporate}}{\text{EVIC or Equity + Debt}} \right)$$

In the case of real estate, the attribution is based on the loan-to-value (LTV) of the property. In accordance with PCAF guidance, residential real estate LTV is calculated using the original property value, while for commercial real estate the most recently available property valuation is used.

$$\text{Real estate financed emissions} = \sum (\text{Real estate emissions} \times \text{LTV})$$

Physical emissions intensity

Physical emissions intensity is a metric that normalizes a company's emissions by its output (e.g., the megawatt-hours or metric tons of cement produced). Through this metric we can monitor whether our clients are becoming increasingly efficient. The physical emissions intensity effectively demonstrates the progress made to transition climate-sensitive sectors in our lending portfolio toward net zero.

$$\text{Corporate physical emis. intensity} = \sum \left(\frac{\text{Corporate emissions}}{\text{Corp. output (e.g., MWh, tons produced)}} \times \frac{\text{Financing to corporate}}{\text{Total sector financing}} \right)$$

For real estate, the physical emissions intensity is calculated by dividing the sum of financed emissions by the sum of financed surfaces.

$$\text{Real estate physical emissions intensity} = \frac{\sum (\text{Real estate emissions} \times \text{LTV})}{\sum (\text{Real estate surface} \times \text{LTV})}$$

Quantifying clients' emissions

To estimate the emissions from our clients we rely on data available in their own disclosures, data from specialized third-party providers and internal data. Current limitations on the availability of emissions data at company or asset level required us to include approximations in the calculations; for example, by applying a sector-level proxy where company- or asset-level data is not available.

We expect the availability and quality of emissions data to improve in the next few years. Improved data may be used to strengthen the robustness of the reporting, which may result in restatements of our net-zero ambitions and total financed emissions over time. In the preliminary assessment of our total financed emissions, we have included PCAF quality scores facilitating data transparency and encouraging improvements to data quality in the medium and long term (see the PCAF data quality scoring scale below).

The inherent one-year time lag between the as-of date of our lending exposure and the as-of date of emissions can be explained by two factors: corporates disclose their emissions in annual reporting only a few months after the end of a financial year; and specialized third-party data providers take up to nine months to collect disclosed data and make it available to data users. Consequently, the baselines for our net-zero ambitions are based on year-end 2020 lending exposure and 2019 emissions data. Our 2021 emissions actuals are based on year-end 2021 lending exposure and 2020 emissions data.

PCAF data quality scoring from 1 to 5

		Corporate Financing	Real Estate Financing
	Certain	Score 1 Verified emissions disclosed by the company	Emissions estimated based on primary energy consumption data and energy supplier-specific emissions factors
		Score 2 Unverified emissions disclosed by the company or estimated based on the company's energy consumption and related emissions	Emissions estimated based on primary energy consumption data and average emissions factors per energy source
		Score 3 Emissions estimated based on the company's primary production and emissions factors per unit of production	Emissions estimated based on average energy consumption per energy label and surface area
		Score 4 Emissions estimated based on the company's revenues and emissions factors per unit of revenue	Emissions estimated based on average energy consumption per location, building type, and surface area
	Uncertain	Score 5 Emissions estimated based on average emissions per US dollar invested in a sector	Emissions estimated based on average energy consumption per location, building type, and number of buildings

