CLIMATE REPORT

2024

Disclosure in accordance with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD)

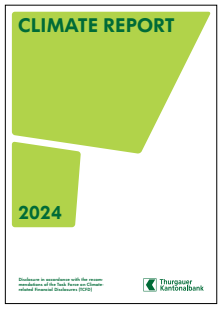
Thurgauer Kantonalbank

About this report

TKB has long been aware of the importance of climate issues. It first reported on its commitment to sustainability, including in the environmental dimension, ten years ago. The bank has continuously enhanced its reporting since then, with three publications now devoted to the topic. Detailed information can be found in the bank's Annual and Sustainability Report and in its GRI Sustainability Report. The Climate Report has been a part of its reporting since 2023. It follows the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) and shows how the bank deals with the opportunities and risks presented by climate change. This report puts TKB in compliance with the legal requirements, because large Swiss companies have been required to report on climate issues since the previous financial year.

The **Annual and Sustainability Report** explains, among other things, how TKB addresses environmental, social and employee-related issues responsibly. It also contains explanations regarding respect for human rights and the fight against corruption. The report implements the provisions of the Swiss Code of Obligations, which have been applicable to large Swiss companies since 2024.

The **Climate Report** forms an annex to the Annual Report and the GRI Sustainability Report. It shows how TKB deals with the opportunities and risks presented by climate change. The report follows the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). The bank published a Climate Report for the first time for the 2023 financial year. The report has been mandatory since 2024.



The **GRI Sustainability Report** reports in detail on the implementation of TKB's sustainability strategy. It shows what TKB does for its customers, employees, society and the environment. The report follows the guidelines of the Global Reporting Initiative (GRI), the worldwide standard for sustainability reporting.

All of these publications are released in German in March and can be found at: tkb.ch/geschaeftsbericht

2024 Climate Report – Contents

Introduction

Reporting on climate-related risks and opportunities

Climate change as a challenge and an opportunity

Ongoing global warming – caused by greenhouse gas emissions – is one of the most urgent challenges of our times. It poses a risk to humankind and the environment, and this is why it is important to limit climate change and minimize its impacts. TKB takes this challenge seriously and is living up to its responsibility. Because the bank itself contributes to greenhouse gas emissions – directly as well as indirectly through its financing and investment activities. The bank intends to reduce its emissions to net zero by 2050. It has formulated climate targets to that end – based on science.

Limiting climate change is strategically important to TKB and forms part of its commitment to greater sustainability. It considers climate protection and reducing greenhouse gas emissions to be a material topic and is addressing it within the scope of its sustainability strategy. For this, the bank looks at both its own operations and its role in the financial system. It focuses not only on the risks posed by climate change, but also on the opportunities presented by the transition to a low-carbon society. The bank has incorporated its approach to both – opportunities and risks – into its business and risk policy.

This report creates transparency. It shows how climate change impacts the bank and how the bank is addressing the challenges and the new opportunities. And last but not least: It documents the bank's progress along its pathway to net zero.

Good to know

What happened at TKB during the reporting year?

The bank passed two important milestones in 2024. First, the near-term climate targets that TKB aims to achieve by 2030 were reviewed and validated by the Science Based Targets initiative (SBTi). Second, the bank expanded its disclosure of financed greenhouse gas emissions to include two asset classes, namely business loans and corporate bonds held by the bank. Find out more starting on page 35 of this report.

Governance

Corporate governance with respect to climate-related risks and opportunities

Clear structures and processes

The Board of Directors and Executive Board ensure that climate issues are dealt with responsibly. The structures and processes form part of sustainability and risk management. They go hand in hand.

The Board of Directors sets the guidelines

TKB's sustainability strategy defines climate change and the reduction of greenhouse gas emissions as material topics, specifies associated risks and opportunities and formulates appropriate aspirations and targets. Sustainability is also embedded in the banking strategy and is incorporated accordingly into its business planning and annual budget, its remuneration policy [1] and relevant decision-making processes such as those relating to major capital raisings and participations. In its capacity as a strategic governing body, the Board of Directors adopts the banking and sustainability strategies and delegates their implementation – including any actions needed to achieve the climate targets – to the Executive Board. It has received training on climate issues, receives semi-annual updates on the progress of target achievement and assesses this across the climate targets.

The Board of Directors also approves the institution-wide Risk Management Framework[2], which contains structures, processes, responsibilities and instruments. It is reviewed at least once per year and amended as needed. Its requirements also apply with respect to sustainability risks, which the bank views as including climate-related risks. A detailed report containing information about the bank's risk situation is prepared for the Board of Directors on a quarterly basis.

As a general rule, the Board of Directors divides its tasks between committees. The Strategy Committee is responsible for preliminary discussion of the banking and sustainability strategies, including the climate targets, and the reporting on them. The Risk and Audit Committee is responsible for preliminary discussion about climate-risk reporting in accordance with the recommendations of the Task Force on Climate-related Financial Disclosures. It takes note of developments relating to climate-related risks.

[1] A detailed description of the remuneration policy can be found in the Annual Report, starting on page 65.
[2] Detailed information on the bank's risk management can be found in the Annual Report, starting on page 90.

The Executive Board is responsible for implementation

It is up to the Executive Board to implement the sustainability strategy. It regularly deliberates on strategic matters relating to sustainability and examines the associated risks and opportunities, including climate issues. Furthermore, the Executive Board provides the resources needed to implement the sustainability strategy and achieve the climate targets, and reports to the Board of Directors twice a year on the progress it has made. Several different offices within the bank – the Sustainability Office in particular – are actively involved on climate-related matters . It takes the lead on the sustainability strategy preparation process (which also involves formulating the climate targets) and coordinates activities related to strategy implementation. It reports directly to the Chief Executive Officer.

The Executive Board is additionally responsible for implementing the requirements set forth in the institution-wide Risk Management Framework. Risks, including climate risks, are monitored and managed in accordance with the three-lines-of-defense model. These lines of defense are (1) the profit-oriented business units, (2) independent supervisory bodies such as Risk Control and Compliance, and (3) Internal Audit. The Chief Risk Officer (CRO) is a member of the Executive Board and reports to the Executive Board and the Board of Directors on a monthly basis on the bank's risk situation. The CRO also prepares detailed risk reporting for the Risk and Audit Committee on a quarterly basis. In the case of extraordinary developments, the CRO immediately informs the Executive Board and the Board of Directors and – if necessary – the financial market supervisory authority.

Good to know

What is the remit of the Sustainability Advisory Council?

An advisory council made up of five sustainability experts from outside the bank provides support on its implementation of the sustainability strategy. This body critically assesses the bank's commitment and provides new ideas from an outside perspective. The same also applies to the bank's approach to dealing with climate change and the associated risks and opportunities. A member of the Board of Directors and the Chief Executive Officer are present at all meetings of the Sustainability Advisory Council.

Climate-risk reporting

Report	Frequency of publication	Responsible bodies	Audience
Explanations of climate issues as part of the report on implementation of the sustainability strategy	Twice per year	– Executive Board – Strategy Committee – Board of Directors	Internal
Explanations of climate-related risks	Once per year	– Executive Board – Risk and Audit Committee – Board of Directors	Internal
Annual and Sustainability Report	Once per year	– Executive Board – Bank Committee – Board of Directors – Thurgau Grand Council (Grosser Rat)	Public
Climate Report in accordance with the TCFD recommendations (annex to the Annual and Sustainability Report)	Once per year	– Executive Board – Risk and Audit Committee – Board of Directors – Thurgau Grand Council (Grosser Rat)	Public
GRI Sustainability Report	Once per year	– Executive Board – Strategy Committee – Board of Directors	Public

Key points at a glance

- **Clear structures and processes:** The bank's approach to climate-related risks and opportunities is embedded in its corporate governance.
- **Active on two levels:** Climate issues form part of both the bank's sustainability management and its risk management.
- **Board of directors sets guidelines:** The Board of Directors adopts the sustainability strategy – including the climate targets – and approves the Risk Management Framework.
- **Executive Board handles implementation:** The Executive Board is responsible for implementing the sustainability strategy and the risk management requirements.

