llb 1861

Towards a sustainable future

TCFD Report 2022

Liechtensteinische Landesbank AG

01

Foreword

Climate change is in full swing. Europe experienced unprecedented heatwaves in the summer months of 2022 and 2023. Droughts, wildfires and floods were the outcome. Against this backdrop, the Secretary-General of the United Nations made an urgent appeal to the global community in March 2023 for the industrialised countries to make every effort to achieve climate neutrality, if possible as early as 2040, in order to avert irreversible damage to the global climate.

We at LLB share this assessment, and we decided already in 2021 to become completely climate-neutral both in our banking operations and with our products by 2040. This second TCFD report is intended to provide transparent information on the LLB Group's progress towards climate neutrality.

Expansion of the sustainable product range

We were able to make progress particularly in asset management and the investment business: our funds have routinely taken ESG criteria into account since 2022. We are particularly proud of our first two impact funds, which we launched in 2022. Through these funds, clients can invest specifically in climate-conscious companies as well as in projects with a positive climate impact. In asset management, we offer clients the LLB ESG+ mandate, an ideal tool for making above-average sustainable investments. And our wiLLBe app makes it possible to invest simply, digitally and cost-effectively in seven selected areas that are aligned with the United Nations Sustainable Development Goals.

Resolute commitment

Shortly before the publication of this report, we decided to go a step further with our own investments by fully withdrawing from investments in companies in the fossil fuel sector – another milestone towards complete climate neutrality. At the same time, we are constantly expanding and improving our database in order to get an even better picture of how we can provide comprehensive support to our clients with their issues and questions around sustainability and to pursue our sustainability goals.

We are aware that the path to complete climate neutrality is a long and difficult one. Step by step, we are developing new measures and resolutely implementing them. We are now more determined than ever to achieve the target that has been set. After all, we owe it to our planet, our children – and ourselves.

Georg Wohlwend
Chairman of the Board
of Directors LLB Group

Gabriel Brenna
CEO LLB Group

100%
climate-neutral banking operations since 2021 with compensation

2
new impact climate funds

0%
exposure to oil and gas sector in own investments by 2025

–23.5%
CO_2
in banking operations since 2019

>90%
of in-scope investments take ESG criteria into account

ESG criteria taken into account in around
700
votes

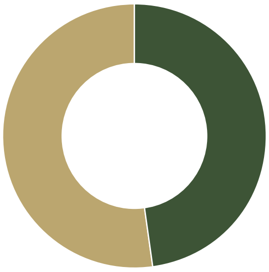
87.5%
renewable energy in banking operations

Overview of the LLB Group as at 31 December 2022

First bank in Liechtenstein, founded in 1861

Three banks:
Liechtenstein, Switzerland and Austria

Two high-earning market divisions
Operating profit before tax



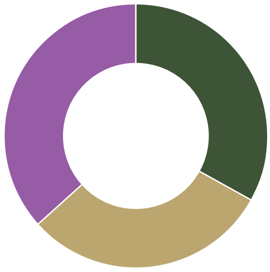
- Retail and Corporate Banking: 48 %
- International Wealth Management: 52 %

Strong in three home markets
- Most important universal bank in Liechtenstein
- Leading asset management bank in Austria
- Largest regional bank in eastern Switzerland

Moody's Aa2 rating

Two competence centres:
Asset Management and Fund Services

Diversified income structure
Earnings



- Interest business: 31 %
- Investment business: 42 %
- Trading business: 27 %

Outstanding investment competence
- Over 45 awards since 2012
- Ongoing integration of ESG aspects into the product range

A brief portrait of LLB

Liechtensteinische Landesbank AG (LLB) – founded in 1861 – is the longest-standing financial institution in the Principality of Liechtenstein. The LLB share has been listed on the SIX Swiss Exchange since 1993. The Principality of Liechtenstein is the majority shareholder and pursuant to the Law on the Liechtensteinische Landesbank holds a stake of at least 51 percent.

The LLB Group has a focused, client-oriented business model and, at the same time, a diversified income structure. It is a bank which firmly upholds its values and continually inspires with technologically innovative offers. It is very well capitalised and stands for stability and security.

LLB is both an asset owner and an asset manager. As at 31 December 2022, it managed CHF 83.9 billion in assets for its clients, while its own balance sheet totalled CHF 25.2 billion.

The LLB Group is predominantly active in the three market regions of Liechtenstein, Switzerland and Austria, where it operates one bank each: Liechtensteinische Landesbank AG in Liechtenstein, LLB (Schweiz) AG (until 14 September 2023 Bank Linth LLB AG) in Switzerland and Liechtensteinische Landesbank (Österreich) AG in Austria. In addition, the LLB Group maintains two centres of competence in the areas of asset management and fund services. While in Austria it is primarily an asset manager, in the Liechtenstein and Swiss markets, the lending business, as part of retail banking, also plays a key role. In addition to this, the LLB Group has two branches in the Middle East with a focus on wealth management.

02

Executive summary

The window of opportunity to successfully mitigate climate change is closing rapidly. The global community's commitments are currently not ambitious enough and need to be set higher. The LLB Group has therefore pledged to achieve a net zero greenhouse gas target by 2040 at the latest, which is ten years earlier than agreed in the Paris Agreement. According to the latest scientific findings, this is the only way to meet the global warming target of 1.5 °C with sufficient probability.

Our approach

Climate protection is part of our business model and affects the LLB Group as a whole. We are working to put our banking operations as well as our products and own investments on a climate-neutral path. When it comes to our continued existence and financial success in the long term, we see sustainability not just as a nice to have, but an absolute necessity. The climate crisis presents substantial risks, but also significant opportunities for the LLB Group.

Governance

Climate protection and sustainability are top priorities for us. The most important body is the Sustainability Council, chaired by the CEO. The Council monitors compliance with the sustainability strategy. A total of eleven workstreams operationally drive the many different topics around sustainability. The Group Executive Board and the Board of Directors are informed about progress at least twice a year.

Since the last TCFD report, sustainability criteria have also been taken into account in our compensation system. The achievement of climate targets affects the calculation of the variable portion of employees' salaries.

Strategy

Our strategy aims to make the most of opportunities arising from the transformation of the economy and society and to minimise risks. To help our clients with the transition, we expanded our product range of investment funds in 2022 to include two impact funds classified in accordance with Art. 9 of the EU Sustainable Finance Disclosure Regulation (SFDR). At the same time, a new asset management strategy based on ESG+ was created with which clients can generate substantially more impact than with our previous ESG strategy. For own investments, as the sole decision maker we can go one step further, which is why we decided in August 2023 to completely withdraw from investments in companies in the fossil fuel sector by 2025.

In order to get our own house in order, significant measures were taken last year to make our banking operations greener. A broad-based switch to clean energy sources brought substantial CO_2 savings. And a new mobility concept was developed to make business trips and commuting more climate-friendly in future.

Risk management

In view of the far-reaching consequences of the climate crisis for all business areas, we see sound risk management processes, where sustainability factors are treated the same as classic risk factors, as essential for an economically successful future. As they say, you can only manage what can be measured, and so our focus so far has been on identifying and assessing climate-relevant data. Based on the calculation logic of the Partnership for Carbon Accounting Financials (PCAF), we were able to identify a set of key metrics that provided us with an initial assessment of potential risks and that will help us with the integration of climate-based risks into existing processes.

Key figures and targets

We have calculated various key figures that give us information about our current performance. It should be emphasised that, with the quality of the underlying data being very limited, they are only estimates and the results should not be given the same weight as key financial figures.

In this TCFD report, we are publishing for the first time a series of figures and comparing the years 2021 and 2022. The LLB Group's absolute and relative CO_2 emissions for banking products fell markedly in these two years, whereby the latter was also positively impacted by high company valuations in the capital markets at the end of 2022. The implied temperature rise of 2.0 °C suggests that companies in our portfolios are to a large extent themselves pursuing climate targets. We still have a lot of work ahead of us though if we are to achieve our target of 1.5 °C.

We were again able to conduct a scenario analysis with a focus on transition risks. It indicates that a disorderly 1.5 °C global warming scenario would cause devaluations amounting to around 10 percent of our portfolios, against 7.5 percent in an orderly transition. Unfortunately, the limited data available does not yet allow physical risks, which are vital for a meaningful analysis of scenarios with higher temperature rises, to be taken into account.

Besides our absolute CO_2 targets, we are also reporting a benchmark for our mortgage loans for the first time. The relative CO_2 emissions from our mortgages, measured in CO_2 per m^2, are significantly higher than the benchmark we selected from the Carbon Risk Real Estate Monitor (CR-REM). We conclude from this exercise that putting our mortgage portfolio on a climate-friendly path will take a lot of time and effort.

03

Introduction

As a financial institution with a long-term orientation, the LLB Group is committed to leaving an environment that is as intact as possible and stable social conditions for the coming generations.

As the oldest bank in Liechtenstein and steeped in tradition, LLB understands the responsibility it has for taking a long-term approach. Sustainable business management is part of its performance mandate and its corporate identity. LLB has a legal obligation to its majority shareholder, the Principality of Liechtenstein, to promote Liechtenstein's economic development while at the same time taking ethical and environmental factors into account. The Group fulfils this special obligation by offering a diverse portfolio of products and services, applying sustainable standards to its offerings, its infrastructure and procurement, and engaging broadly in society.

With its ACT-26 corporate strategy, the LLB Group is going a step further: in future, it wants to play a pioneering role in terms of sustainability. Above all, the LLB Group wants to make a positive contribution to the climate issue – by, among other things, reducing its greenhouse gas emissions across its banking operations and its products.

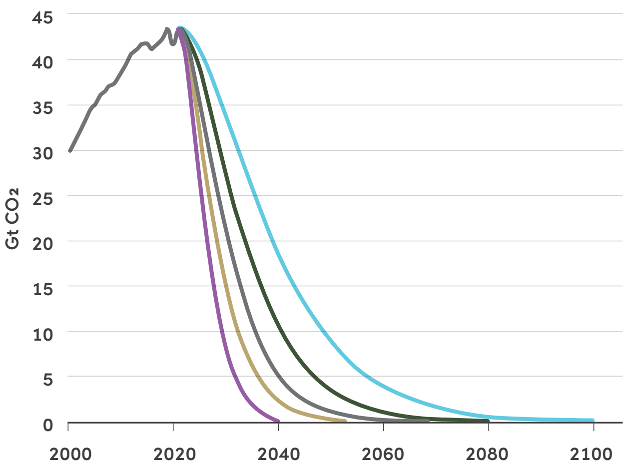
3.1 LLB's sustainability ambitions

With the Paris Agreement, the global community agreed in 2015 to limit global warming to well below 2 °C compared to pre-industrial levels and to pursue efforts to comply with the limit of 1.5 °C. According to the findings of climate science, success in reaching the targets depends on tight emission budgets which, as a whole, must not be exceeded. The budgets are exhausted at different rates, depending on ambition. To limit global warming to 2 °C, emissions must be reduced to net zero by 2075 at the latest; for 1.5 °C, by 2050 at the latest.

These targets come with probabilities. Net zero in 2050 carries a considerable risk that the 1.5 °C will be exceeded, even with targets having been reached (see left chart, page 9). This is particularly the case given the uncertainties around the reduction in greenhouse gases other than carbon dioxide (CO_2). In this scenario, the Intergovernmental Panel on Climate Change (IPCC) only gives a good chance of actually limiting global warming to 1.5 °C if net zero is reached by 2040 at the latest.[1]

[1] IPCC, 2018: Summary for Policymakers. In: Global Warming of 1.5 °C. An IPCC special report on the impacts of global warming of 1.5 °C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty. Online: https://www.ipcc.ch/sr15/chapter/spm/ (accessed on 27 July 2023).

Probabilities of limiting global warming, depending on CO_2 budget and net zero timing



Future pathways for 1.5 °C with different probabilities

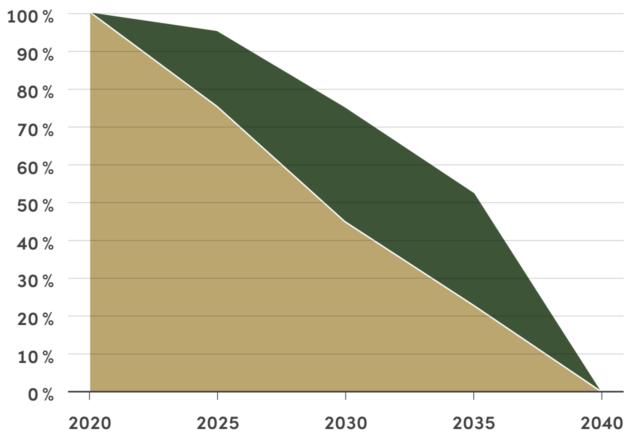
- p = 17 %, RCB = 900 $GtCO_2$
- p = 33 %, RCB = 650 $GtCO_2$
- p = 50 %, RCB = 500 $GtCO_2$
- p = 67 %, RCB = 400 $GtCO_2$
- p = 83 %, RCB = 300 $GtCO_2$

Based on a chart by Glen Peters (2021) from the Center for International Climate Research (CICERO) in Oslo.