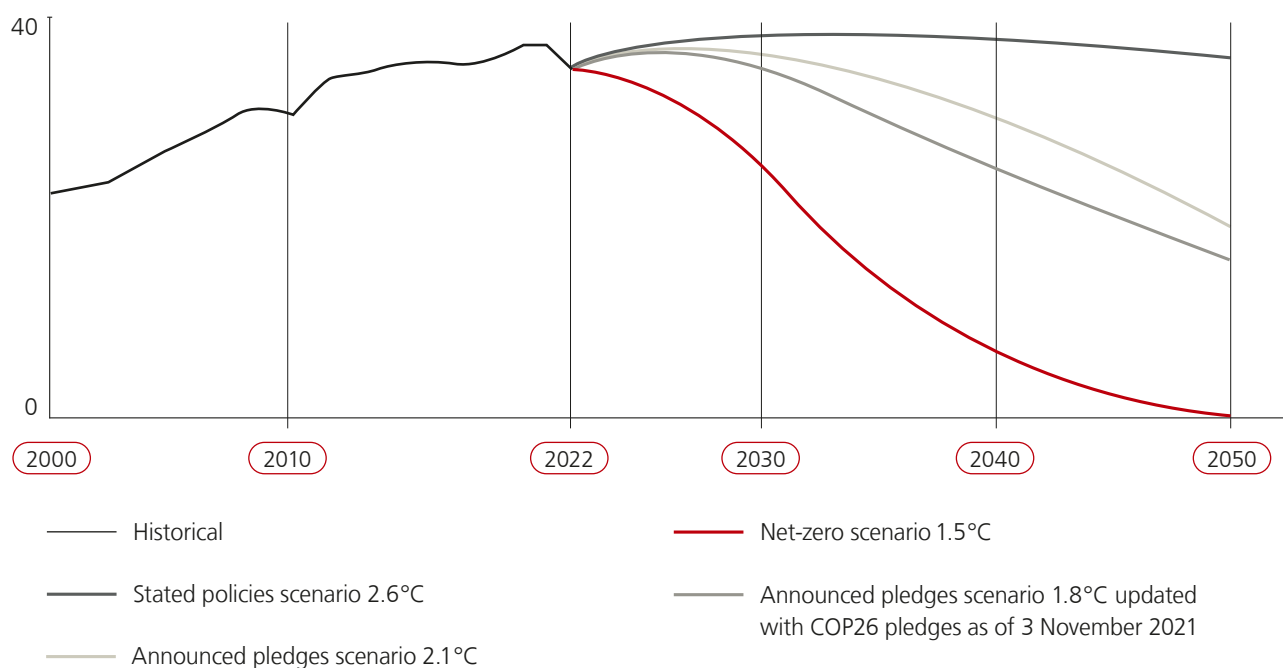
Source: PCAF 2020 "The global GHG accounting and reporting standard for the financial industry."

Climate scenarios

We selected the scenario – IEA NZE by 2050 – in accordance with the NZBA guideline, as one of the most recent and widely accepted models that achieves a temperature increase of 1.5°C by 2050. Over time we will seek to augment our sector pathways, as we gain greater clarity on the validity of key technological and regulatory uncertainties identified within the IEA NZE scenario (e.g., biofuels, carbon capture utilizations or CCUs). Until that point, the possibility of overshoot is factored into certain sector pathways due to the heavy reliance on external factors beyond our steering capabilities.

CO₂ emissions in world energy outlook scenarios over time, 2000–2050

In Gt CO₂



Source: IEA.

Net-zero-related materiality assessment

NZBA sectors and targets	2022		2021		Net zero	Carbon emissions scopes	Unit	2020 baseline	2021 actuals	2020–2030 target
	Gross exposure (USD billion) ¹	Covered with target (USD billion)	Gross exposure (USD billion) ¹	Covered with target (USD billion)						
Real estate										
– Residential real estate	158.9	156.9	155.9	152.9	Private clients with mortgages	1,2	kg CO ₂ e / m ²	30	27	(42%)
– Commercial real estate	47.1	45.5	44.7	43.6	Real estate financing	1,2	kg CO ₂ e / m ²	32	30	(44%)
Fossil fuels (coal, oil and gas) ²	1.3	0.5	1.0	0.7	B.05, B.06, C.19	1,2,3	t CO ₂ e, baseline indexed as 100	100	58	(71%)
Power generation	2.2	1.8	1.5	1.2	D.35.11, D.35.13	1,2,3	kg CO ₂ e / MWh	238	210	(49%)
Cement	0.5	0.5	0.5	0.5	C.23.51	1,2	t CO ₂ e / t cementitious	0.62	0.61	(15%)

NZBA sectors without target	2022		2021		NACE codes in scope of PACTA methodology
	Gross exposure (USD billion) ¹	PACTA scope (USD billion)	Gross exposure (USD billion) ¹	PACTA scope (USD billion)	
Transportation					
– Automotive	0.4	0.1	0.4	0.1	C.29
– Air	1.8	0.1	2.5	0.5	H.51
– Shipping	0.4	0.3	0.4	0.3	H.50
Aluminum	0.0	0.0	0.0	0.0	C.24.42
Steel	0.1	0.1	0.1	0.1	C.24.1
Agriculture ³	3.0	0.2	4.1	0.2	A.01

¹ Gross exposure includes total loans and advances to customers and guarantees as well as irrevocable loan commitments (within the scope of expected credit loss). ² Commodity Trade Finance excluded. ³ Refer to World Business Council for Sustainable Development publication “An Introductory Guide for Net Zero Target Setting for Farm-Based Agricultural Emissions.”