Governance structure for climate issues

Board of Directors

– adopts the sustainability strategy (including the climate targets) and the GRI Sustainability Report (including climate-risk reporting)
– adopts the institution-wide Risk Management Framework (including the management of climate-related financial risks) and the climate report in accordance with the TCFD recommendations, which forms an annex to TKB's Annual Report

Strategy Committee

Risk and Audit Committee

Executive Board

– implements TKB's sustainability strategy (including climate targets) and reports to the Board of Directors
– implements the requirements of institution-wide risk management (including climate-related financial risk management) and reports to the Board of Directors

Chief Executive Officer / Head of the Bank Management division

Head of Finance and Risk (Chief Risk Officer)

Sustainability Office
(in the Strategy, Innovation and Sustainability department)

manages the process for drafting the sustainability strategy, including the climate targets, and coordinates activities related to its implementation

Risk Control department

is responsible for bank-wide risk management including management of climate-related financial risks

Strategy

The inclusion of climate-related risks and opportunities in business policy

Seizing opportunities, minimizing risks

Climate change poses risks but also opens up opportunities. While severe storms can cause high costs and loan defaults, the transition to a climate-friendly society opens up significant financing opportunities. A strong strategy takes both into account.

Climate-related opportunities and their impacts

Climate change is opening up opportunities. The opportunities for TKB mentioned below are mainly based on a qualitative analysis and sometimes supported by quantitative data. Impacts on the bank – in the form of changes to the products and services offered, for example – are also explained. No financial impacts can be identified at present.

Good to know
Which periods of time does the bank distinguish?

When TKB assesses climate-related risks and opportunities, it makes statements about the future. To this end, it uses the following periods of time:
- near-term: 0 to 5 years
- medium-term: 5 to 10 years
- long-term: 10 to 30 years

Markets, products and services

Investments of nearly CHF 390 billion – around CHF 13 billion per year – will be needed over the next 30 years for Switzerland's transition to a low-emission economy.[1] Four-fifths of this necessary capital investment can be covered by conventional banking products. This opens up opportunities for Swiss banks, in that they will be able to grant mortgages and business loans that support the transition to a more climate-friendly economy and society. In the building sector, investments totaling nearly CHF 2 billion per year will be needed to replace heating systems and renovate building envelopes, for example. As the canton's leading mortgage bank, TKB can also capitalize on this investment potential.

TKB offers sustainable products and services and is expanding its offering on an ongoing basis. At the same time, it provides customers with needs-based advisory services. ESG topics are addressed within the scope of this systematic advisory process – both in the financing and the investment business. Customers' growing awareness of these topics goes hand in hand with an opportunity to generate addi-

[1] This figure stems from a study conducted in 2021 by the Swiss Bankers Association in cooperation with the Boston Consulting Group. The title of the study was "Sustainable Finance – Investment and financing needed for Switzerland to reach net zero by 2050".

tional income. This, however, hinges on the availability of advisors who are well trained on topics related to sustainability – and climate issues in particular. TKB collaborates with the Zurich University of Applied Sciences (ZHAW) to provide its staff with just such training. In the mortgage sector, the bank offers free energy advice in cooperation with cantonal advice centers, useful services like the renovation cost calculator, and a contribution towards the cost of obtaining a cantonal energy certificate for buildings (known as a CECB). In addition, TKB offers special financing products – like the energy mortgage – that promote climate-friendly behavior and reward it with preferential terms and conditions. Both private and business customers can benefit from these offers. The bank also helps its customers transform their business models. For this, the bank conducts in-depth discussions on the topic of sustainable corporate governance as well as the climate-related risks and opportunities associated with it. Additional financing opportunities arise for TKB as a result, including financing investments in new technologies and innovative sustainability solutions (such as photovoltaic systems on third-party roofs and district heating). The bank offers sustainability-linked loans to large companies.

Energy efficiency and renewable energy sources

An economical use of resources – particularly energy – protects the climate and helps the bank cut costs. The bank can for example reduce its energy consumption – and therefore its operating costs – by making energy-efficient renovations to its properties. When replacing heating systems, it refrains from using fossil fuels wherever possible and instead relies on self-produced electricity, making the bank less dependent on rising electricity prices. Only e-vehicles are used as company vehicles, which reduces both maintenance and operating costs. Finally, TKB systematically monitors its use of other resources, such as paper and water, so it can take actions on an ongoing basis to reduce the use of these resources and the associated costs.

Good to know

What impacts does TKB have on the environment?

As a service provider, the bank's **direct environmental impact** is comparatively low. The main factors include the energy consumption of its building systems and IT infrastructure, the business and commuter travel of its employees, the use and disposal of office supplies as well as the new construction and remodeling of the bank's own properties. Like any bank, TKB also has **indirect environmental impacts**. It finances residential and commercial properties, for example, which in turn cause emissions. TKB only finances a very small volume of loans in emissions-intensive sectors such as waste and wastewater management.

Climate-related risks and their impacts

Climate change poses many different risks for the economy and society. The risks to TKB mentioned below are based on a qualitative risk analysis. The bank has defined scenarios for the most important risks and calculated the potential losses. No material, direct financial impacts on TKB are discernible at this point in time. However, other impacts on the bank – in the form of changes to the products and services offered, for example – are explained.

The risk analyses reveal a minor climate-related risk for the bank in the near to medium term. This applies to both transition risks, meaning risks associated with the transition to a climate-friendly economy and society, as well as physical risks. In the long term, TKB expects the importance of physical climate risks to grow. However, compared with other non-climate-related risks and measured against equity, these are currently assessed as being rather low. The impact of climate change on credit risk is the most important issue for TKB. Market, liquidity and operational risks, on the other hand, are considered very minor as they are not directly impacted by climate change or, if so, only marginally.

Good to know

What risks does climate change pose?

For one, global warming entails **physical risk**. Climate change is leading to an increased incidence of extreme weather events, resulting in floods, landslides and fires. Incidents such as these can cause damage to the bank's operational infrastructure as well as to customers' real estate and assets and cause additional costs. Climate change also poses **transition risks**. These arise through the shift towards a more climate-friendly economy and society. Some examples of these include rising levies for greenhouse gas emissions, stricter renovation regulations and additional costs for the transition to more environmentally friendly technologies.

Credit risk

Financing, particularly lending in connection with residential and commercial real estate, is immensely important to TKB. For the bank, the most noticeable impacts of climate change therefore come in the form of credit risk. A distinction is made between transition risk – such as rising levies for greenhouse gas emissions – and physical risk – such as flooding.

Transition risk in mortgages for private homes and commercial real estate

Rising levies for greenhouse gas emissions and stricter renovation regulations can lead to higher operating costs or necessitate investments, which in turn could result in price reductions or loan defaults. Simulations of such scenarios have revealed that the impacts for TKB would be easily manageable – even if greenhouse gas prices were to rise sharply, which seems possible in the medium to long term.