It is not only the timing of net zero that is important, but also the path taken to get there. Rapid and continuous savings cause far fewer greenhouse gas emissions overall than late and consequently more aggressive measures. Surplus greenhouse gases are shown as the green area in the chart below. It is imperative to act quickly and not to delay efforts until some future date.

Annual CO_2 emissions indexed to 2020

x-axis: years; y-axis: annual CO_2 emissions indexed to 2020. Golden area: cumulative CO_2 emissions with early action. Golden plus green area: cumulative CO_2 emissions with delayed action.



- 2040 Pathway 2: late CO_2 savings
- 2040 Pathway 1: early CO_2 savings

At the end of 2021, the LLB Group committed itself to following the latest scientific findings and thus undertook to lower its emissions to net zero by 2040 at the latest. It also resolved to report on the progress being made, openly and transparently. This, the second TCFD Report produced by the LLB Group is the consequence of this resolve.

In order to rapidly minimise the cumulative greenhouse gas emissions, a raft of measures were implemented already in 2021 and 2022. The aim is to make at least a 30 percent saving by 2026 and at least a 55 percent saving by 2030 in emissions from products and own investments. Since the sustainable management of bank products and own investments differs considerably from the sustainable management of banking operations, two different savings paths are being pursued.

2019 was selected as the base year for all reduction measures as this was the last full year before the COVID-19 pandemic. Because of the corona regulations, using the data for 2020 and 2021 would provide a highly distorted picture.

Overview of the sustainability strategy

Sustainability@LLB	Concrete measures	Overarching objective
We set **standards for banking with values.** The LLB Group actively contributes to **environmental protection,** promotes **social justice** and stands for **responsible corporate governance.**	**Banking operations** ▪ **From 2021: Climate neutral** through compensation (incl. commuter traffic) ▪ **By 2026: –20 %** CO_2 emissions **Bank products** ▪ **By 2026: –30 %** CO_2 emissions ▪ **Ongoing:** Expansion of the sustainable product range **Reporting** ▪ **From 2022:** Extended reporting ▪ **Ongoing:** Progress monitoring	**Entire LLB Group** with net zero emissions by 2040 at the latest

«LLB stands for sustainable and innovative financial products with competent advice.»

Roger Möhl
Head Product Management

3.2 Risks and opportunities of climate change
Advancing climate change is associated with various risks and opportunities that affect companies to varying degrees. Given their service focus, banks hardly contribute directly, for instance with their buildings, to climate change. Rather, the risk potential results from the structure of the portfolios: if, for example, a bank largely finances industrial enterprises that are themselves subject to climate risks, then it is also indirectly affected. The same is true for the opportunities that come with climate change.

Two different types of climate risks have become established in the literature: transition risks and physical risks. Transition risk means «a risk arising through the transition to a climate-neutral and resilient economy and society and which therefore may lead to a devaluation of assets, such as changes in political and legal conditions in the real economy (introduction of a CO_2 tax, changes in construction codes and zoning, rules regarding reliability of supply, different treatment of exposures with higher sustainability risks, etc.), technological developments (e.g. renewable energies and energy storage) and changes in consumer behaviour».[2] The risk potential arising from transition risks for financial companies therefore depends on their exposure to high-emission and energy-intensive industries as well as industries with high emissions in the value creation chain, while value creation in the financial sector itself is usually not particularly CO_2 intensive.

Physical risks, on the other hand, «result directly from the consequences of climate change e.g. an increase in average global temperature, or natural catastrophes and extreme weather events such as flooding, periods of extreme heat/drought, storms and hail occurring more frequently».[3] The risk potential arising from physical risks for financial companies therefore depends on their exposure to the assets and value creation chains affected by physical risks. However, institutes may also be directly affected through, for instance, their office buildings and server premises. Physical risks are considered to be a lower threat over the short to medium term but may already represent significant risks for individual companies now.

[2] FMA, 2020: FMA Guide for Managing Sustainability Risks, p. 14. Document number 01/2022. Online: https://www.fma.gv.at/wp-content/plugins/dw-fma/download.php?d=4720 (accessed on 28 July 2023).

[3] FMA, 2020: p. 13

Companies can benefit from climate change if they recognise the inherent opportunities in good time. These benefits can range from making electricity savings through energy efficiency measures to producing products for a new target group interested in sustainability. For financial companies, these include, in particular, financial products that help clients achieve their sustainability goals (e.g. mortgages for thermal refurbishment) and investment products for corporate and retail clients as well as institutional investors that pursue a sustainable strategy.

The LLB Group has therefore started to systematically identify, measure and assess climate risks and opportunities. Climate-related aspects have been integrated into the strategy and governance. The recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) have served and continue to serve us as a compass in this field. The relevant risks and opportunities differ by region and product. This situation has been taken appropriate account of in this report.

In 2022, further significant progress was made in the management of climate risks and opportunities, including the optimisation of data availability and data quality. We also developed physical risk maps and defined a sectoral pathway for mortgages. For the first time, we can present figures (2021–2022) indicating that there has been an improvement in financed greenhouse gas emissions.

Two investment funds classified under Article 9 of the SFDR and the ESG+ asset management strategy were introduced, giving sustainability-oriented clients even more opportunities to invest with impact. One of the new investment funds is an equity fund following a Paris-aligned benchmark strategy, the other is a bond fund dedicated to investments in the green bond market. Additional measures are described, in particular, in the chapter «Strategy» on page 16.

3.3 About this report

With this report, the LLB Group is following the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). It applies in all qualitative and quantitative aspects equally to Liechtensteinische Landesbank AG (Liechtenstein), LLB (Schweiz) AG (until 14 September 2023: Bank Linth LLB AG) and Liechtensteinische Landesbank (Österreich) AG. All key figures were reported on a consolidated basis as at 31 December 2022. Included in the analysis were credits and loans, own investments and assets under management. As at 31 December 2022, the business volume of the LLB Group totalled CHF 98.4 billion.

The ACT-26 corporate strategy applies to the whole LLB Group. The three banks are, however, structured differently. While in Austria the LLB Group is primarily an asset manager, in the Liechtenstein and Swiss markets the lending business, as part of retail banking, also plays a key role. This report was not able to take account of these differences. It should be emphasised, however, that the strategic approach of the three banks has been largely harmonised and that the guidelines apply equally to all Group entities. The LLB sustainability strategy has been developed intensively; adjustments that were made by 31 August 2023 were taken into account in the qualitative disclosures.

04

Governance

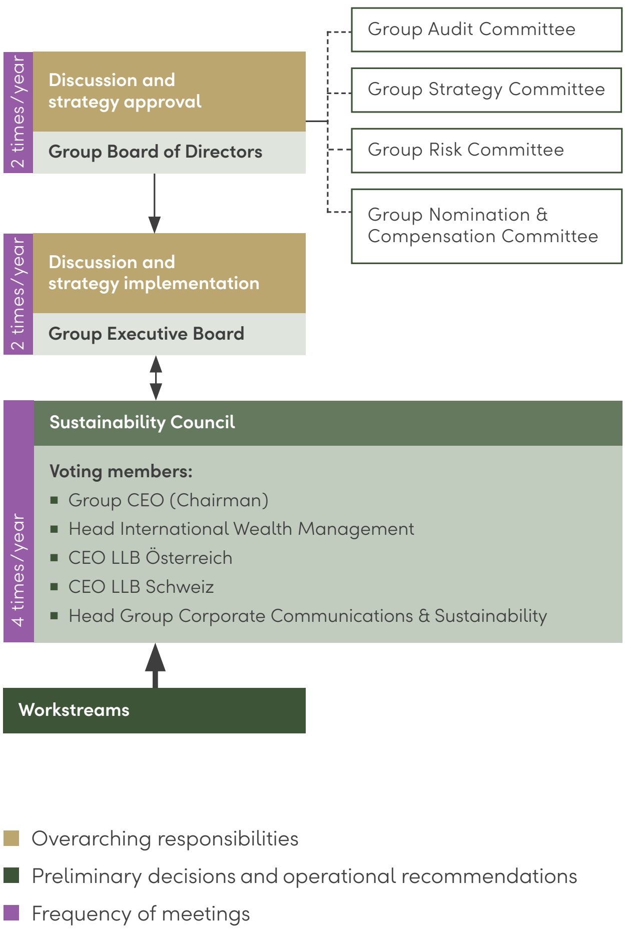
The LLB Group has set up a new governance structure, with effect from 2022, to ensure that sustainability concerns, including climate management, are addressed at all levels of the hierarchy.

It enables decision makers and employees alike to take climate-related risks and opportunities into account and to include them in strategic and operational considerations.

The key body in this structure is the Sustainability Council. It is composed of the Group CEO, who is the Chairman, the CEOs of the subsidiaries, the Head of International Wealth Management and the Head of Group Corporate Communications & Sustainability. The Sustainability Council is tasked with overseeing the implementation of the LLB's climate strategy and making adjustments where necessary. The council generally convenes four times a year. It informs the Group Executive Board and the Board of Directors about how climate management is progressing on a semi-annual basis.

A total of eleven workstreams have been established at the operational level. They bear the main responsibility for implementing the sustainability and climate strategy and report to the Sustainability Council every two months. The individual workstreams have either a product focus (e.g. credits) or a thematic focus (e.g. social impact).

Overview of sustainability and climate governance structure



The purchase of CO_2 certificates is used to support small farmers in Uganda and reforest forests.

The highest body at the LLB Group is the Board of Directors. It deals with climate-related topics at least every six months. It is supported by a series of committees:

- The **Group Risk Committee** informs the Board of Directors specifically about the risks of the climate crisis.
- The **Group Nomination & Compensation Committee** incorporates sustainability into the incentive systems.
- The **Strategy Committee** advises on adjustments to the existing sustainability strategy.

Since the publication of the TCFD Report 2021, sustainability and climate protection have also been incorporated into remuneration. The variable salary component is now partly dependent on the achievement of the sustainability-based ACT-26 targets. The assessment criteria for this are determined annually by the Board of Directors.

Besides the bodies mentioned above, climate risks are currently integrated into the existing risk management structure, where they are closely managed. At the heart of this is the Group Credit & Risk Management Business Area. The business area is functionally and organisationally independent of the operating units. The Group Executive Board and its committees are responsible for controlling the risks.

«Transparency is indispensable for a credible sustainability strategy.»

Cyrill Sele
Head Group Corporate Communications & Sustainability

05

Strategy

The LLB Group has firmly anchored climate-related risks and opportunities in its business strategy. The aim in so doing is to identify and effectively manage the risks of climate change and to make the best possible use of opportunities.

As a universal bank operating primarily in Central Europe, we focus on climate change in this region when assessing opportunities and risks. This is not least due to our importance as a mortgage lender in Lichtenstein and Switzerland. For our similarly strongly anchored asset management business, we broaden our focus as investments can be made all over the world.

Risks and opportunities can arise at different times. We have therefore analysed both for when they are likely to occur using the Science Based Targets initiative (SBTi) definition.[4] Risks that are expected to materialise within five years are declared as short-term. Medium-term risks are those that are expected to occur in five to fifteen years and long-term ones after fifteen years.