Based on a UBS-internal analysis (using data supplied by the European Banking Authority), our lending exposure to the most carbon-intensive sectors is already low compared with our peers. This has the advantage of making us well-aligned with the transition to a low-carbon economy. However, it also means that for us, the number of sectors for which our volumes justify setting meaningful net-zero targets is reduced, especially since the bulk of our lending in some NZBA sectors is to parts of the value chain that are not currently in focus of target setting for net zero.

We have set net-zero targets for five sectors that have a material share of our lending activities and carbon emissions. Targets would not be material at present for aluminum, iron and steel because of the limited exposure. For transportation and agriculture, the clear bulk of our exposure is in business activities that are not in the current scope of target-setting standards (e.g., PACTA for Banks). The developments of target-setting standards and/or portfolio exposure to those sectors are being monitored.

Further enhancements

Like many of our peers, we are at the start of our net-zero journey and have created our methodology based on current industry best practice. As the world's pathway to net zero is still at a developing stage, we expect continued advances and evolutions to our approach. We see four key factors for change: market practices will continue to evolve, science-based industry pathways may be updated, client data will become more readily available, and new methodologies will continue to emerge.

Specifically, adjustments will be needed, when scope 3 is rolled out to additional sectors beyond the fossil fuel, power generation and automotive industries after 2023, or as new target-setting guidance emerges.

Our selected scenario (IEA NZE by 2050) is currently used by the industry, but other scenarios may emerge that are more specific to our lending portfolio and geographic exposure (e.g., Switzerland). Additionally, IEA NZE is also subject to new updates and new releases over time as the science and projections develop.

Regarding data, we used a combination of data sources to build our emission baseline and targets. However, client information, either directly, or from public sources or third-party vendors, remains limited. As more information becomes available, we will be able to refine our footprint.

We have developed our methodology based on leading practices and reported where possible, despite the limitations we face due to the nascency of the challenge. As more methodologies become available for additional sectors or asset classes where UBS has relevant exposures, we will test and adopt them accordingly. The remaining improvements we can identify are reliant on external factors. We continue to await these and will make refinements wherever necessary.

Carbon sequestration

We are dedicated to helping our clients in any way possible to guide them toward net zero. Our engagement plan prioritizes emissions reductions. While we recognize that not all scenarios or frameworks allow for offsetting, we anticipate that carbon removal offsets will be needed to supplement our net-zero targets, and the reduction strategies of some of our clients. For example, certain industrial processes cannot viably achieve absolute zero emissions. Those industries, however, still provide products and services that are important to society and are likely to remain relevant in the future. In these cases, removal offsetting can help to address residual emissions from such sectors. While our selected scenario of IEA NZE does not contemplate offsets, it does include the development of robust carbon sequestration activities.

We strive to support our clients' transitions through limited use of carbon sequestration, in accordance with the NZBA. Offsets shall be additional, certified, and restricted to carbon removals to balance residual emissions where there are limited technological or financially viable options to eliminate emissions. We plan to evaluate the use of offsets and sequestration on a case-by-case basis and to take a variety of factors into consideration in assessing their applicability in our clients' net-zero efforts, including the disclosure recommendations of the various frameworks to which we are signatory. However, as technology and methodologies continue to develop, our approach to offsets will continue to evolve.

Climate-related methodologies – defining net-zero-aligned investment portfolios

Our Asset Management division's methodology is based on a framework derived from the Paris Aligned Investment Initiative's "Net Zero Investment Framework" and the Science Based Targets initiative's (SBTi) definition of net zero for financial institutions. The framework defines net-zero-aligned investment portfolios as those managed in a way that is consistent with achieving global net-zero greenhouse gas (GHG) emissions by 2050 and defines eligible metrics and appropriate guidelines for individual asset classes.