Physical risk in mortgages for private homes and commercial real estate

Since building damage caused by storms is largely covered by compulsory building insurance in Switzerland, this is not likely to result in any increase in loan defaults in the short to medium term. The lion's share of TKB-financed properties is located in Thurgau and the neighboring regions. These regions are not as heavily impacted by storms as other regions of Switzerland, such as the mountains, for example. Very few of the financed properties are in metropolitan areas, where an enormous amount of damage can be sustained in a small area. In the long term, sharply rising insurance premiums and decreases in real estate values due to climate risk are likely to be the exception and unlikely to have any appreciable impact on the bank's loan portfolio.

Transition risk for business loans

At TKB, only a small volume of financing activity takes place in emissions-intensive sectors such as waste and wastewater management. Therefore, for the majority of corporate customers, rising levies for greenhouse gas emissions will have only a moderate impact on loan default risk. Even in the event of sharp price increases, which seems possible in the medium to long term, the simulations do not reveal any appreciable impacts on the bank's loan portfolio.

Physical risk for business loans

Acute consequences of climate change such as flooding could result in damage to a company's buildings and facilities or business interruptions and related costs. Since events such as these are generally limited to specific areas, only a small portion of TKB's loan portfolio would be impacted. Long-term developments such as ground erosion can threaten customers' business models. Since potentially harder-hit sectors such as agriculture and tourism do not account for a high proportion of financing at TKB, it does not expect this to have any appreciable impact on the loan portfolio in the medium to long term.

Market and liquidity risks

TKB does not engage in any trading on its own account. The bank invests in financial assets with high debtor quality to preserve liquidity. TKB invests very little in sectors that are highly impacted by climate change – whether through transition or physical risk. The risk of sustaining losses in market value is low as a result. TKB is unable to identify any climate-related impacts on the bank's liquidity risks at this time.

Operational risk

Climate change only has a minor impact on the bank's operational risk. Here, a distinction is made between transition risk and physical risk.

Transition risk for bank operations

Society's growing awareness of climate issues as well as the introduction of related regulatory provisions are making additional demands on companies with respect, for example, to data collection, disclosures and the structuring of advisory processes. These new requirements are resulting in operational risk for TKB. This is affecting the entire value creation process and becoming evident in slightly higher legal risk, for example.

Physical risk for banking operations

With respect to operational risk, the impact of climate change mainly occurs through physical events such as flooding, which could cause damage to the bank's premises or to critical infrastructure, such as its IT systems. TKB takes structural actions, for example floodwater protection, to protect itself against such events. The bank is insured against most risks that cannot be eliminated through structural actions. Furthermore, the bank's business continuity management ensures that damage sustained during such events is minimized and that operations can be restored quickly.

Reputational risk

Reputational risk rises as awareness of climate issues increases among the bank's stakeholder groups. Expectations left unfulfilled can result in justified or unjustified accusations – "greenwashing" being the keyword – and negative business performance. Since TKB attaches great importance to sustainability and provides transparent information, it assesses its reputational risk as fairly low overall.

Resilience of the banking strategy with respect to climate change

When it comes to climate change, there are prospects for the future. To assess its resilience to changes in the climate as well as the impacts of those changes, the bank has defined various scenarios and performed calculations. Overall, TKB considers its strategy to be sufficiently resilient. Climate-related impacts on the bank's business activities seem possible, but manageable. Corresponding metrics and targets are explained in detail starting on page 32.

Significance of various climate scenarios

TKB has on the one hand analyzed the possible impact of climate change on the bank's business model and risk situation in the future. It has also examined how its business activities could impact climate change on the other hand. For TKB, the most important combinations of risk drivers and risk types result in low-level climate-related impacts in the medium term, even if physical climate events pose a latently increasing risk potential. Even assuming extreme conditions, climate-related loan defaults would only account for less than two percent of the bank's operating profit. Since potential price increases in greenhouse gas levies are a key risk driver, the bank has examined different price levels and evaluated them in terms of the bank's ability to distribute profits and build reserves as well as in terms of its reputation as a secure bank. When simulating the climate scenarios, it was guided by the climate stress test of the European Central Bank and the recommendations of the Network for Greening the Financial System. The most serious event that had occurred to date according to the Swiss Federal Office for the Environment was used as the basis for calculating the flooding scenario. TKB aims to expand its methodology and to improve the quality of the underlying data over the next few years. The insights gained by examining potential climate scenarios are incorporated into the monitoring and management of climate-related risks as well as climate-risk reporting.

Further analyses regarding climate change

TKB has carried out additional analyses with a view to the future, in addition to calculating various climate scenarios. For example, it has determined the conditions under which the net zero target is attainable for the greenhouse gas emissions arising in connection with its financing activities and what impact these could have on its business model. Overall, it has concluded that climate change will not have any serious impact on its business model because its financing activities focus on sectors with relatively little exposure. Most of them exhibit fairly low to average levels of emissions that are mainly caused by buildings and vehicles. TKB has only a few emissions-intensive loans, which predominantly relate to public infrastructure, in particular waste and wastewater management. The Canton of Thurgau is drawing up emission-reduction strategies for these. Additionally, the Swiss federal government and the cantons are initiating legislative changes and

incentive programs that will promote energy efficiency building renovations. Finally, the bank is supporting its customers and helping them to implement these actions appropriately.

Key points at a glance

- **Low risk exposure:** Climate change has little impact on TKB's risks; the climate-related risks are therefore low.
- **Focus on credit risk:** The importance of the financing business makes climate-related credit risk a priority for TKB.
- **Climate change opens up opportunities:** The shift towards a lower-emission economy and society entails a high need for investment, which is opening up opportunities for TKB in mortgage and lending business.
- **Resilience intact:** The bank considers the potential impact of climate change on its business activities to be manageable.

Sustainability management

The processes for setting and managing climate targets

Near-term and long-term climate targets

TKB influences the climate – through its operations on the one hand and its financing and investment activities on the other. It endeavors to reduce its operational greenhouse gas emissions and steer the flow of capital toward climate-friendly activities. Climate targets point the bank in the right direction.

The bank's overarching goal is to reduce its greenhouse gas emissions to net zero by 2050 across all three scopes, including financed emissions. TKB has established a process to achieve this goal. The climate targets are set and managed in six steps.

Process for setting and managing TKB's climate targets

Calculate emissions	**Set climate targets**	**Embed transition plan in the strategy**	**Define and implement actions**	**Manage climate targets**	**Report progress**
Calculate the greenhouse gas emissions in all scopes (Scopes 1 to 3), identify climate-related risks and opportunities, and define metrics	Define science-based climate targets for the material portfolios in all scopes (Scopes 1 to 3)	Embed the transition plan into the bank's strategies and relevant decision-making and business processes	Develop and implement actions in all scopes (Scopes 1 to 3)	Address climate-related risks throughout the risk management process. Regularly measure progress towards climate targets	Regular climate-risk reporting
GHG Protocol, PCAF, NGFS, PACTA, TCFD	SBTi	Sustainability strategy, institution-wide Risk Management Framework	Science-based targets (in accordance with SBTi)	Sustainability and risk management	GRI, TCFD

Calculate emissions, identify opportunities and risks

TKB calculates its greenhouse gas emissions in all three scopes distinguished by the Greenhouse Gas Protocol (Scopes 1 to 3), including financed emissions in the loan portfolio and the bank's own financial investments, and defines suitable indicators for monitoring its greenhouse gas emission reduction targets. The bank uses an environmental management system to document its energy consumption and operational greenhouse gas emissions, which it reports in accordance with the Greenhouse Gas Protocol. The bank uses the Partnership for Carbon Accounting Financials (PCAF) methodology to calculate the greenhouse gas emissions generated through its financing business and its own financial investments. In addition, TKB regularly participates in the Paris Agreement Capital Transition Assessment (PACTA) carried out by the Swiss Federal Office for the Environment. This helps the bank ascertain whether its financing and investments are in line with the Paris Agreement. At the same time, it provides TKB with information to derive actions for its loan portfolio and for the bank's own financial investments. Finally, TKB

identifies and assesses the opportunities and risks associated with climate change. When simulating the climate scenarios, the bank is guided by the climate stress test of the European Central Bank and the recommendations of the Network for Greening the Financial System (NGFS).