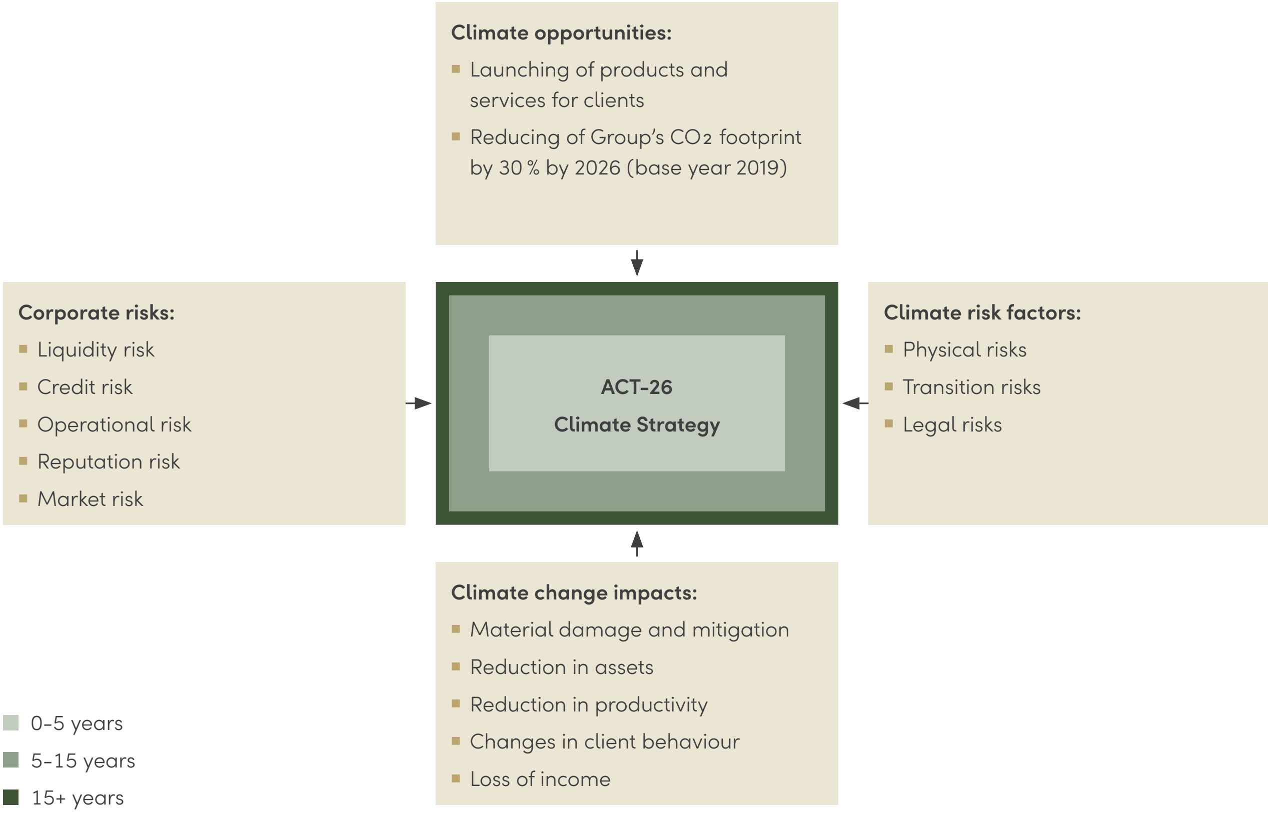
While long-term risks should be anticipated as far as possible and long-term goals have been defined, the current climate strategy and this TCFD report focus on short- to medium-term opportunities and risks (top right figure). This reflects the urgency, on the one hand, but also the fact that modelling longer time horizons is more difficult and involves greater uncertainty, on the other.

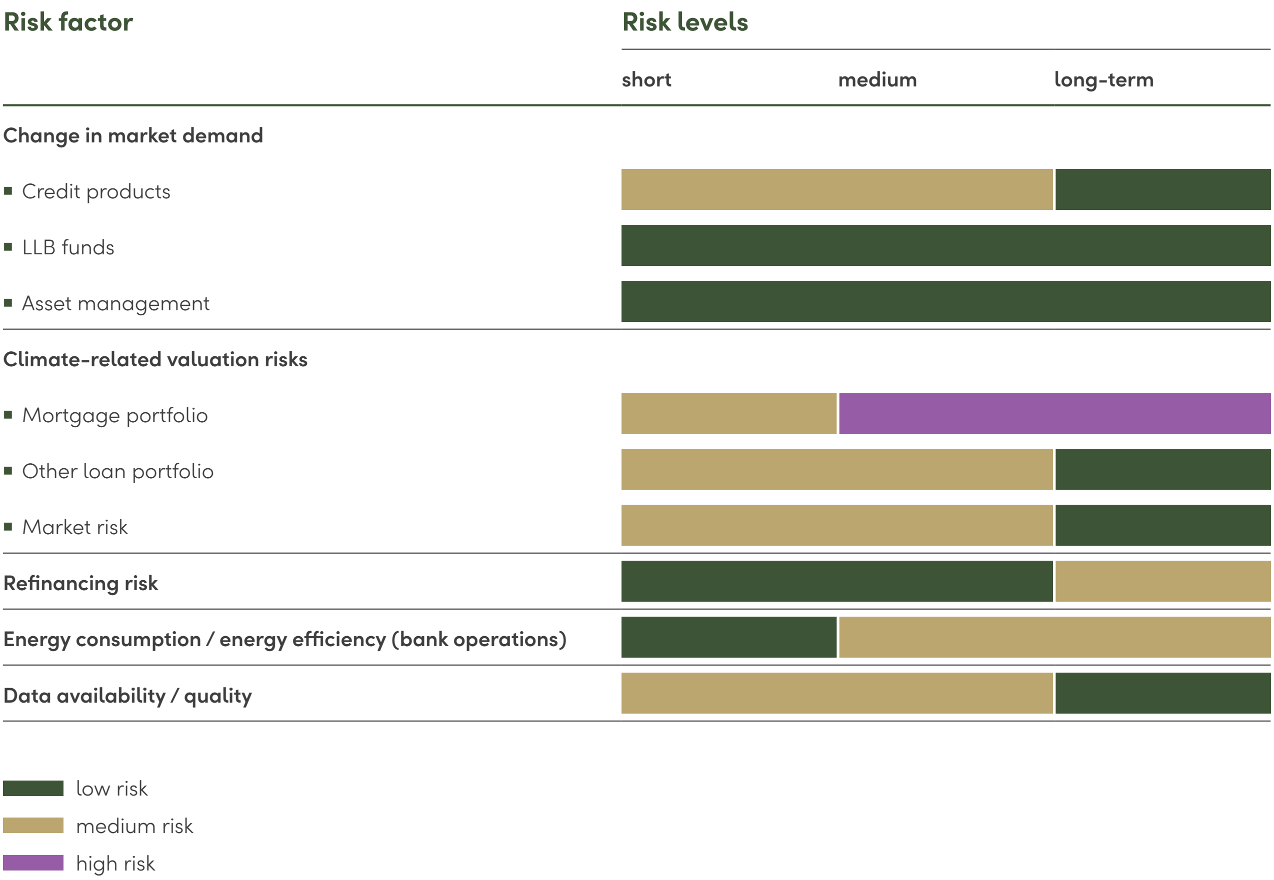
Impact of climate risks

The chart on the bottom right shows a qualitative assessment of climate risks with regard to the probable time of occurrence and the possible impact on the LLB Group. It takes into account both physical risks, which are particularly important for our mortgage portfolio, and transition risks. The latter have an impact on our products and own investments and, to a lesser extent, on our banking operations, particularly due to the regulatory environment and changes in customer behaviour. Climate risks need to be managed in the short, medium and long term, but the risk assessment varies significantly over a time horizon.

In analysing the risks associated with climate change, taking into account the LLB Group's business model and strategy, the focus was on the mortgage lending and asset management businesses.

[4] SBTi, 2023: SBTi Financial Sector and TCFD Reporting Guidance. Online: https://sciencebasedtargets.org/resources/files/SBTi-TCFD-reporting-guidance.pdf (accessed on 27 July 2023).


Climate opportunities:
Launching of products and services for clients
Reducing of Group's CO_2 footprint by 30 % by 2026 (base year 2019)
Corporate risks:
Liquidity risk
Credit risk
Operational risk
Reputation risk
Market risk
ACT-26
Climate Strategy
Climate risk factors:
Physical risks
Transition risks
Legal risks
Climate change impacts:
Material damage and mitigation
Reduction in assets
Reduction in productivity
Changes in client behaviour
Loss of income
0–5 years
5–15 years
15+ years


Risk factor
Risk levels
short
medium
long-term
Change in market demand
Credit products
LLB funds
Asset management
Climate-related valuation risks
Mortgage portfolio
Other loan portfolio
Market risk
Refinancing risk
Energy consumption / energy efficiency (bank operations)
Data availability / quality
low risk
medium risk
high risk

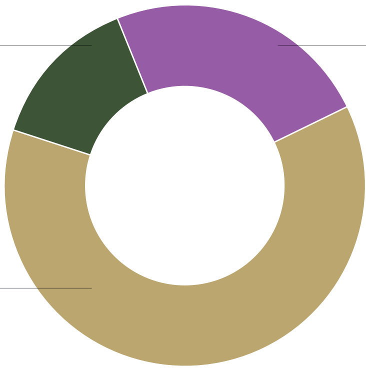
5.1 Climate risks

Risk considerations specific to our products and own investments

Our products and own investments are exposed to different climate risks. In terms of climate management, our focus at the present time is primarily on those items that we hold on our own balance sheet or that we can effectively risk manage in our function as asset managers. Together, these accounted for around 39 percent of assets/credits as at 31 December 2022 (upper pie chart). The rest was predominantly execution-only and private-label services and, to a lesser extent, investment advice services.

Although our role as asset owner appears greater in volume terms expressed in CHF, a look at our CO_2 footprint reveals that at 85 percent most of the impact comes from client assets entrusted to us for asset management purposes (lower pie chart). CO_2 management will therefore play a key role, both in our asset management services and in our in-house funds.

As an asset manager and asset owner, we have a direct or indirect impact on investment decisions and the assumption of sustainability risks for around 39 percent of the assets and credits



Asset manager 14 %

Assets where we as LLB make the investment decisions and/or advise the client (asset management, investment advisory and LLB funds)

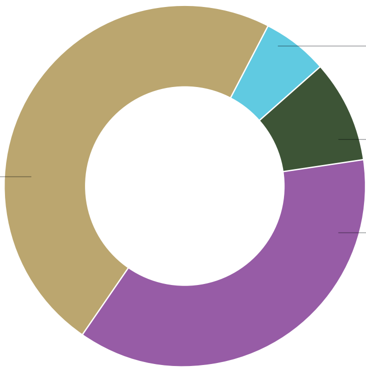
Asset owner 25 %

Assets that we have on our balance sheet and where our decisions directly affect sustainability risk (credit origination and own investments)

Out of scope 61 %

Assets where investment decisions are made by third parties (investment advisory, execution only and private label funds)

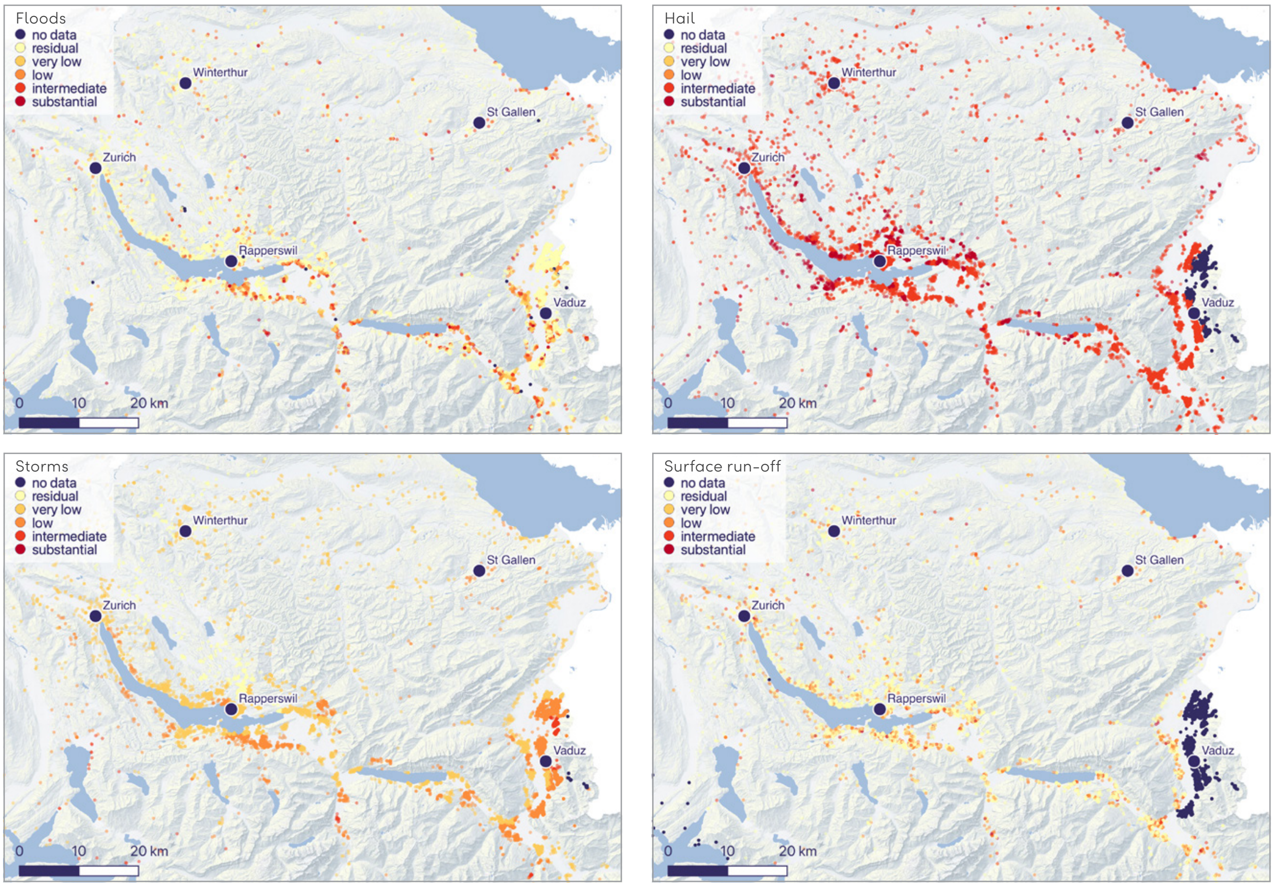
At around 85 %, asset management and our own funds account for the lion's share of our CO_2 footprint



CO2 is most evident in LLB's transition risk (presented quantitatively in the chapter «Key figures and targets», page 36). Physical risk, on the other hand, is the result of global cumulative CO2 emissions, which are contributing to changes in the climate. While we are not yet able to reflect the risk in our global investment portfolio, we have already made progress with financing at the local level. The greatest risk at present is hail, which can cause medium to severe damage to buildings throughout the region. For a substantial portion of our portfolio, only minor damage to buildings from storms is to be expected. The risk of flooding is specifically concentrated in mortgages on properties near water banks (the Rhine, Lake Constance, Lake Walen, Lake Zurich), where it is significant, while it is of little relevance to the rest of the portfolio.