The following guiding principles are used when defining an investment portfolio as net-zero-aligned:

- The portfolio has a **defined decarbonization target** and/or invests in **climate solutions** that enable net-zero global GHG emissions by 2050.
- The portfolio makes a **real economy contribution**: relevant companies, partners, managers, borrowers, tenants and vendors that are not currently meeting or aligned with net zero are the subject of direct or collective engagement and stewardship actions.
- **Offsets** may be used to enable or support long-term carbon removal where there are no technologically and/or financially viable alternatives to eliminate emissions.
- Monitoring and **annual disclosure** of progress toward portfolio-level targets.

Portfolio target levels are expressed in terms of interim milestones or an annualized decarbonization rate (absolute or intensity) and reference a relevant science-based net-zero pathway (currently defined in relevant climate models as 1.5°C). Targets are set using scope 1 and 2 emissions; inclusion of scope 3 is guided by availability of quality data and regulatory requirements. Decarbonization can be achieved through various approaches depending on the strategy; some examples include tracking a relevant index that follows a net-zero pathway, actively managing the portfolio carbon profile vs. a relevant benchmark or managing carbon reduction to a specified pathway.

Asset Management's framework will evolve over time as further data and methodologies become available and as the real-economy decarbonization process progresses. We are making our commitments in the expectation that governments will follow through on their own commitments to ensure the objectives of the Paris Agreement are met, including increasing the ambition of their Nationally Determined Contributions, and in the context of our legal duties to clients and unless otherwise prohibited by applicable law.

Climate-related methodologies – our own operations

We have prepared our greenhouse gas (GHG) reporting in accordance with key concepts and requirements stated by the International Organization for Standardization (ISO) in ISO 14064-1:2018 (specification with guidance at the organization level for quantification and reporting of GHG emissions and removals) and the World Business Council for Sustainable Development and World Resources Institute in the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard.

All GHG emission figures are in metric tons of carbon dioxide equivalents (CO₂e) and include three of the six GHGs covered by the Kyoto Protocol: carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O). We have left hydrofluorocarbon (HFC) emissions out of our reporting as they are not a material source of GHGs for our business. We have no GHG sources contributing to perfluorocarbons (PFCs) or sulfur hexafluoride (SF₆) emissions.

Direct GHG emissions and indirect GHG emissions from electricity have been reported by UBS Group AG and its branches and representative offices, and entities where UBS has operational control and through which UBS conducts its banking and finance business or provides services in support of such business. Based on the GHG protocol scope 2 guidance and scope 3 standard, energy consumption for heating purposes of leased space where UBS does not have any operational control of the heating system is classified as other indirect GHG emissions.

We have determined the GHG emissions associated with UBS's activities on the basis of measured or estimated energy and fuel use, multiplied by relevant GHG emission factors. Where possible, fuel or energy use is based on direct measurement, purchase invoices or actual mileage data covering more than 80% of our reported energy usage. In other cases, it has been necessary to make estimations.

We have used published national conversion factors and global warming potentials to calculate emissions from operations. In the absence of any such national data, we have used the UK Government GHG Conversion Factors for Company Reporting for the calculation of GHG emissions.

The GHG base year was originally set as 2004 (July 2003 to June 2004), as that was the first year we reported detailed GHG emissions verified according to ISO 14064:2018. The 2004 GHG footprint baseline is 360,502 metric tons and consists of 41,858 metric tons of scope 1 emissions, 219,727 metric tons of net scope 2 emissions and 98,918 metric tons of scope 3 emissions. The appropriateness of the base year is reviewed on an annual basis. In 2006, we set global quantitative objectives for energy, paper, waste and water for 2009. They have been revised and extended four times to date and covered the periods 2009 to 2012, 2012 to 2016 and 2016 to 2020. The new targets relating to GHG and other environmental performance indicators are set for 2025 and have 2020 as a baseline.

Climate-related methodologies – identifying GHG key vendors in our supply chain

We have used a combination of our annual spend with vendors and Economic Input-Output Life Cycle Assessment (EIO-LCA) emission factors per industry to identify likely top emitters in our supply chain. When identifying supply chain relevant top emitters, we excluded any spend that is covered in scopes 1 and 2 or non-vendor relevant scope 3 subcategories. Vendors that collectively account for >50% of our estimated vendor GHG emissions are called GHG key vendors.