Setting climate targets

The bank's overarching goal is to reduce its greenhouse gas emissions to net zero by 2050 across all three scopes, including financed emissions. To reach this goal, it joined the Science Based Targets initiative (SBTi) and has defined science-based climate targets for its material portfolios. The near-term climate targets with a time horizon up to 2030 comply with the SBTi standard and were reviewed and validated by the SBTi in the reporting year. The climate targets that impact the bank's financing and investment activities cover around 74% of its total assets. The targets can be found in the table on page 41.

Good to know

What does net zero mean?

Net zero refers to a balanced greenhouse gas footprint in which the sum of all man-made and natural greenhouse gases released into the atmosphere is equal to the sum of the greenhouse gases removed from the atmosphere. The concentration of CO_2 has increased enormously since industrialization and has triggered global warming. In order to combat climate change, the 2015 United Nations Climate Change Conference in Paris decided to limit global warming to well below 2°C compared to pre-industrial levels. Since then, most countries have been reducing their carbon emissions with the aim of achieving net zero. From 2050, Switzerland aims to emit no more greenhouse gases into the atmosphere than can be removed using natural and technological sinks.

Embed the transition plan in the strategy

TKB's commitment to sustainability is embedded in its strategy. That means its approach to climate-related risks and opportunities – the avoidance and reduction of greenhouse gas emissions in particular – is incorporated into the bank's relevant decision-making and business processes (see "Governance" starting on page 8 for more details). In addition to its sustainability strategy, TKB also has a sustainability policy. This policy helps the bank achieve its net-zero target by formulating exclusions for socially controversial topics, one of which is climate change. The exclusions apply to all of the bank's business activities – namely its financing business, its investment and pension provision business, its own financial investments and its banking operations.[1] Loans to and investments in companies that quarry, mine or extract particularly emissions-intensive energy sources such as coal, petroleum or natural gas, or that own or operate fossil-fuel power plants or nuclear power plants are excluded.

[1] The exclusions will be applied in the financing business from 1 July 2025. Prior to this, the provisions need to be integrated into the bank's processes and systems. The exclusions do not apply retroactively to existing transactions in any area.

Good to know

What is TKB's climate commitment based on?

For more than ten years, TKB has had a sustainability strategy in place that enshrines the goal of limiting climate change. This strategy is based on the bank's values and is aligned with Swiss and international standards. It focuses on 14 material topics – with climate change and greenhouse gas emissions being one of them. Targets have been defined for all topics. And all topics have been assigned to one of four strategic thrusts: the bank's commitment to its customers, to its employees, to society and the region, and to the environment. For detailed information, see tkb.ch/nachhaltigkeit.

Define and implement actions

The bank uses a two-pronged approach in its efforts to achieve its climate targets: first, to avoid and reduce greenhouse gas emissions in its operations and, second, to avoid and reduce greenhouse gas emissions in its loan portfolio and in its own financial investments. To this end, it takes actions in four areas. First, it optimizes its operating procedures, selects climate-friendly alternatives when purchasing products and services, and motivates its employees to embrace climate-friendly behavior. Second, it offers its customers products and services that create long-term benefits. Third, it engages in dialog with Swiss companies in order to positively impact their sustainability performance – "engagement" being the keyword in this context. Fourth, it supports a high-quality climate protection project to avoid greenhouse gas emissions elsewhere and, from 2026 onward, will be investing in negative emission technologies to remove CO_2 from the atmosphere. The bank's commitment to the climate is based on Swiss and international initiatives and standards (for a summary, see page 25).

Manage climate targets

The bank regularly measures progress towards achieving its climate targets. Sustainability risks, including climate-related risks, are incorporated into the bank's internal control system and monitored on an ongoing basis. The Board of Directors and the Executive Board are informed of any relevant developments. Further information on this can be found in the "Governance" section, which starts on page 8, and the "Risk management" section, which starts on page 28.

Report progress

In addition to measuring greenhouse gas emissions and defining related actions, the bank attaches great importance to the disclosure of climate information. Its sustainability reporting is aligned with the Global Reporting Initiative (GRI) standard. When identifying climate-related risks and opportunities, it follows the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).

Climate-related initiatives and standards important to TKB

Initiative or standard	Significance to TKB
Climate strategy of the Canton of Thurgau	The climate strategy of the Canton of Thurgau defines action areas and climate-protection targets. It shows ways in which greenhouse gas emissions are to be reduced in various areas. Since 2021, TKB has been helping to formulate the climate strategy and action plan – particularly with respect to climate-friendly flows of capital.
Principles for Responsible Investment (PRI)	Six principles promote responsible investments. This sector-based initiative is supported by the United Nations. In 2021, TKB pledged to uphold the principles.
Science Based Targets initiative (SBTi)	This initiative helps businesses set science-based targets for reducing their greenhouse gas emissions to net zero. TKB aligned itself with the initiative's net-zero standard in 2023. In 2024, the SBTi reviewed and validated TKB's near-term climate targets.
Partnership for Carbon Accounting Financials (PCAF)	This initiative for measuring and disclosing GHG emissions caused in connection with loans granted and investments made is led by the financial industry. Since 2022, it has provided TKB with a framework for describing its flows of capital.
Paris Agreement Capital Transition Assessment (PACTA)	Financial service providers use PACTA-based climate tests to assess whether their investments and financing align with the Paris Agreement. TKB has participated every two years since 2022, most recently in the reporting year.
Greenhouse Gas Protocol (GHG Protocol)	This internationally recognized standard enables organizations to comprehensively inventory their greenhouse gas emissions, which are broken down into three different scopes. Since 2015, TKB has been using this standard to calculate its greenhouse gas emissions.
Task Force on Climate-related Financial Disclosures (TCFD)	This initiative for reporting on climate risks and opportunities is led by the financial industry. TKB has been aligning with the Task Force's recommendations since 2021.
Energy Agency of the Swiss Private Sector (EnAW)	Founded by Swiss business organizations, this association helps participating companies establish energy consumption reduction targets as well as reach agreements with the Swiss federal government, implement suitable actions and report on their energy consumption. TKB joined the program in 2019.
Responsible Shareholder Group	This group is managed by Inrate, a Swiss provider of sustainability ratings. It offers participating investors the opportunity to jointly influence the sustainability performance of Swiss companies, through constructive dialog or by exercising voting rights, for example. TKB has been a member since 2024.

Key points at a glance

- **Net zero by 2050**: TKB's strategic goal is to reduce direct and indirect greenhouse gas emissions to net zero by 2050.
- **Multi-stage process**: The bank sets its climate targets in six steps and manages the achievement of these targets.
- **Embedded in the strategy**: The objectives and actions are linked to existing strategies and policies.
- **Broad-based support**: The bank's climate commitment is based on relevant initiatives and standards.