Surface run-off is the term used when rainwater does not seep directly into the ground, but runs off on the ground surface. Here the risk is distributed more evenly.

It is important to note that these physical risk maps represent the status-quo and do not specifically factor in future variables. Nonetheless we are of the oppinion that they are still a useful indicator of future impact.



5.2 Climate opportunities

Every change brings opportunities. This also applies to climate change and the transition to a climate-friendly and sustainable society, to which there is no alternative. Opportunities already identified for the LLB Group are summarised in the following table. They have largely been taken into account in our ACT-26 corporate strategy. It is, however, important to emphasise that in this dynamic environment the list is being developed year by year and can affect adjustments to our strategy.

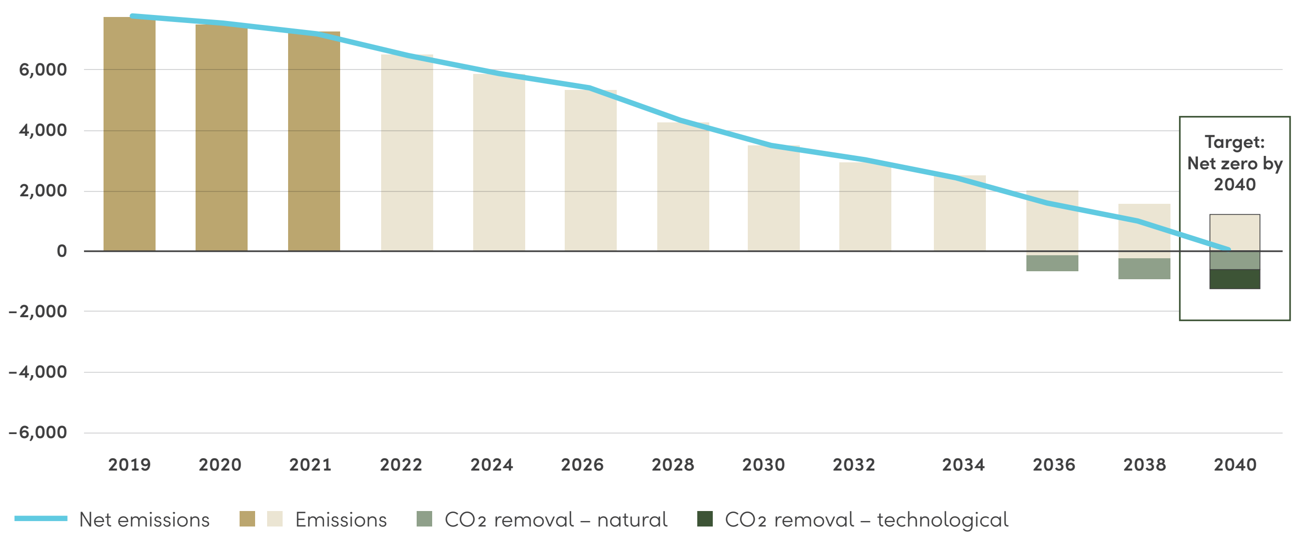
Opportunity	LLB's ambition	Time horizon	Progress to date	Financial impact
Supporting clients on the way to a CO_2-neutral future	As the number one mortgage lender in Liechtenstein and with a strong foothold in eastern Switzerland, we help clients (1) to increase the energy efficiency of their existing properties and (2) to acquire the most energy-efficient properties.	Short, medium and long term	▪ Planning of new credit products for green new builds and refurbishments ▪ Intensive training for client advisers	▪ Increase in the proportion of sustainable on- and off-balance-sheet investments and financing ▪ Increase in investment and financing volume driven by increased demand from clients for sustainable solutions ▪ Decrease in CO_2-intensive investments and energy-inefficient properties in the mortgage portfolio ▪ Higher costs to launch climate-friendly products and services as well to improve existing ones
	In asset management, we are working on making existing products more climate-friendly and on launching innovative climate-oriented products to serve as a tool for clients in the fight against climate change.	Short and medium term	▪ Expansion of own fund range with impact climate products classified under Article 9 of the SFDR ▪ Incorporation of LLB sustainability aspects into all investment strategies in asset management ▪ Launch of a new investment strategy with a significant impact target ▪ Launch of a sustainable investment app specifically for small investors	
	Sustainable retail banking	Short term	Switch to resource- and climate-friendly materials for bank cards in 2024	

Opportunity	LLB's ambition	Time horizon	Progress to date	Financial impact
Supporting the ending of the most climate-damaging activities	We are changing around our own and our clients' investments so that they no longer contribute to the financing of particularly damaging activities.	Short term	LLB Group resolution to phase out the fossil fuel sector in its treasury portfolio by 2025 at the latest	Reduced balance sheet exposure to the fossil fuel sector
Regional and international cooperation	As part of a number of local and international alliances, initiatives and working groups, we want to continue to advocate for a green economy and society.	Short, medium and long term		■ Indirect increase in the proportion of sustainable on- and off-balance-sheet investments and financing ■ Indirect increase in investment and financing volume driven by increased demand from clients for sustainable solutions
Getting our own house in order	We have a target to save at least 20 percent of our Scope 1, 2 and 3.1 to 3.14 emissions by 2026.	Short term	CO_2 savings of 23.5 per cent over the base year	■ Cost savings due to efficiency improvements and reduced business travel as well as savings through CO_2 offset certificates for climate-neutral banking operations ■ Higher costs for CO_2-friendly measures that are not accompanied by improvements in efficiency such as switching to green energy
	By 2026, we aim to have 100 per cent green energy in all our own buildings.	Short term	Switch to green electricity and biogas at most of our locations	
	We encourage the promotion of sustainable mobility.	Short term	Developing a new mobility concept to make business travel and commuting greener	
	We want to act in the most resource-friendly way possible.	Short term		
	We hold our suppliers to account.	Short term	Drawing-up of a code of conduct for suppliers	

5.3 Sustainable products and own investments
We aim to gradually decarbonise our products and own investments by 2040, with any unavoidable emissions being ultimately offset through CO_2 removal certificates. From today's perspective, this is unavoidable also because most companies are committing to the net zero target only by 2050. It may be that by 2040, it will not be possible to create net zero investment portfolios that are sufficiently diversified to meet clients' needs. Transforming the mortgage portfolio will anyway take time due to the long-term nature of mortgages.

Long-term decarbonisation pathway of the LLB Group for investments and credits

- **Net zero for own investments as well as investment and credit products by 2040 at the latest**
- **Compensation of remaining investment and credit emissions if they cannot be reduced outright by 2040**



The Net-Zero Banking Alliance, among others, lays out how decarbonisation can be achieved. According to it, banks have the following options:

- **Reduction in brown assets:** Portfolios are rebalanced away from high greenhouse gas emitting sectors and companies to low greenhouse gas emitting sectors and CO_2-efficient companies.
- **Investment in green assets:** Targeted investments are made in green sectors that play a major role in the sustainable transformation of the economy.
- **Engagement:** Through engagement with the client or investee, the institute uses its influence to push for sustainable transformation. This includes direct, bilateral engagement, but also active participation in voting activities.

Depending on LLB's role and the type of product, these levers can be used with varying degrees of effectiveness (see chart, page 23).

Adjustment screws in the investment and credit sector to reduce greenhouse gases

Adjustment screw	Own investments	LLB funds	Asset management & investment advisory	Credits
Divestments	◕	◑	◔	○
Green investments	●	◑	◔	◕
Engagement	◔	◔	●	●

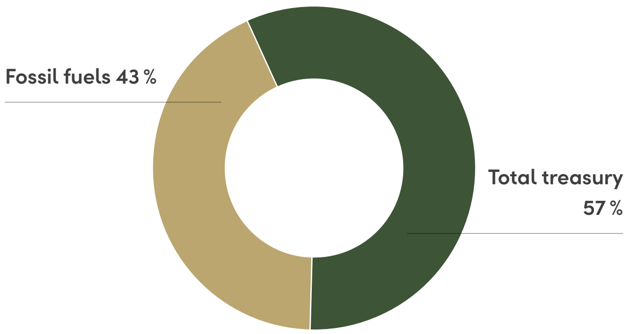
Description: Depending on the product, CO_2 reduction measures can be used to varying degrees or their influence on CO_2 emissions varies.

5.3.1 Own investments

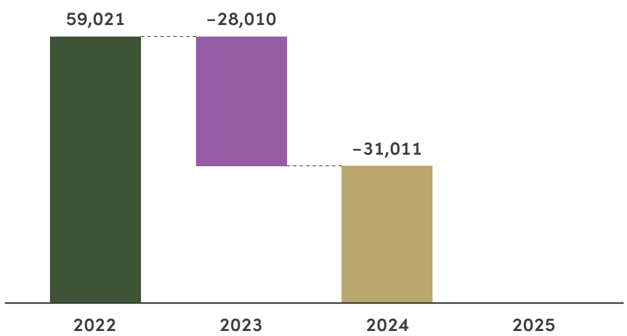
We are the decision makers for own investments. Disposals of climate-damaging assets and targeted green investments are an adequate means to reduce CO_2. One extremely effective measure is a complete withdrawal from fossil fuels by 2025, as this sector is responsible for 43 percent of the total CO_2 footprint of the treasury portfolio (figures on the right).[5]

Being of a manageable size and focused on bonds, our treasury portfolio is a less effective engagement tool. Nevertheless, we believe it is important to use all available tools in the fight against climate change. And that is why we added sustainability aspects to our voting strategy at the beginning of 2022. Based on the recommendations of the Institutional Shareholder Services (ISS) and within the framework of the Socially Responsible Investor Guidelines, corporate ethics are taken into account with regard to social and environmental criteria.[6]

Breakdown of the CO_2 footprint of the treasury portfolio



Phase-out of fossil fuels in tonnes of CO_2



[5] Please note that certain asset classes, such as government bonds, cannot yet be calculated and have therefore not yet been included in the treasury portfolio.

[6] ISS, 2023: SRI Proxy Voting Guidelines: 2023 Policy Recommendations. Online: https://www.issgovernance.com/file/policy/active/specialty/SRI-International-Voting-Guidelines.pdf (accessed on 27 July 2023).

5.3.2 Own fund products and asset management
While we are the decision makers for our own funds, we still have to take the requirements of our investors into account. Divestments and green investments are an adequate means to achieve decarbonisation. In asset management, we work directly on behalf of clients. Our scope for action is limited to the framework set by the client-specific mandate. Portfolio rebalancing is possible, but severely limited in scope. At the same time, there is leverage in terms of engagement with clients, as we accompany and advise them on building up their assets.

In 2022, we expanded our fund range to include climate solutions. To this end, we launched an impact equity fund classified under Article 9 of the SFDR. It enables clients to massively reduce the climate footprint of their capital. Compared to the MSCI World Index, the savings amount to more than 85 percent.