Formula:

Sum across purchased goods or services

$$\sum \frac{\text{(value of purchased goods or services (USD) \times \text{emission factor of purchased good or service per unit of economic value (kg CO}_2\text{e/USD))}}{\text{of economic value (kg CO}_2\text{e/USD))}}$$

Our GHG key vendor list is revised annually to take into consideration changes in spend and business relationships.

Appendix 5 – Other

UBS Europe SE considerations for sustainability and climate management

UBS Europe SE is a significant entity of UBS Group. Therefore, UBS Group's management of sustainability and climate risks and related risk assessments implicitly cover UBS Europe SE's portfolios. In addition, UBS Europe SE maintains an explicit management and assessment of sustainability and climate risks. This includes a tailored risk strategy and business strategy, review of the UBS net-zero commitment, as well as dedicated materiality assessments and stress testing with respect to sustainability and climate risks.

Strategy & Business Planning

Pursuant to the German Banking Act in connection with the European Banking Authority guidelines on Internal Governance and the Minimum Requirements for Risk Management (MaRisk) published by the Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht – BaFin), UBS Europe SE manages a robust and durable business strategy. The business strategy sets targets for all important business activities and defines the measures required to achieve these targets, which are updated at least on an annual basis. Some of these targets and measures consider sustainability and climate risks. Sustainability and climate risks are also included in the risk strategy where a risk appetite statement for these risks is defined.

Net zero and UBS Europe SE

As part of the UBS Group, UBS Europe SE is fully committed to supporting the goals of the Paris Agreement, which includes aligning our own operations and business activities with the pathway of a five-step net-zero plan to: (i) measure carbon emissions; (ii) define a roadmap and set targets; (iii) reduce climate impact; (iv) finance climate action and support the transition of our clients; and (v) communicate and engage. These ambitions, activities and related targets are coordinated at the UBS Group level, and then reviewed from a UBS Europe SE materiality perspective.

Climate risk scenario analysis and stress testing

UBS Europe SE has participated in the ECB supervisory climate risk stress test, which assesses how prepared banks are for dealing with financial and macroeconomic shocks stemming from climate risk. The exercise was conducted in the first half of 2022. The results indicated low exposure to corporate counterparties in high-risk sectors.

UBS Europe SE's internal climate risk scenario analysis and stress testing capabilities are currently being developed aligned to UBS Group. UBS is developing a climate risk scenario analysis and stress testing framework, which includes the development of internal climate risk scenarios covering transition and physical risks. Further, UBS Group is in the process of developing corresponding climate risk models for major risk types including credit risks and non-financial risks. This will allow risk assessments across different severities of climate change and time horizons.

Currently, UBS Europe SE assesses climate risk in an internal capital adequacy assessment process (ICAAP)-related annual sensitivity assessment. This assessment covers most relevant credit risks in the ICAAP economic perspective. It is based on the heatmaps for physical and transition risks that primarily focus on sectoral vulnerabilities.

Overall, the credit risk sensitivity assessment as well as the results from the ECB supervisory climate risk stress test indicate a low sensitivity to climate risk and therefore a low relevance for UBS Europe SE's risk profile and business model.

Materiality assessment

UBS Europe SE considers sustainability and climate risk as part of the regular risk identification process that feeds into the Risk Strategy. This includes an evaluation whether SCR has a material impact on other risk categories. For example, this assessment leverages results from the credit risk sensitivity analysis. Based on these evaluations, SCR is currently assessed as not material after consideration of mitigating measures (see section UBS management of sustainability and climate risks). This indicates a low relevance for UBS Europe SE's risk profile and business model.

Key terms and definitions

Sustainability

Is commonly defined as “meeting the needs of the present without compromising the ability of future generations to meet their own needs” (United Nations (UN) Brundtland Commission, 1987). In this way, we sometimes refer to sustainability to imply a broader scope of exhausted resources beyond those that impact climate change. Our ambition is to conduct business and operations without negatively impacting the environment, society or the economy as a whole and, through our sustainability disclosure, be transparent about how we are pursuing this.