Risk management

The processes used for dealing with climate-related risks

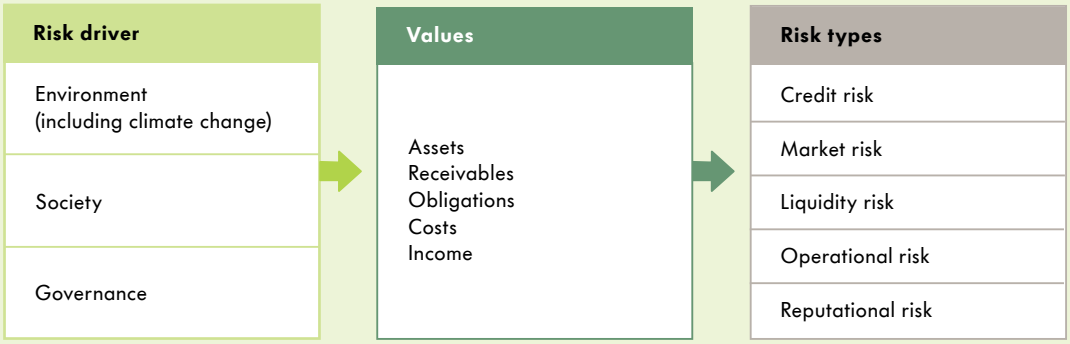
Systematic approach to risks

TKB engages in professional risk management, part of which is the bank's approach to sustainability risks, including climate-related risks. These are identified, assessed and managed in accordance with the bank's overall risk management process.

Integration of climate-related risks

TKB has professional structures, responsibilities and instruments that it uses for the purpose of risk management. These are described in detail in the "Explanations on risk management" section of the Annual Report. The institution-wide Risk Management Framework is an important instrument. It defines the bank's risk policy, tolerance and limits as well as the related risk governance. Furthermore, it governs the identification, measurement, evaluation, management, monitoring and disclosure of risks. These rules also apply with respect to sustainability risks, which the bank views as including climate-related risks. TKB views climate-related developments and events as risk drivers that can impact existing types of risk.

Effect of risk drivers on risk types



As part of its risk management, the bank distinguishes between and addresses different types of risks. Climate change, and the events and developments that accompany climate change, act as risk drivers for the various types of risk. Risk drivers are found in the three ESG dimensions (environment, social and governance). They influence the bank's values.

Managing climate-related risks

Climate-related risks are managed in line with the bank's general risk management process. The requirements and instruments used for this are reviewed regularly and adjusted as needed or further developed on an ongoing basis.

Risk management process

Identification

TKB identifies climate risks by means of a risk analysis. It takes not only the near-term, acute impacts of climate change into consideration, but also the long-term, persistent impacts. The purpose of the analysis is to establish an understanding of the risks by identifying the relationships between cause and effect.

Measurement and assessment

Climate risks and their impacts on TKB are quantified as completely as possible. The bank employs various methods for this including scenario analyses, sensitivity analyses and stress tests. If a risk cannot be quantified, the bank will instead describe its potential impacts. It applies the TCFD recommendations when identifying and assessing the climate risks. These are combined with the Greenhouse Gas Protocol for operational greenhouse gas emissions and the PCAF methodology for financed greenhouse gas emissions.

Management

To manage its climate-related risks, the bank measures both its directly generated greenhouse gas emissions (Scope 1) and its indirect greenhouse gases associated with the purchase of energy (Scope 2). The volume of financed greenhouse gas emissions in the loan portfolio (Scope 3) is an important metric for the bank. The bank has set corresponding emission reduction targets. For this, it followed the science-based approach of the Science Based Targets initiative (SBTi). Climate-related metrics are presented in the "Metrics and targets" section. Because the interdependencies of climate risks are hard to identify, TKB has not yet set any thresholds for several metrics. Instead, it is first working toward gaining a better understanding of the risks in question.

Monitoring and reporting

Sustainability risks, including climate-related risks, are incorporated into the internal control system and monitored on an ongoing basis. TKB regularly reviews the requirements and tools used and adapts or enhances them if necessary. The Board of Directors and the Executive Board are provided with regular updates on climate risks and their development. The bank provides information to the public once per year through this report. The "GRI Sustainability Report" also contains relevant metrics.

Key points at a glance

- **Climate change as a risk driver**: Climate-related developments and events have an impact on the risks that already exist in the banking business.
- **Targeted risk management**: Climate-related risks are handled in line with TKB's risk management process.
- **Multi-stage process**: Risk management encompasses the identification, measurement, evaluation, management, monitoring and disclosure of risks.
- **Ongoing development**: The policies and tools used in risk management are regularly reviewed and adjusted if necessary.

Metrics and targets

Metrics for dealing with climate-related risks and opportunities

Ongoing measurement of results

TKB has pledged to achieve net-zero greenhouse gas emissions by 2050 in line with the Science Based Targets initiative. This obligation includes both operational and financed emissions.

The bank inventories its emissions in accordance with the Greenhouse Gas Protocol and with the help of its environmental management system, which it improves on an ongoing basis. It has devised science-based emission targets for its operational and financed greenhouse gas emissions. In this context, it has also defined metrics for monitoring and managing its emission-reduction targets as well as corresponding actions.

Good to know

What are greenhouse gases?

Greenhouse gases are gases that absorb some solar radiation from the sun and retain its heat in the Earth's atmosphere. The greenhouse gas effect is a natural phenomenon, but it is amplified by increased levels of greenhouse gases in the atmosphere – causing global warming to develop. While carbon dioxide (CO_2) is the dominant greenhouse gas in quantitative terms, other gases such as methane (CH_2) and nitrous oxide (N_2O) are also having an impact on the climate. The various greenhouse gases do not all contribute equally to the greenhouse effect, however, and break down at different rates. The global warming potential of methane, for example, is 28 times higher than that of CO_2, but it lingers in the atmosphere for a shorter period of time.

Operational greenhouse gas emissions

Operational greenhouse gas emissions are generated as a result of the bank's own business activities. These can be assigned to one of three different scopes – Scope 1 to Scope 3 – in accordance with the Greenhouse Gas Protocol. In Scope 3, they comprise categories 1 to 14. TKB began calculating its operational greenhouse gas emissions in 2014 and has been continuously improving its database and metrics since then. The carbon footprint resulting from the bank's operational emissions is formally audited by Swiss Climate. The bank reduced its operational greenhouse gas emissions by 5.5 percent – from 11,443 metric tons to 10,838 metric tons – during the reporting year.

Good to know

How are greenhouse gases measured?

CO_2 equivalents (CO_2e) is a unit of measurement that was established as a way of making the climate impact of greenhouse gases such as carbon dioxide, methane and nitrous oxide comparable. Sustainability and climate reports generally report emissions in metric tons of CO_2e. Since measuring a company's emissions is difficult and very time-consuming using measurement technology, these are calculated instead. Standards, for example the Greenhouse Gas Protocol, have been developed for this purpose. The formula is: Activity rate × emission factor. The activity rate is defined as the extent of a specific emission process, such as how much oil is burned in a heating system each year. The emission factor indicates the rate at which greenhouse gases are generated during this process.