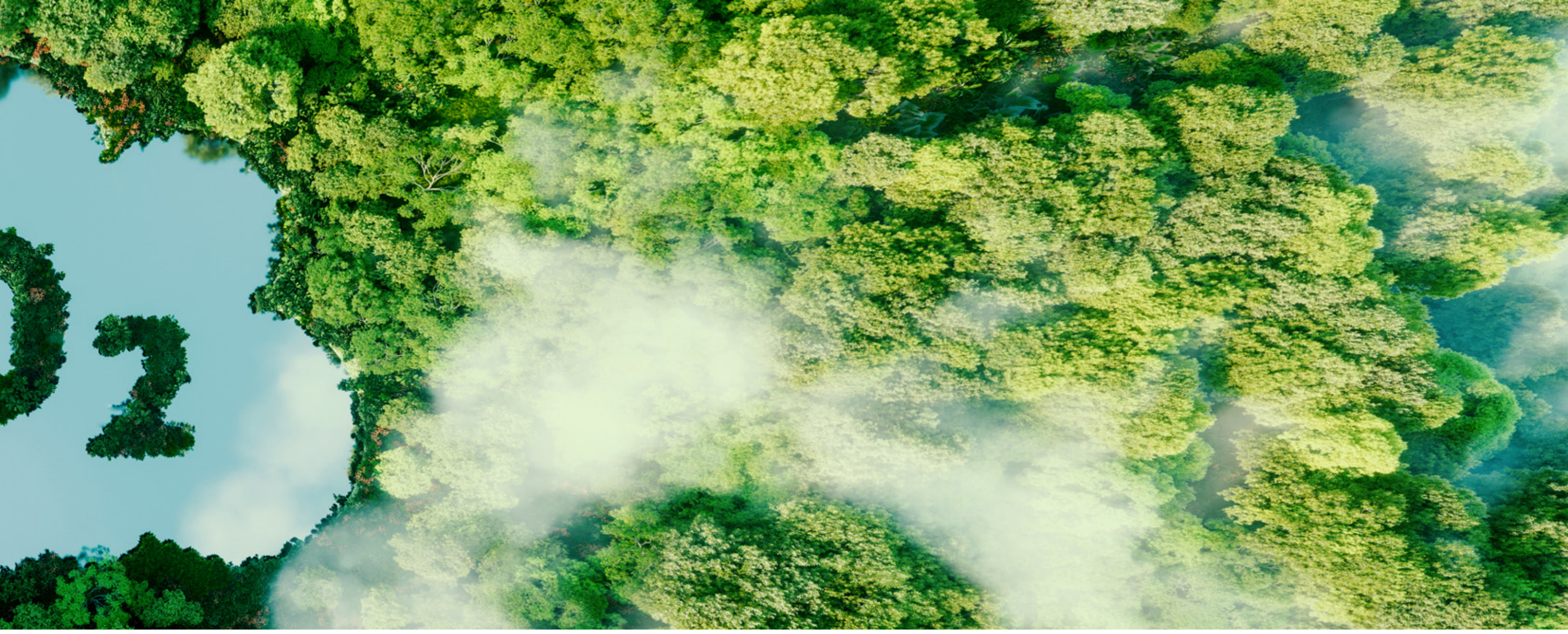
LLB Impact Climate Equities Global Passive
LLB has launched the first Liechtenstein-domiciled, globally investing impact equity fund. The objective of the fund is to replicate the MSCI World Climate Paris Aligned Net US Index. The index and fund are designed to overweight companies on a credible decarbonisation path or those offering green solutions, while under-weighting brown companies.

Comparison of LLB Impact Climate Equities Global Passive with MSCI World Index

The Climate Paris Aligned concept is particularly convincing when it comes to the climate. Emissions per invested capital are significantly lower.

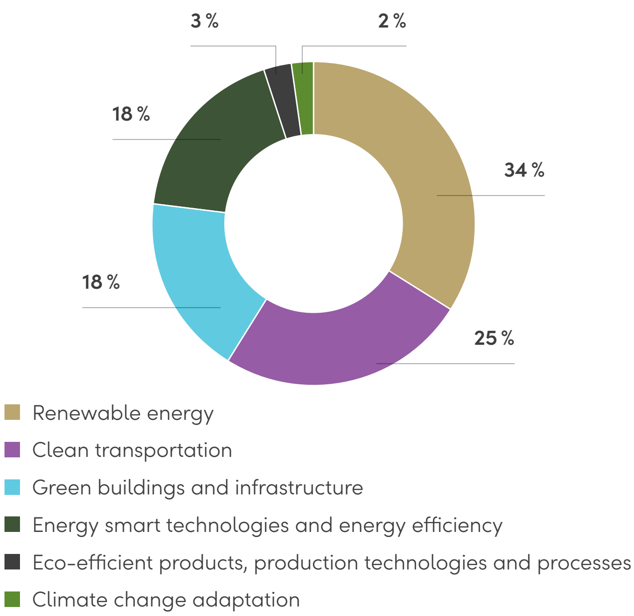
Comparison of climate characteristics:	LLB Impact Climate Equities Global Passive	MSCI World Index
CO_2 footprint		
CO_2 emissions per invested capital	9.7	67.7
Total CO_2 emissions (weighted data)	9,660	67.477
Share of investments transitioning to low carbon		
Environmental impact	8.7 %	3.8 %
Climate change – energy efficiency	4.6 %	2.7 %
Sustainable impact characteristics		
Gesamter nachhaltiger Impact	12.3 %	6.7 %
Umwelt-Score aus ESG-Qualitätsanalyse	6.7	6.1

Source: Bloomberg, MSCI ESG Research, MSCI. Emissions in tCO_2 measured in terms of Scopes 1 and 2. Total emissions: absolute emissions at current fund volume



In the second half of last year, an impact bond fund, also classified under Article 9 of the SFDR, was added to our range of funds. It allows investors to employ their capital in a targeted way for climate protection activities. Currently, one third of the bond issuers are financing renewable energy projects, followed by climate-friendly mobility and green buildings and infrastructure (bottom chart).

Both funds are an extremely effective tool for clients to align their portfolio in a climate-friendly way, while at the same time diversifying broadly across different asset classes.



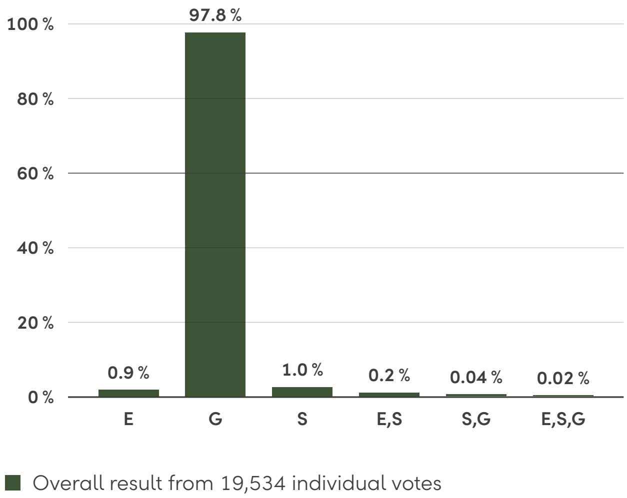
Impact, ESG, sustainability, EU article: what's this all about?

The EU wants to be climate neutral and achieve sustainable economic growth by 2050 at the latest. It attributes a key role to the financial industry. Sustainable capital flows are to finance and drive the transformation, with the types of green financial products that are regulated in the Sustainable Finance Disclosure Regulation (SFDR) being central instruments. With a simple classification under Articles 6, 8 and 9 of the SFDR, clients should be able to quickly recognise how sustainable their financial product is. Article 6 funds usually have little to do with sustainability. Those that are classified as Article 8 products – also known in the jargon as «light green» – at least take sustainability criteria into account, even if they usually do not aspire to a specific effect (i.e. impact). «Dark Green» Article 9 products are in the top league in terms of sustainability because they focus on the effect (or impact) achieved by the capital investment.

We were also able to make improvements in the area of voting and engagement. Analogous to our own investments, the voting topic for the 2022 voting season for our fund products was also set with a comprehensive sustainability focus (see chapter «Own investment», page 23). With the support of International Shareholder Services (ISS), we have clearly positioned ourselves in equity funds. For voting analysis and decisions, we use the SRI assessment methodology from the ISS. This methodology and the sustainability-oriented approach to voting decisions have helped us in roughly 700 votes. It is important to note that the majority of votes with ESG relevance deal with the topic of governance. This is mainly due to ongoing appointments of the management boards. Environmental, including climate, issues accounted for less than 1 percent, although these are indirectly influenced by the composition of the management bodies (top right chart).

We have also made asset management more sustainable and climate-friendly. Already in the previous year, all mandates were converted to ESG, i.e. an overall minimum ESG performance as foreseen under the LLB sustainability approach is ensured. For example, no investments are made in companies with ESG ratings lower than BBB and controversial sectors are completely excluded.[7] This year, with the LLB ESG+ mandate, a new tool was created for asset management with which the client can achieve a substantial and measurable impact. At least 45 percent of the investments will be allocated to Article 9 compliant products in accordance with the SFDR, while the rest will be broadly diversified and invested with the foreseen minimum ESG performance.

Votings by assignable ESG pillars



Sustainable and impact investing

LLB focuses on two aspects of sustainability:

LLB ESG

Impact investments	≥ 5 %
Sustainable investments	≥ 75 %

LLB ESG+

Impact investments	≥ 45 %
Sustainable investments	≥ 75 %

[7] See: Sustainable solutions for the future (LLB website): https://llb.li/en/llb/sustainability/responsibility/sustainability.

In asset management, the LLB Group also scored with a product expansion in addition to the mandate adjustments. The launch of the sustainable investment app wiLLBe offers a solution specially developed for small investors. It also enables investments in fractional shares, thus opening up access to the capital market in a diversified form even with the smallest amounts and creating more inclusion. With wiLLBe, investors can focus on a total of seven sustainable topics.[8] If they opt for climate, environmental protection or clean energy, they save around 65 percent in CO_2 emissions compared to the MSCI World Index.

5.3.3 Financing

Since the LLB Group specialises in mortgages in the financing sector and since these are not publicly traded, divestments as a tool hardly play a role. Green investments, however, are very much an option, with client engagement a key part of the advisory process.

While the focus in 2022 was still largely on the CO_2 analysis of our portfolio, we set an important course in the first half of 2023 for climate-friendly financing. Real estate is responsible for around 35 percent of greenhouse gas emissions in Liechtenstein. As the market leader in the granting of mortgages and building loans in Liechtenstein, we see ourselves as having a special responsibility to contribute to climate neutrality in the country. As a result, LLB has decided to increase its support of sustainable new construction and energy-efficient renovation measures.

5.4 Banking operations

As with other financial companies, the environmental impact of our operations is low compared to our products. Nevertheless, sustainable business management is a cornerstone of the ACT-26 strategy.

Since 2021, the LLB Group has achieved climate neutrality across its banking operations – as certified externally by the Swiss climate foundation myclimate.[9] Although substantial CO_2 savings have been made through a variety of measures (for more details, see «Key figures and targets»), a large part of the emissions had to be offset through the purchase of CO_2 certificates from myclimate. The foundation uses the income it generates to support CO_2-reducing projects in the region and around the world. Among these are reforestation initiatives in western Uganda and a climate protection programme for fertile soil as a natural CO_2 sink in the Lake Constance region. Since these projects actually remove greenhouse gases from the atmosphere again, they are called carbon removal certificates. According to the IPCC, only these can be used to achieve climate neutrality and net zero emissions.

«For a world that will still be intact tomorrow: at LLB, we consistently take responsibility by embedding sustainability into every decision.»

Henrietta Schmoiger
Fund Manager

[8] See wiLLBe website: https://willbe-invest.com/en/willbe/sustainable-investing/investment-topics/overview.

[9] In the TCFD Report 2021, we used the term «net zero», which, according to the IPCC, is a synonym for climate neutrality. Companies and industries often distinguish between the two terms, but as yet there is no widely agreed standard definition. For consistency with other LLB reports, we now also use the term climate neutrality in this TCFD report.

Climate neutrality between Kyoto and Paris

In 1997, the industrialised countries committed themselves to concrete climate targets under the Kyoto Protocol. In Phase 1 (2008–2012), this reduced emissions by an average of 5.2 percent. The agreement enabled companies to reduce or offset their CO_2 emissions with the help of CO_2 savings certificates often through climate protection projects in developing countries.

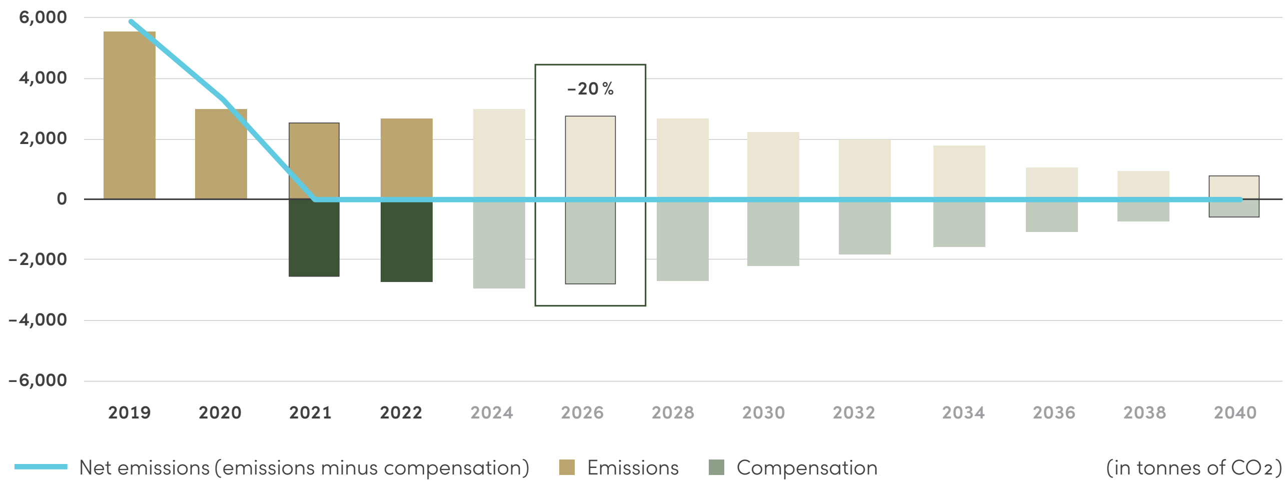
It took almost twenty years for the international community to agree to a continuation of the Kyoto Protocol. In 2015 in Paris, both developed and developing countries committed to targets aiming to limit global warming to a maximum of 2 °C. These targets are underpinned by nationally determined contributions (NDCs) for each country. What happens though when a company in an industrialised nation finances CO_2 reductions in a developing country? Is this considered a measure by the industrialised nation or by the developing country? The question cannot be answered in general terms. To prevent the risk of double counting, it is envisaged that in case of doubt the CO_2 reduction will remain in the target country. However, this can be voluntarily waived through corresponding adjustments in the climate footprint, whereby the company, and thus the industrialised nation, can book the reduction.