Sustainable Development Goals (the SDGs)

The 2030 Agenda for Sustainable Development, adopted by all UN member states in 2015, provides a shared blueprint for peace and prosperity for people and the planet. At its heart are the *17 UN Sustainable Development Goals* (available on sdgs.un.org/goals), the SDGs, which are an urgent call for action by all countries – developed and developing – in a global partnership. They recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests.

ESG (Environmental, Social, Governance)

A framework to help stakeholders understand how an organization is managing risks and opportunities related to ESG criteria or factors. It is often used in the context of investing, but – beyond the investment community – clients, suppliers, and employees are also increasingly interested in how sustainable an organization’s operations are.

Sustainable finance

Sustainability focus: Strategies that have explicit sustainable intentions or objectives that drive the strategy. Underlying investments may contribute to positive sustainability outcomes through products / services / use of proceeds.

Impact investing: Investment strategies that have an explicit intention to generate measurable, verifiable, positive sustainability outcomes. Impact generated is attributable to investor action and/or contribution.

Green, social, sustainability and sustainability-linked bonds: Debt instruments with a commitment to use the proceeds to (re-)finance green or sustainable projects, aligned with the voluntary guidelines in the pertinent International Capital Market Association (ICMA) Principles.

Low-carbon economy

Refers to a type of decarbonized economy that is based on low energy consumption and low levels of greenhouse gas (GHG) emissions.

GHG emissions

Scope 1: Accounts for GHG emissions by UBS.

Scope 2: Accounts for indirect GHG emissions associated with the generation of imported / purchased electricity (grid average emission factor), heat or steam.

Scope 3: Accounts for GHG emissions resulting from activities from assets not owned or controlled by the reporting organization, but that the organization indirectly impacts in its value chain.

Net zero: Refers to cutting GHG emissions to as close to zero as possible, with any remaining emissions re-absorbed from the atmosphere.

GHG key vendor: A top GHG scope 3 emitter relative to UBS’s overall scope 3 supply chain emissions and with which UBS has a long-term ongoing relationship.

Sustainability disclosure

Global Reporting Initiative (GRI): Provider of the world’s most widely used sustainability disclosure standards (the GRI Standards).

Task Force on Climate-related Financial Disclosures (TCFD): Provider of climate-related financial disclosure recommendations designed to help companies provide better information to support informed capital allocation.

Taskforce on Nature-related Financial Disclosures (TNFD): Provider of nature-related financial disclosure recommendations designed to help companies provide better information to support informed capital allocation.

Value Reporting Foundation SASB Standards: Disclosure standards to guide the disclosure of officially declared material sustainability information by companies to their investors.

World Economic Forum International Business Council (WEF IBC): Provider of the Stakeholder Capitalism Metrics, which offer a set of universal, comparable disclosures focused on people, planet, prosperity and governance that companies can report on, regardless of industry or region.

Materiality assessments

With regard to the materiality assessments included in this report (GRI-based and climate-related), the GRI requires companies to determine material topics that “represent the organization’s most significant impacts on the economy, environment, and people, including impacts on their human rights.” The TCFD requires companies to conduct a double materiality assessment that looks at both the inside-out impact the company has on the environment and the outside-in impact climate-related activities might have on the company performance.

UBS-related terms used in this report

Unless the context requires otherwise below terms are used for:

Terms	Used for
“UBS,” “UBS Group,” “UBS Group AG consolidated,” “Group,” “the Group,” “we,” “us” and “our”	<i>UBS Group AG and its consolidated subsidiaries</i>
“UBS Group AG” and “UBS Group AG standalone”	<i>UBS Group AG on a standalone basis</i>

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Rounding | Numbers presented throughout this report may not add up precisely to the totals provided in the tables and text. Percentages and percent changes are calculated on the basis of unrounded figures. Information about absolute changes between reporting periods, which is provided in text and which can be derived from figures displayed in the tables, is calculated on a rounded basis.

Tables | Within tables, blank fields generally indicate that the field is not applicable or not meaningful, or that information is not available as of the relevant date or for the relevant period. Zero values generally indicate that the respective figure is zero on an actual or rounded basis. Percentage changes are presented as a mathematical calculation of the change between periods.

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