Scope 1

The greenhouse gas emissions ascribed to this scope are attributable to the use of fossil fuels and renewable energies for the purpose of heating the bank's buildings, running air-conditioning systems and using company vehicles, for example. Here, the bank makes a distinction between the 17 buildings it owns and the 14 premises it leases. While it exerts a direct influence on the former, its influence on the latter is purely indirect in nature, namely through dialog with the owners. When building and remodeling its own buildings, the bank applies sustainability criteria that form part of its real estate strategy. Whenever heating systems are replaced, TKB refrains from using fossil fuels where possible and relies on self-produced electricity. The real estate strategy also includes a detailed modernization plan for the properties owned by the bank. This strategy is based on a comprehensive analysis of the buildings' structural soundness, technical systems, energy supply and safety precautions.

Scope 2

The greenhouse gas emissions ascribed to this scope arise in connection with purchased energy that is generated outside of TKB but used by the bank. Accordingly, the bank causes the emissions indirectly. This applies to the use of power, steam, district heating and district cooling. Since 2012, TKB has exclusively purchased Swiss natural electricity, which was previously considered to be completely renewable, for its self-owned and leased buildings. Due to a recent change in the framework conditions, only 50 percent of electricity generated by waste incineration plants is now considered renewable. As a result, the percentage of renewable electricity at TKB is roughly 75 percent. The bank is currently taking actions to enable it to purchase all of its electricity from renewable sources again.

Scope 3

The greenhouse gas emissions ascribed to this scope are indirect emissions caused along the bank's value chain. They arise as a result of TKB's activities but stem from sources that are neither owned nor controlled by TKB. Purchased products and services, capital goods such as construction projects and IT systems, business travel, and employee commuting are particularly important at TKB. Given the rural nature of the Canton of Thurgau, employees mainly use their own private vehicles to go to work. TKB conducts regular mobility surveys to improve its database and to derive actions to motivate its employees to embrace sustainable mobility. The bank's progressive working-from-home rules and efforts to raise awareness among employees are contributing to this.

Direct and indirect operational greenhouse gas emissions (Scope 1 to Scope 3)

Detailed explanations on how operational emissions are calculated can be found in the annex.

GHG emissions in t CO_2e	**Change 2023/24** in %	**2024** (as at 30 June)	**2023** (as at 31 Oct.)	**2022** (as at 31 Oct.)	**2021** (as at 31 Dec.)	**2020** (as at 31 Dec.)
Direct GHG emissions from the combustion of fuels (Scope 1)	–25.7	210	283	259	383	401
Indirect GHG emissions from district heating and electricity generation (Scope 2)	+5.9	788	745	763	684	703
Indirect GHG emissions from upstream and downstream activities in the value chain (Scope 3, categories 1 to 14)	–5.5	9,840	10,416	10,543	1,906	2,386
Total operational GHG emissions (Scope 1, Scope 2 and Scope 3, categories 1 to 14)	**–5.5**	**10,838**	**11,443**	**11,565**	**2,973**	**3,490**
Operational GHG emissions per employee (Scope 1, Scope 2 and Scope 3, categories 1 to 14)	–6.8	14.1	15.2	15.8	4.2	4.9

– *The table shows TKB's operational greenhouse gas emissions in metric tons of CO_2 equivalents (t CO_2e) for the years 2020 to 2024. It also shows the intensity of greenhouse gas emissions measured in terms of emissions per employee (full-time equivalents as at the reference date).*
– *While the reference dates vary, the observation period is always 12 months. The bank shifted the reference date to 30 June in the reporting year in order to harmonize the approach for both operational and financed emissions.*
– *The table shows actual greenhouse gas emissions. No carbon avoidance or removal certificates were taken into account.*
– *The 25.7% decline in direct emissions (Scope 1) from 2023 to 2024 was attributable in particular to the leakage in 2023 of climate-harming refrigerants amounting to 65 metric tons of CO_2 equivalents.*
– *Since the reporting year, the bank has reported all operational greenhouse gas emissions resulting from upstream and downstream activities in the value chain (Scope 3 categories 1 to 14) – and has done so retrospectively for 2022 and 2023. Disclosure had previously been limited to a portion of the activities (Scope 3 categories 1, 3, 6, 7 and 8). This explains the increase between 2021 and 2022. In addition, the bank adjusted the factors used to calculate its GHG emissions in Scope 3 categories 6 and 7 for the entire time series.*
– *The table contains rounded numbers; rounding differences are possible as a result.*

Financed greenhouse gas emissions

Financed greenhouse gas emissions comprise the third-party emissions financed by the bank through its loans and investments, as described in category 15 of Scope 3 of the Greenhouse Gas Protocol. When calculating and disclosing its financed greenhouse gas emissions, TKB follows the global Partnership for Carbon Accounting Financials (PCAF) standard. It disclosed its material financing and investment activities for the first time for the 2023 financial year. At that time, the bank calculated the emissions generated in its two largest asset classes – residential and commercial real estate. Since the reporting year, it has also disclosed the emissions generated by business loans and corporate bonds held by TKB. The calculated emission values cover receivables that amount to over 99 percent of the overall portfolio that is deemed relevant in accordance with the PCAF. For future financial years, the bank will endeavor to make ongoing improvements to its database.

Good to know

What are financed emissions and how are they calculated?

Banks indirectly cause greenhouse gas emissions through their financing and investment activities. These are referred to as financed emissions. For example, TKB finances residential and commercial real estate, the construction and operation of which cause emissions. The Partnership for Carbon Accounting Financials (PCAF) – an initiative of the international financial industry – helps participating institutions calculate their financed emissions. The PCAF standard distinguishes between seven different asset classes – including mortgages and business loans – and specifies a detailed methodology to calculate them.

Financed greenhouse gas emissions in accordance with PCAF (Scope 3, Category 15)

Detailed explanations on how financed emissions are calculated can be found in the annex.

Asset class	**Outstanding amount** (in CHF millions)	**GHG emissions in Scope 1 and Scope 2** (in t CO_2e)	**GHG emissions in Scope 3** (in t CO_2e)	**Emission intensity** (in t CO_2e / CHF millions)	**Coverage ratio** (in %)	**Data quality score** (1 high, 5 low according to PCAF)
2024						
Corporate bonds (held by TKB)	**186**	**10,392**	**137,508**	**796.9**	**98**	**2**
Agriculture, forestry and fishing	**–**	**–**	**–**	**n.a.**	**n.a.**	**n.a.**
Mining and quarrying	**39**	**7,008**	**73,176**	**2,055.1**	**100**	**2**
Mining of coal and lignite	–	–	–	n.a.	n.a.	n.a.
Extraction of crude petroleum and natural gas	39	7,008	73,176	2,055.1	100	2
Mining of metal ores	–	–	–	n.a.	n.a.	n.a.
Other mining and quarrying	–	–	–	n.a.	n.a.	n.a.
Mining support service activities	–	–	–	n.a.	n.a.	n.a.
Manufacturing	**55**	**277**	**6,190**	**116.9**	**100**	**2**
Manufacture of food products	22	231	5,592	263.2	100	2
Manufacture of tobacco products	–	–	–	n.a.	n.a.	n.a.
Manufacture of coke and refined petroleum products	–	–	–	n.a.	n.a.	n.a.
Manufacture of basic pharmaceutical products and pharmaceutical preparations	33	46	598	19.4	100	2
Manufacture of motor vehicles, trailers and semi-trailers	–	–	–	n.a.	n.a.	n.a.
Manufacture of other transport equipment	–	–	–	n.a.	n.a.	n.a.
Electricity, gas, steam and air conditioning supply	**3**	**84**	**32**	**46.4**	**100**	**2**
Electricity, gas, steam and air conditioning supply	3	84	32	46.4	100	2
Water supply; sewerage, waste management and remediation activities	**–**	**–**	**–**	**n.a.**	**n.a.**	**n.a.**
Construction	**5**	**103**	**342**	**87.9**	**100**	**2**
Civil engineering	5	103	342	87.9	100	2
Wholesale and retail trade; repair of motor vehicles and motorcycles	**30**	**668**	**52,745**	**1,780.4**	**100**	**2**
Wholesale and retail trade and repair of motor vehicles and motorcycles	–	–	–	n.a.	n.a.	n.a.
Retail trade, except of motor vehicles and motorcycles	30	668	52,745	1,780.4	100	2

Continued on page 37; see page 39 for notes on the table.