Currently, all states are working on their NDCs. There is still no voluntary waiver of CO_2 savings on the part of the target countries. Forthcoming changes are likely to cause upheaval in the market for CO_2 offset certificates. And what does all this mean for the LLB Group? Well, we are currently certified as climate neutral and are closely monitoring market developments. It can be assumed that many target countries will speak out against a voluntary waiver, meaning that we will also make adjustments if necessary.

Despite confirmed climate neutrality, we are following a quantitative CO_2 savings plan under the motto of «do your best and offset the rest» and are looking to reduce our absolute climate footprint by at least 20 percent by 2026 at the latest compared to our base year 2019. In the medium to long term, we are also aiming for an absolute decarbonisation path, although some residual emissions are to be expected.

Historical development of operational emissions and strategic outlook to 2040

Since 2021 the LLB Group has achieved net zero across its banking operations.



Sustainable management of banking operations

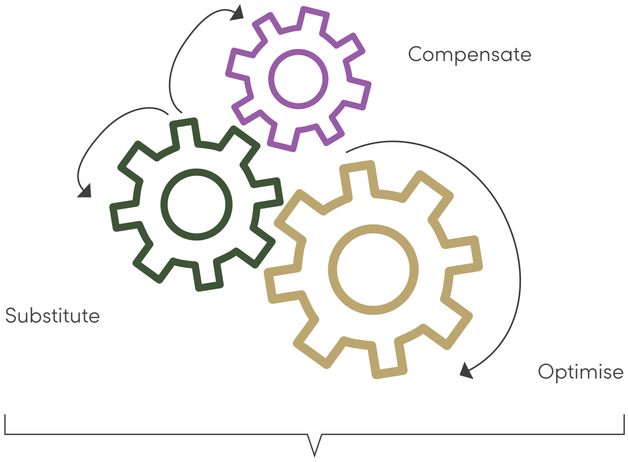
The aim of making banking operations sustainable is, of course, very different from the task of designing sustainable products and own investments. For our climate-focused activities, we measure and manage Scopes 1, 2 and 3.1 to 3.14, based on the definitions of the Greenhouse Gas Protocol (GHG).

Measures are customised as needed, but fall into one of the following three categories: optimise, substitute and compensate.

So far, a number of measures have been implemented across all scopes. The linchpin of management in banking operations are emissions caused by employee mobility, i.e. commuting and business travel. These two areas are responsible for approximately two thirds of LLB's greenhouse gas budget. For several years now, LLB has had a mobility concept that charges for parking spaces and distributes the revenue to those employees who do not use their cars. In addition, use of public transport is promoted. A home office regulation of up to 40 percent contributes to substantially reducing the mobility footprint.

The mobility concept was revised in 2023 and will enter into force in 2024. Among other things, the concept provides for greater promotion of public transport.

Approaches to sustainable operations



Explanation

1) Optimise: The classic 3Rs of reduce, reuse and recycle. Efficiency improvements and reuse are intended primarily to save resources. Any surplus resources are to be recycled and returned to the cycle.

2) Substitute: Environmentally harmful products are to be replaced by environmentally friendly ones.

3) Compensate: What can neither be optimised nor substituted is to be compensated.

Energy management through Scopes 1 and 2 represents the second-largest lever in banking operations. Here, the following measures were initiated or implemented:

- Introduction of target temperature corridors for the heating and cooling of office buildings;
- Switch from conventional to green electricity;
- Switch from conventional to biogas;
- Gradual switching of the LLB vehicle fleet to e-cars;
- Concept for switching to standard double-sided printing that is also compatible with pre-printed stationery;
- Drawing-up of a code of conduct for suppliers, which must be signed by all suppliers above a certain purchasing volume and which commits them to environmental and climate protection in addition to social and governance issues.

The purchase of CO_2 certificates supports local organic farmers in implementing humus enrichment measures.

Information week for employees on the topic of «Sustainable nutrition»
The food industry is one of the world's largest CO_2 emitters. Each of us can contribute to protecting the environment and the climate through our eating habits. Against this background, LLB chose nutrition as the theme for an information week. The primary aim was to raise awareness and to stimulate exchange and discussion among the staff.

Articles were published daily on LLB's intranet, including general information on greenhouse gases and nutrition, as well as articles on the production of meat or the topic of food waste. To round off the sustainability week, vegan meatloaf and vegan chocolate mousse were served at the bank's three large locations. Finally, employees' tips and tricks for resource-conserving nutrition were collected and made available to everyone as inspiration for a more sustainable everyday life.

5.5 Resilience of the business model

To test the resilience of our business model to climate risks, we conducted a climate scenario analysis for our investment portfolio in 2022. The analysis is based on two 1.5 °C scenarios that model the transition to a sustainable economic model: once in a disorderly way, once in an orderly way. In a disorderly scenario, the transition is delayed and abrupt (for example, through emergency intervention by states), whereas an orderly transition is timely, predictable and gradual.

As a result, in the disorderly scenario, a decline of around 10 percent in the valuations of the companies in the portfolio is to be expected; in the orderly scenario, this figure is around 7.5 percent (for details, see page 39). These figures indicate a relatively high vulnerability of the investment portfolio to climate risks. However, the informative value of these models is still very limited, especially since physi-cal climate risks are not yet taken into account. We therefore see the results as a first rough estimate. A more accurate statement will only be possible when the existing models are expanded and we are able to calculate scenarios with higher target temperatures. We are constantly monitoring global developments and will make the necessary adjustments as soon as the data situation and tool landscape has improved. In order to strengthen the resilience of our business model, it is of crucial importance to consistently continue on the chosen path towards complete climate neutrality by 2040.

06

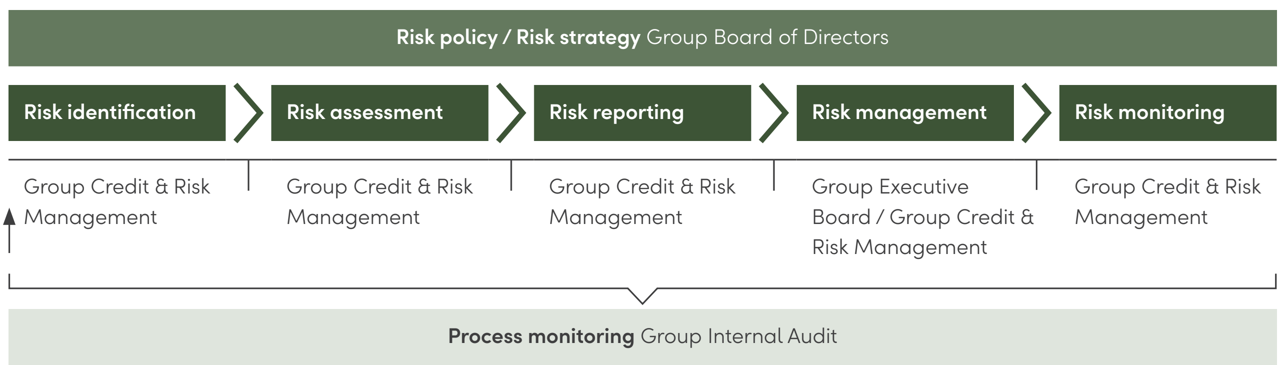
Risk management

It is a core competency of LLB-Group to take calculated risks for generating profits.

The proactive and prudent approach to risks is an integral part of our corporate strategy. It ensures the LLB Group's risk-bearing capacity and creates a strong culture of risk awareness at all levels.

The LLB Group's risk management process ensures that credit, market, liquidity and operational risks are appropriately identified, assessed, managed, reported and monitored. The risk strategy set out by the Group Board of Directors provides the framework for this. Depending on the type of risk, not only have upper limits for losses been stipulated, but also a detailed set of regulations have been drawn up, which stipulate which risks may be accepted under what conditions, and when measures to control risks are to be implemented.

Control loop of the LLB Group's risk management process



Typology of the LLB Group's risk categories

6.1 Climate risk management

By climate risks, we mean the financial losses resulting from climate change and the transition to a climate-neutral and resilient economy and society. We do not regard climate risks as an independent risk category, but rather as a danger of additional losses stemming from the categories concerned. To this extent, climate risks can both cause and also result in losses in all risk categories.

The impact of climate risks on the financial sector is manifold. We assume that transition risks will manifest themselves in the short to medium term as governments introduce climate targets and regulations. At the same time, society is changing and investors are increasingly looking to invest in carbon-friendly companies and industries. Physical risks, on the other hand, we expect to see mainly in the long term. For this reason, we have continued to push ahead with the collection of sustainability criteria as well as the improvement of data quality. In doing so, we ensure that climate risks are appropriately identified, assessed, managed and monitored in the future.

6.1.1 Identification of climate risks

We have identified climate risks and described their potential impact on the LLB Group's financial risks in the following chart. The underlying identification process is qualitative and follows a solid systematic approach. It is the responsibility of the Group Credit & Risk Management Business Area.

A significant further development is the introduction of a uniform classification system for environmentally sustainable economic activities (EU taxonomy). In future, all existing and new mortgage investments will be assessed in line with climate projections for a range of future scenarios as part of a climate risk/vulnerability analysis. These are based on current scientific findings. This enables us to identify climate risks transparently and effectively and provides the basis for an appropriate allocation of tasks and responsibilities within our banking group.

«No matter what business sector you work in: climate protection concerns us all.»

Yannik Ilkow
Green Team member

Climate risk inventory of the LLB Group

Financial risks	Physical risks		Transition risks
	Acute	Chronic	
	Extreme weather events: ▪ tropical cyclones ▪ floods ▪ snow storms ▪ heat waves ▪ wildfires ▪ hail storms	**Long-term weather changes:** ▪ droughts ▪ rises in sea levels ▪ changes in precipitation patterns ▪ landslides	**Political and regulatory developments** **Technological developments** **Consumer preferences**
Credit risk	Extreme weather events and long-term weather changes may reduce the value of assets held as collateral by our clients. In addition, the probabilities of default and loss given default of risk positions may be impacted by reduced economic activity and productivity as a result of extreme weather events and long-term weather changes.		Political guidance on climate change and technological development may trigger substantial adaptation costs and lower profitability and productivity, which may lead to higher probabilities of default as well as lower collateral values.
Market risk	The repricing of equities, bonds, commodities, etc. as a result of extreme weather events and long-term weather changes may increase the market risk for the LLB Group.		Transition risks may generate an abrupt repricing of securities and derivatives, for example for products associated with industries affected by asset stranding, i.e. abrupt and drastic losses in asset values.
Operational risk	The LLB Group's operations could be disrupted due to physical damage to its property, branches and data centres as a result of extreme weather events. It may also not be possible to ensure the uninterrupted availability of staff as a result of extreme weather events.		Non-compliance with process requirements (e.g. investment regulations, loan origination) may lead to claims and compensation for the resulting damage.
Liquidity risk	The LLB Group's liquidity risk may be affected in the event of clients withdrawing money from their accounts in order to finance damage repairs.		An abrupt repricing of securities could reduce the value of high-quality liquid assets, thereby negatively affecting liquidity buffers.
Reputational risk	Physical damage to the LLB Group's property, branches and data centres as a result of extreme weather events may increase the LLB Group's reputation risk.		Changing societal sentiment on climate protection may lead to increased reputation risk for the LLB Group as a result of scandals caused by the financing of environmentally controversial activities.
Strategic risk	Inadequate consideration of physical risks when developing the business strategy may increase the strategic risk for the LLB Group.		Lack of alignment of the strategy to products and clients in the face of advancing climate change may increase the strategic risk for the LLB Group.

6.1.2 Assessment of climate risks

Continuous climate risk management requires that all relevant information is quantified as well as possible. For this, we rely for our investment and mortgage portfolio on both internal and external sources, which form the basis for risk measurement in the context of sustainability. To assess the risk of our investment portfolio we use data and metrics from the provider MSCI. These include, in particular: Implied Temperature Rise (ITR), Climate Value-at-Risk (CVaR), CO_2 emissions in tCO_2 and CO_2 footprint in tCO_2 per CHF million invested. The risk assessment of our mortgage loans includes the CO_2 emissions in tCO_2, the CO_2 footprint in tCO_2 per CHF million invested and a natural risk analysis. The calculation of these key metrics was carried out by the provider Wüest Partner. All calculations were carried out taking into account the specifications of PCAF and the recommendations of the TCFD. The table on page 35 summarises the assessment metrics that we currently use and plan to use in the future.

6.1.3 Reporting of climate risks

We ensure that the Board of Directors and all other relevant units of the LLB Group are informed promptly, comprehensively and exactly about all material risks as part of quarterly risk reporting. Detailed and extensive analyses and assessments are intended to serve the Group Executive Board and relevant subcommittees of the Board of Directors as a basis for making sound strategic and operational decisions. Selected climate risk indicators and analyses have already been incorporated into the LLB Group's quarterly risk reporting. Responsibility for reporting on climate risks lies with the Group Credit & Risk Management Business Area.

6.1.4 Management of climate risks

The aim of risk management is to actively influence the LLB Group's risk situation. Our management of climate risks is based on our climate goals, which includes the overarching goal of reducing the CO_2 emissions in the credit and investment portfolios of the LLB Group to net zero by 2040 at the latest. We have defined differentiated and restrictive measures to limit the risks in our financial investments.

6.1.5 Monitoring of climate risks

The monitoring of climate risks primarily involves regularly reviewing both the existing climate risk indicators and analyses and the effectiveness of the risk management measures. Responsibility for monitoring climate risks lies with the Group Credit & Risk Management Business Area.

Assessment metrics of the LLB Group's mortgage and investment portfolio

Climate indicator	Portfolio	Climate risk	Indicator	Status
Implied temperature rise	Investment portfolio	Transition risks	Implied temperature rise in °C	Disclosed
Climate Value-at-Risk	Investment portfolio	Transition risks	Loss in value of companies caused by transition risks under different climate scenarios, in %.	Disclosed
CO_2 emissions in tCO_2	Mortgage and investment portfolio, banking operations	Transition risks	CO_2 emissions in tCO_2	Disclosed
CO_2 emissions in $kgCO_2$ per m^2	Mortgage portfolio	Transition risks	CO_2 emissions per m^2 in tCO_2	Disclosed
CO_2 footprint in tCO_2 per CHF million invested	Mortgage and Investment portfolio	Transition risks	tCO_2 per CHF million invested	Disclosed
Natural risk analysis	Mortgage portfolio	Physical risks	Portfolio analysis with regard to physical risks	Disclosed
Stranded asset time point	Mortgage portfolio	Transition risks	Time point from which the CO_2 emissions of a property lie above the emissions reduction path.	Disclosed
Green asset ratio (GAR)	Total assets	Transition risks, physical risks	Proportion of environmentally sustainable assets in relation to total assets (under the EU taxonomy)	In progress

6.2 Outlook

In conclusion, it remains to be said that the integration of climate risks into risk management is an ongoing task. It must not be regarded as completed any time in the near future; instead it is based on a continual assessment of the observations of the market and the competition. Continuous professionalisation based on regulatory requirements is therefore fully in line with the entire LLB Group's understanding of sustainability. This is operationalised in various working groups and project plans. The upcoming tasks of the LLB Group include, for example: the expansion of ESG risk reporting; the improvement of data quality for the calculation of the CO_2 emissions of the mortgage loans and the financial investments; the analysis and assessment of physical risks in connection with climate change, taking into account various climate scenarios; as well as the implementation of stress tests based on sectoral and/or regional scenario analyses.

07

Key figures and targets

Data indicates a reduction in the CO_2-footprint of our mortgage and investment portolio in 2022.

In this chapter we present some of the performance indicators described. With regard to the calculations of the CO_2 emissions of our investment and mortgage portfolio, we would like to point out that the underlying data is limited and can fluctuate significantly over time. This is due in particular to the ongoing further development of the models as well as the retroactive adjustment of the data basis. Consequently, the metrics shown here are indicative and a snapshot in time. We expect that the metrics given in this report may differ from those in future TCFD reports.

We nevertheless believe that the data is valuable. It supports us in improving our climate management, including tools, and provides guidance to our shareholders and clients on climate-related risks to which they are ultimately also exposed. The LLB Group considers high data quality a key success factor. And for this reason, both we and our data providers are driving the optimisation of continuous processes (further development of data acquisition, metrics and models). We are convinced that this will successively improve the quality of the data.

Finally, we would like to point out an innovation at this juncture of the report: In the 2022 reporting year, we are presenting a CO_2 reduction path in the mortgage sector as a benchmark for the first time.

«Sustainability is a central element in any treasury department today.»

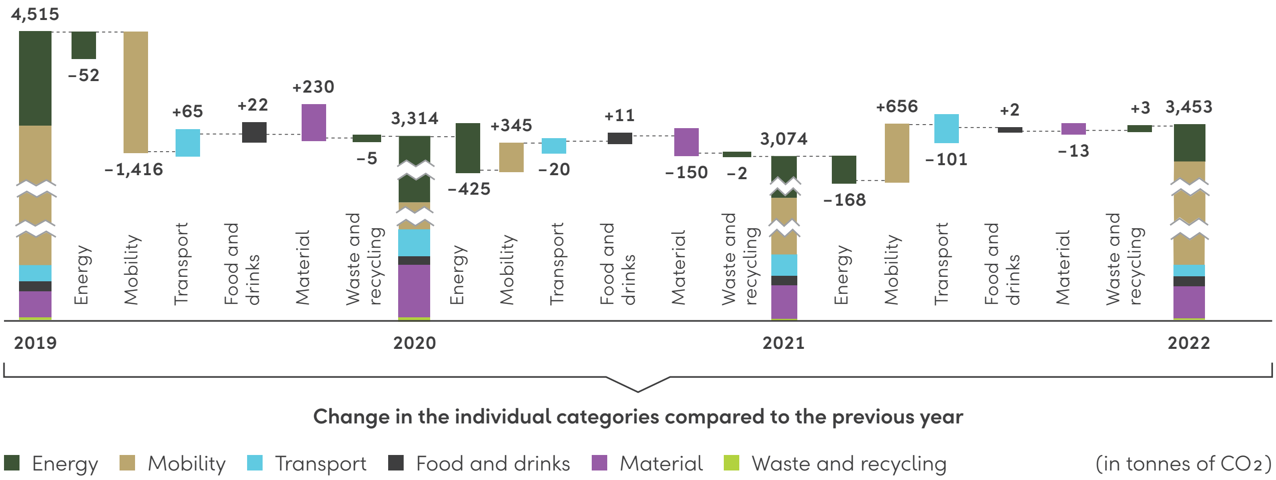
Alessio Manis
Treasurer and Green Team member

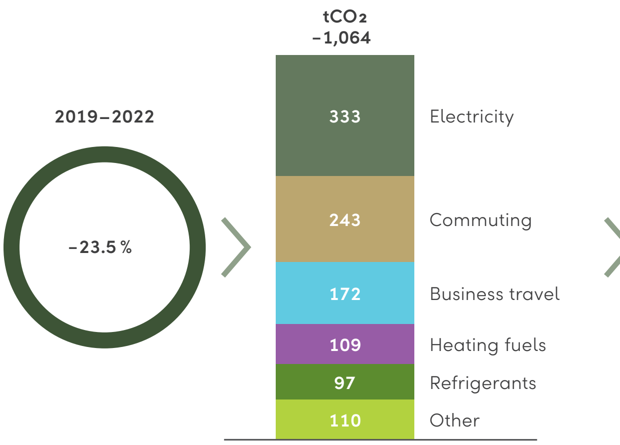
7.1 Banking operations

The absolute greenhouse gas emissions from our banking operations, which are assigned to Scopes 1 to 2 and 3.1 to 3.14, have been calculated since 2019. While in our base year emissions were recorded at 4,515 tCO_2, by 2022 they were 23.5 percent lower at 3,453 tCO_2.[10]

This pleasing development is due to a number of active measures as well as partly to favourable externalities (charts and text below).

Development of absolute emissions in banking operations (2019–2022)





- **Electricity:** The greatest CO_2 savings were achieved by switching to green electricity. This measure accounts for approximately one third of the Group's CO_2 reduction to date.
- **Commuting:** This contributed approximately a quarter of the CO_2 savings, which is mainly a result of introducing the option of working from home.
- **Business travel:** The decline in business travel accounts for 15 percent of the reduction. On the one hand, cross-border virtual working has proven its worth since the corona lockdowns and, on the other hand, the number of flights to Vienna has fallen sharply after a project was completed at LLB Österreich.
- **Heating fuels:** A switch to biogas at LLB AG and LLB (Schweiz) AG (until 14 September 2023: Bank Linth LLB AG) resulted in savings of approximately 10 percent.
- **Refrigerant:** Without active intervention, a change in reporting led to material savings. Refrigerant refill quantities were collected for the first time, which allowed the change from proxy figures to precise calculations.
- **Other:** Here, the switch to e-cars in the LLB vehicle fleet and the decline in district heating consumption had an impact. Lower consumption in the canteen and less waste due to home office working also had a positive effect.

[10] The values were reviewed again as part of a data quality management process. There have therefore been slight shifts compared to the figures in the TCFD Report 2021 and the Sustainability Report 2022.

7.2 Bank products and own investments

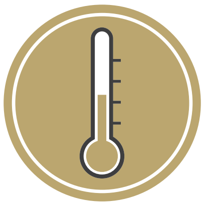
We use selected metrics to identify, measure and assess the climate-related opportunities and risks in the LLB Group's mortgage and investment portfolio.

7.2.1 Implied Temperature Rise (ITR)

This indicator shows the extent to which the companies in our investment portfolios are committed to the global climate goals and how successfully they are pursuing them. MSCI's Implied Temperature Rise model provides information on the quality of the targets and the progress achieved.

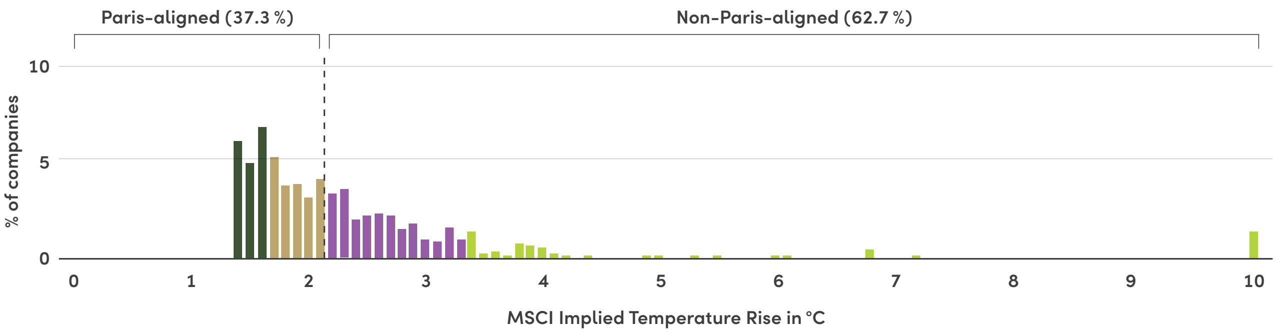
As at 31 December 2022, the ITR of our investment portfolio was 2.0 °C. This means that the companies in our investment portfolio with their current commitments and without further climate protection measures exceed the LLB Group's target of limiting global warming to 1.5 °C. Overall, data coverage here is 57.2 percent. The ITR in the previous year was 2.1 °C, indicating there has been a slight improvement.

2.0 °C



−0.1 °C compared to 2021

MSCI Implied Temperature Rise of the investment portfolio of the LLB Group – distribution



Implied Temperature Rise categories		% of companies in catgory
1.5 °C aligned	<= 1.5 °C	17.4 %
2 °C aligned	1.5 °C – 2 °C	19.8 %
Misaligned	> 2.0 – 3.2 °C	23.6 %
Strongly misaligned	> 3.2 °C	10.4 %

We assume that the actual rise in temperature is significantly higher than the implied rise in temperature. This is due, among other things, to the fact that the model assumes all emitters will achieve their climate targets in full. This optimism is only corrected if targets are missed. The second source of distortion relates to data availability. For there seems to be a correlation here between companies that provide CO_2 data and companies that have actually set targets. This could lead to companies that are among the climate pioneers being overrepresented, while climate laggards are underrepresented.

7.2.2 Climate Value-at-Risk (CVaR)

Using CVaR, we try to simulate the financial impact of transition risks on the companies in our investment portfolio. This analysis tool models the future financial impact of climate risks under various scenarios and thus illustrates the impact of risks and opportunities on the valuations of the companies in our portfolio.