Asset class	Outstanding amount (in CHF millions)	GHG emissions in Scope 1 and Scope 2 (in t CO_2e)	GHG emissions in Scope 3 (in t CO_2e)	Emission intensity (in t CO_2e / CHF millions)	Coverage ratio (in %)	Data quality score (1 high, 5 low according to PCAF)
Transportation and storage	44	2,246	5,001	164.8	100	2
Land transport and transport via pipelines	44	2,246	5,001	164.8	100	2
Water transport	–	–	–	n.a.	n.a.	n.a.
Air transport	–	–	–	n.a.	n.a.	n.a.
Warehousing and support activities for transportation	–	–	–	n.a.	n.a.	n.a.
Accommodation and food service activities	–	–	–	n.a.	n.a.	n.a.
Information and communication	–	–	–	n.a.	n.a.	n.a.
Financial and insurance activities	–	–	–	n.a.	n.a.	n.a.
Real estate activities	10	6	22	2.9	100	2
Professional, scientific and technical activities	–	–	–	n.a.	n.a.	n.a.
Administrative and support service activities	–	–	–	n.a.	n.a.	n.a.
Public administration and defence; compulsory social security	–	–	–	n.a.	n.a.	n.a.
Education	–	–	–	n.a.	n.a.	n.a.
Human health and social work activities	–	–	–	n.a.	n.a.	n.a.
Arts, entertainment and recreation	–	–	–	n.a.	n.a.	n.a.
Other service activities	–	–	–	n.a.	n.a.	n.a.
Business loans	**1,093**	**80,265**	**112,412**	**176.3**	**100**	**5**
Agriculture, forestry and fishing	2	2,118	795	1,553.5	100	5
Mining and quarrying	0	0	0	842.2	100	5
Mining of coal and lignite	–	–	–	n.a.	n.a.	n.a.
Extraction of crude petroleum and natural gas	–	–	–	n.a.	n.a.	n.a.
Ore mining	–	–	–	n.a.	n.a.	n.a.
Other mining and quarrying	0	0	0	842.2	100	5
Mining support service activities	–	–	–	n.a.	n.a.	n.a.

Continued on page 38; see page 39 for notes on the table.

Asset class	**Outstanding amount** (in CHF millions)	**GHG emissions in Scope 1 and Scope 2** (in t CO_2e)	**GHG emissions in Scope 3** (in t CO_2e)	**Emission intensity** (in t CO_2e / CHF millions)	**Coverage ratio** (in %)	**Data quality score** (1 high, 5 low according to PCAF)
Manufacturing	**244**	**16,139**	**61,999**	**320.0**	**100**	**5**
Manufacture of food products	38	2,972	21,563	652.5	100	5
Manufacture of tobacco products	–	–	–	n.a.	n.a.	n.a.
Manufacture of coke and refined petroleum products	–	–	–	n.a.	n.a.	n.a.
Manufacture of chemicals and chemical products	10	2,007	2,677	454.0	100	5
Manufacture of rubber and plastic products	10	1,992	2,657	454.0	100	5
Manufacture of other non-metallic mineral products	14	2,649	3,533	454.0	100	5
Manufacture of fabricated metal products, except machinery and equipment	13	1,646	4,331	455.3	100	5
Manufacture of computer, electronic and optical products	39	1,139	6,571	198.9	100	5
Manufacture of machinery and equipment n.e.c.	97	2,857	16,480	198.9	100	5
Manufacture of motor vehicles, trailers and semi-trailers	0	4	36	208.9	100	5
Manufacture of other transport equipment	0	1	9	209.7	100	5
Electricity, gas, steam and air conditioning supply	**15**	**8,380**	**2,714**	**720.4**	**100**	**5**
Electricity, gas, steam and air conditioning supply	15	8,380	2,714	720.4	100	5
Water supply; sewerage, waste management and remediation activities	**74**	**40,110**	**12,036**	**703.6**	**100**	**5**
Water collection, treatment and supply	3	1,836	550	708.3	100	5
Sewerage	70	38,255	11,452	708.2	100	5
Waste collection, treatment and disposal activities; materials recovery	1	19	35	96.4	100	5
Construction	**48**	**1,284**	**8,756**	**208.2**	**100**	**5**
Civil engineering	22	585	3,987	208.2	100	5
Specialised construction activities	19	508	3,465	208.2	100	5
Wholesale and retail trade; repair of motor vehicles and motorcycles	**79**	**3,130**	**9,652**	**162.4**	**100**	**5**
Wholesale and retail trade and repair of motor vehicles and motorcycles	16	623	1,922	162.4	100	5
Wholesale trade, except of motor vehicles and motorcycles	51	2,024	6,242	162.4	100	5
Retail trade, except of motor vehicles and motorcycles	12	482	1,488	162.4	100	5

Continued on page 39; see page 39 for notes on the table.

Asset class	**Outstanding amount** (in CHF millions)	**GHG emissions in Scope 1 and Scope 2** (in t CO_2e)	**GHG emissions in Scope 3** (in t CO_2e)	**Emission intensity** (in t CO_2e / CHF millions)	**Coverage ratio** (in %)	**Data quality score** (1 high, 5 low according to PCAF)
Transportation and storage	3	163	237	140.8	100	5
Land transport and transport via pipelines	2	113	165	140.8	100	5
Water transport	1	41	60	140.8	100	5
Air transport	–	–	–	n.a.	n.a.	n.a.
Warehousing, storage and support activities for transportation	0	9	13	140.8	100	5
Accommodation and food service activities	18	732	2,259	162.4	100	5
Information and communication	14	141	385	36.9	100	5
Financial and insurance activities	232	271	1,046	5.7	100	5
Real estate activities	13	16	61	5.7	100	5
Professional, scientific and technical activities	78	103	369	6.1	100	5
Administrative and support service activities	21	35	111	6.8	100	5
Public administration and defence; compulsory social security	0	7	11	78.2	100	5
Education	171	5,196	8,146	78.2	100	5
Education	171	5,196	8,146	78.2	100	5
Human health and social work activities	64	1,946	3,051	78.2	100	5
Arts, entertainment and recreation	1	32	51	78.2	100	5
Other service activities	15	462	736	79.4	100	5
Mortgages (commercial real estate)	**11,645**	**64,289**	**n.a.**	**5.5**	**100**	**4**
Mortgages (residential real estate)	**12,643**	**55,348**	**n.a.**	**4.4**	**100**	**4**
2023						
Mortgages (commercial real estate)	**10,870**	**61,617**	**n.a.**	**5.7**	**100**	**4**
Mortgages (residential real estate)	**12,769**	**59,595**	**n.a.**	**4.7**	**100**	**4**

– The table shows how many greenhouse gas emissions are caused by the residential and commercial real estate financed by TKB, the business loans granted by it and the corporate bonds held by it.
– If the value is shown as zero (0), that means the actual values rounded to zero. No entry (–) means that there are no stocks. If the table contains "n.a.", this means that no values are available.
– The table shows actual greenhouse gas emissions. No carbon avoidance or carbon removal certificates were taken into account.
– The table contains rounded numbers; rounding differences are possible as a result.
– The reference date is 30 June of each year.