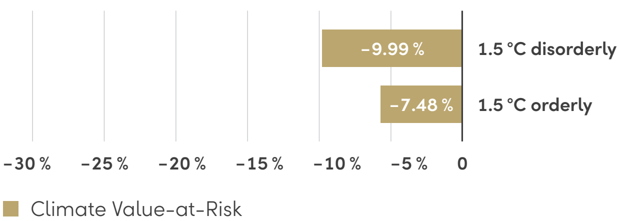
There are various possible climate scenarios. We have opted for two 1.5 °C scenarios (analogous to the LLB Group's target) from the Network for Greening of the Financial System (NGFS). Scenarios with higher temperatures would be most helpful for risk modelling. In these scenarios, physical risk increases considerably compared to transition risk. However, as we are not yet able to model such scenarios, we will limit ourselves to the two scenarios mentioned above.

As at 31 December 2022, the analysis shows a higher transition risk in the disorderly scenario than in the orderly scenario. This was to be expected, as an orderly transition allows market actors to adjust to the tremendous changes over a longer period of time. In the disorderly case, the valuations of the companies in our portfolios are estimated to fall by around 10 percent. For us, this means that we closely monitor global efforts to combat the climate crisis, as they have a major impact not only on the value of our managed portfolios but also on the assets on our balance sheet.

Climate transition scenarios for calculating the Climate Value-at-Risk of the investment portfolio of the LLB Group

Scenario	Source	Climate path	Description
Orderly decarbonisation	NGFS	1.5 °C	In this scenario, climate protection measures are implemented early on and successively tightened so that a maximum temperature rise of 1.5 °C is achieved.
Disorderly decarbonisation	NGFS	1.5 °C	In this scenario – analogous to the orderly scenario – a temperature rise of 1.5 °C is achieved. Climate protection measures will not be adopted, however, until 2030. Consequently, more drastic steps have to be taken in order to still achieve the global warming target.

MSCI Climate Value-at-Risk of the investment portfolio of the LLB Group



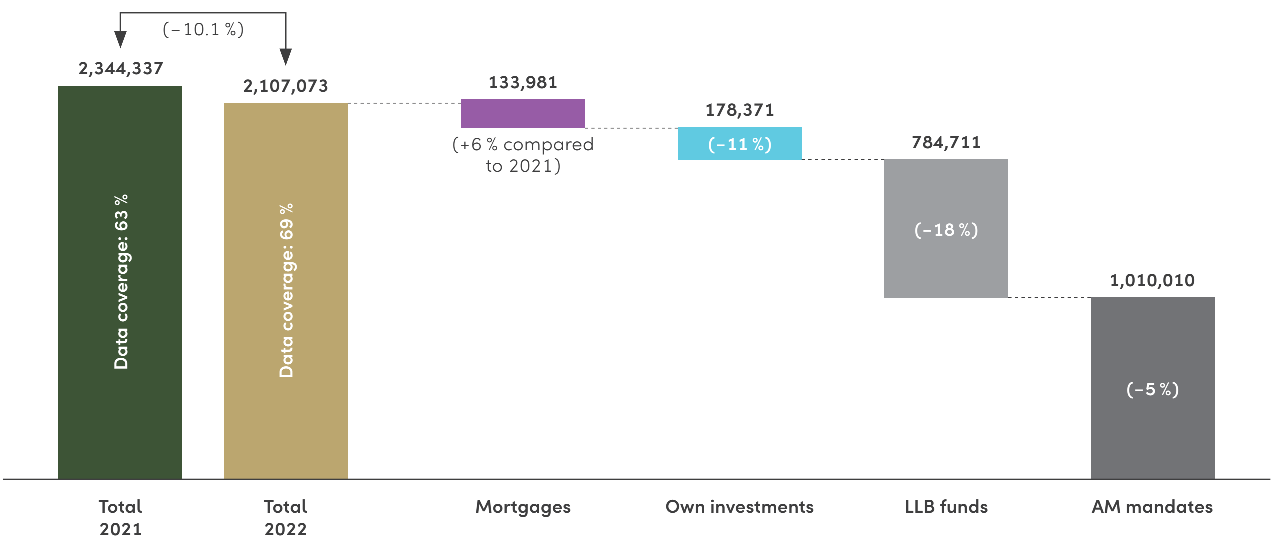
7.2.3 CO_2 figures

Other key metrics that we use to assess climate risks include absolute and relative CO_2 figures. All calculations follow the methodology of PCAF, of which we are an official supporter.

CO_2 emissions in tCO_2 [11]

This measure summarises the emissions of our mortgage and investment portfolio and thus represents our share of responsibility for the climate crisis. As at 31 December 2022, the overall emissions were 2.1 million tCO_2. This figure is based on data coverage of 69 percent and represents a CO_2 reduction of 10 percent compared to the previous year. The increase in the absolute emissions of our mortgage loans reflects the higher coverage ratio.[12] The differences in CO_2 emissions between the portfolios are due in large part to the limited availability of data and different calculation requirements for mortgages.[13]

Financed CO_2 emissions in tCO_2



CO_2 data coverage

When it comes to CO_2 figures, it is worth mentioning that data coverage varies considerably between the product groups. While the data coverage for our LLB funds is 84 percent, there is a significant data gap for our own investments owing to the substantial proportion of sovereign and supranational issuers for which no or incomplete CO_2 figures are available.

But data quality is still lacking for other asset classes as well. There continues to be a number of companies that do not disclose CO_2 data or do not even calculate it. Ultimately, gaps exist in both our internal and external data, and we and our data providers are working hard to close them.

[11] For comparability, we have recalculated the previous year's figures for our investment portfolio according to PCAF. In addition to those of the oil and gas sectors, we have also taken into account the Scope 3 emissions of the transport, construction, raw materials and industry sectors.

[12] In 2022, where values were missing a use-specific portfolio mean was used. This had the effect of increasing the coverage ratio.

[13] Scope 3 emissions for real estate (mortgage loans) are excluded in accordance with PCAF; incomplete or missing emissions data for sovereign and supranational issuers (own investments).

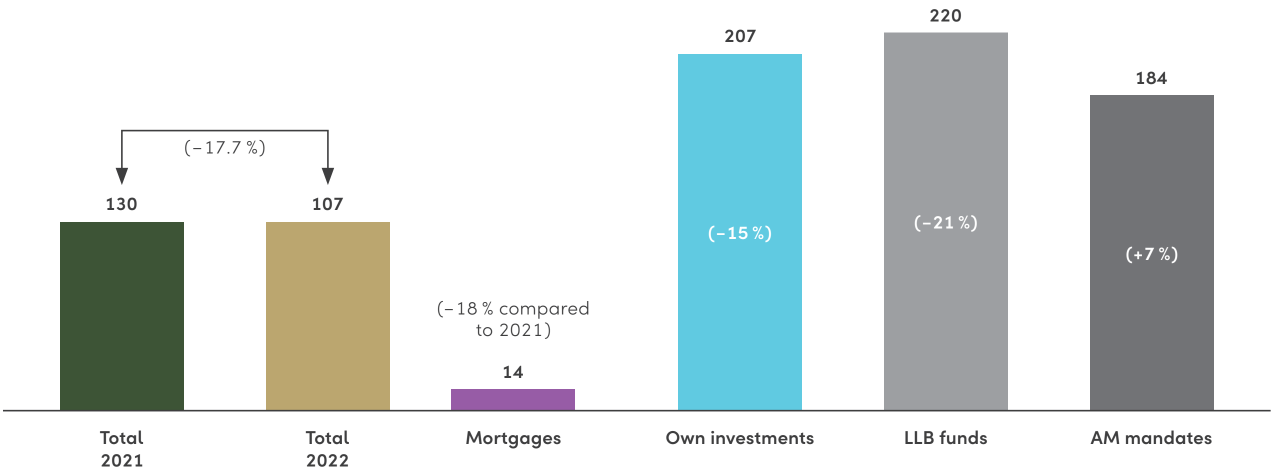
CO_2 footprint in tCO_2 per CHF million invested

Based on the financed CO_2 emissions of our portfolios, we calculated the CO_2 footprint in tCO_2 per CHF million invested.

The average footprint of all LLB portfolios as at 31 December 2022 was 107 tCO_2 per CHF million invested, which corresponds to a reduction of almost 18 percent over the previous year. There are various reasons why the CO_2 footprint for LLB funds and in asset management developed as it did. The investment fund launched as part of the LLB's ACT-26 strategy and with a Paris-aligned benchmark approach contributed significantly to the development of the CO_2 footprint, especially to that of LLB funds. Changes made to the strategic asset allocation and decisions taken on the tactical asset allocation also gave the issue of the CO_2 footprint a tailwind. By comparison, there was an increase in the CO_2 footprint of the asset management mandates. This reflected in particular market-related changes in volume.

The relative emissions of mortgage loans fell markedly thanks to the improvement in data quality. Substituting oil and gas heating with fossil-free heating systems in Liechtenstein also had an effect.

CO_2 footprint in tCO_2 per CHF million invested



«Every step, no matter how small, counts on our path to sustainability.»

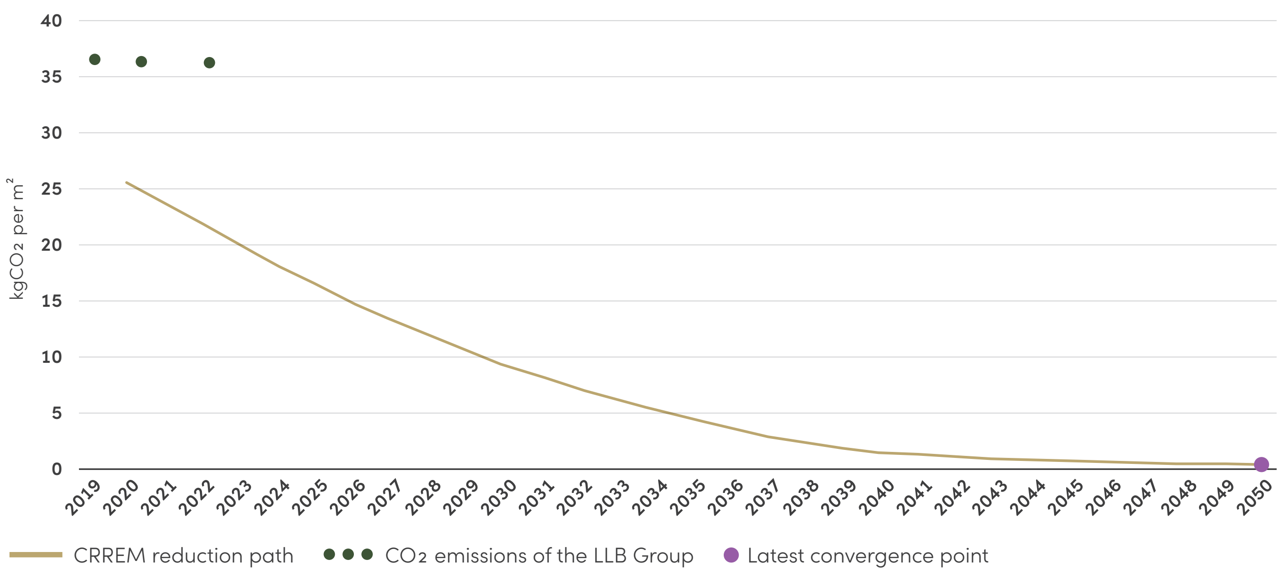
Jacqueline Suter
Project Management Marketing

7.3 Sectoral pathway

For our mortgage portfolio, we have identified as an additional benchmark a sectoral pathway based on the Carbon Risk Real Estate Monitor (CREEM). In contrast to the absolute CO_2 values and relative CO_2 values per CHF million invested already presented, the CO_2 emissions per square metre of our mortgage portfolio are monitored here. We can track the corresponding values back to the base year 2019. Since then, CO_2 emissions per m^2 have fallen slightly: In the 2022 reporting year, the value was 0.7 per cent lower than in 2019. The reason for this is mainly to do with changes in the composition of the portfolio and an improvement in the data quality.

- The calculations of the historical CO_2 values are compliant with the PCAF standard and are based on the modelling of energy loss from properties using building physics elements. Data on actual electricity consumption is not available. The PCAF quality score lies between 1b and 2a.
- Data coverage was 76 percent in 2022 and has greatly improved compared to 2021 (62 percent). The low data coverage reflects the fact that there is limited public access to building data in Liechtenstein.
- We recalculated the values for 2019 to 2021 due to a model adjustment. These different annual values can now be compared, and there are no material distortions.
- The CRREM pathway is a use-based CO_2 reduction path for real estate and includes commercial and residential properties. The calculated LLB real estate portfolio is composed of 98.1 percent residential properties, which is why we decided against separate reduction paths for residential and commercial properties. As there is no CRREM pathway just for Liechtenstein, the Swiss pathway was used as a reference value.

Mortgages



[14] https://carbonaccountingfinancials.com/files/downloads/PCAF-Global-GHG-Standard.pdf

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