Metrics and targets

With their climate strategies, both Switzerland and the Canton of Thurgau are committed to reducing greenhouse gas emissions to net zero by the middle of the current century. TKB shares this intent: It aims to achieve net-zero emissions by 2050 at the latest – in all scopes (Scope 1 to Scope 3) and including financed emissions. Near-term climate targets with a time horizon of up to 2030 substantiate the long-term goal. The bank has devised targets based on science in accordance with the Science Based Targets initiative (SBTi). The climate targets cover 74% of the bank's total assets and were reviewed and validated by the SBTi in the reporting year. TKB monitors progress towards its target values and any deviations from them using selected metrics known as "key performance indicators (KPIs)" for assessing progress against its targets for reducing greenhouse gas emissions. They are based on the asset classes used in the "Partnership for Carbon Accounting Financials" (PCAF) methodology.

Political framework decisive

The bank's reduction targets seem ambitious yet attainable. One key prerequisite for reaching the net-zero target by 2050 is for the political circumstances to be such that greenhouse gas emissions in the economy as a whole can be reduced in line with the formulated aspiration. TKB contributes its findings at the cantonal level when actions are being planned to implement Thurgau's climate strategy.

Reduction targets for greenhouse gas emissions

Detailed explanations of the targets, methods and coverage ratio can be found in the annex.

Target	Target year and value	Base year and value	Coverage ratio	Method
Direct operational GHG emissions (Scope 1)				
2050: 100% reduction in absolute GHG emissions	2030: 42% reduction in absolute GHG emissions	2022: 259 t CO_2e	100%	Absolute contraction
Indirect operational GHG emissions (Scope 2)				
2030: 100% of purchased electricity from renewable sources	2025: 80% of purchased electricity from renewable sources	2022: 75% of purchased electricity from renewable sources	100%	Renewable energy target
Corporate bonds (held by TKB)				
2040: Temperature rating achieved by Scopes 1+2: < 1.69°C Scopes 1+2+3: < 2°C	2028: Scopes 1+2: 1.69°C Scopes 1+2+3: 2.22°C	2023: Scopes 1+2: 1.69°C Scope 1+2+3: 2.31°C	100%	Temperature rating
Business loans: long-term loans (> 1 year), of which large companies (>500 employees)				
2040: Temperature rating achieved by Scopes 1+2: < 1.75°C Scopes 1+2+3: < 2°C	2028: Scopes 1+2: 2.39°C Scopes 1+2+3: 2.78°C	2023: Scopes 1+2: 2.66°C Scopes 1+2+3: 3.10°C	100%	Temperature rating
Mortgages (commercial real estate)				
2030: 40.5% reduction in GHG emission intensity (kg CO_2e per m^2)	2030: 10.3 kg CO_2e/m^2	2023: 17.3 kg CO_2e/m^2	100%	Sectoral decarbonization
Mortgages (residential real estate)				
2030: 39% reduction in GHG emission intensity (kg CO_2e per m^2)	2030: 12.6 kg CO_2e/m^2	2023: 20.4 kg CO_2e/m^2	100%	Sectoral decarbonization

– *The table shows the bank's reduction targets for its greenhouse gas emissions, including the respective base value and year, the coverage ratio and the method applied.*
– *The table contains rounded numbers; rounding differences are possible as a result.*

Indicators for monitoring reduction targets

Asset class / indicator	Change 2023/24	2024	2023
Direct operational GHG emissions (Scope 1)			
Absolute emissions in t CO_2e	–73	210	283
Deviation from target pathway compared to base year in %	n.a.	–10.48	+13.33
Indirect operational GHG emissions (Scope 2)			
Share of electricity from renewable sources in %	0.0	75.0	75.0
Deviation from 2030 target value in %	n.a.	25.0	25.0
Corporate bonds (held by TKB)			
Temperature rating in Scopes 1 and 2 in °C	–0.29	1.40	1.69
Temperature rating in Scopes 1, 2 and 3 in °C	-0.07	2.24	2.31
Deviation from 2028 target value in Scopes 1 and 2 in °C	n.a.	–0.29	0.0
Deviation from 2028 target value in Scopes 1, 2 and 3 in °C	n.a.	+0.02	+0.09
Business loans: long-term loans (> 1 year), of which large companies (>500 employees)			
Temperature rating in Scopes 1 and 2 in °C	–0.45	2.21	2.66
Temperature rating in Scopes 1, 2 and 3 in °C	–0.12	2.98	3.10
Deviation from 2028 target value in Scopes 1 and 2 in °C	n.a.	–0.18	+0.27
Deviation from 2028 target value in Scopes 1, 2 and 3 in °C	n.a.	+0.20	+0.32
Mortgages (commercial real estate)			
GHG emission intensity in Scopes 1 and 2 in kg CO_2e/m^2	+0.1	17.4	17.3
Deviation from target pathway compared to base year in %	n.a.	+7.01	n.a.
Mortgages (residential real estate)			
GHG emission intensity in Scopes 1 and 2 in kg CO_2e/m^2	+0.1	20.5	20.4
Deviation from target pathway compared to base year in %	n.a.	+6.27	n.a.

– *The table shows progress made in reducing greenhouse gas emissions. Negative figures in the "Change" column mean that the target pathway or target value was exceeded . Positive numbers mean that the target pathway or target value was missed. If the table contains "n.a.", this means that no values are available.*
– *Direct operational greenhouse gas emissions fell sharply compared to the previous year, which was due in particular to the leakage of climate-harming refrigerants in 2023. Emissions declined despite this incident and exceeded the target pathway.*
– *No improvement was achieved with respect to indirect operational greenhouse gas emissions in the reporting period.*
– *The temperature rating for corporate bonds improved year over year in Scopes 1 and 2 as well as in Scopes 1, 2 and 3. This is largely due to the fact that an emission-intensive corporate bond matured and is no longer included in the portfolio. Marginal adjustments to companies' self-set climate targets were also a contributing factor.*
– *The temperature rating for business loans improved year over year in Scopes 1 and 2 as well as in Scopes 1, 2 and 3. This is largely due to the fact that more companies set climate targets in the reporting year. Loans are considered in relation to the reference date, meaning that the actual loan drawdown on the reference date has an impact on the level of the temperature rating. This is due to the weighting effect.*
– *The values for mortgages ("commercial real estate" and "residential real estate") are virtually unchanged compared to the previous year. This is because the PCAF parameters underlying the emission calculation were identical in both years. The marginal increase in emission intensity is due to slight changes in the property mix – such as more single-family homes, fewer apartment buildings, etc.*
– *The table contains rounded numbers; rounding differences are possible as a result.*
– *The reference dates for calculating the indicators are 30 June 2024 and 31 October 2023.*

Measures to achieve climate targets

TKB has defined operational targets and measures for reducing its greenhouse gas emissions. These can be found in the transition plan. With respect to operational greenhouse gas emissions, the bank's activities are focused on avoiding and reducing negative impacts. It is optimizing its operating procedures, implementing structural actions in its buildings, prioritizing climate-friendly variants such as renewable energy and motivating its employees to embrace climate-friendly behaviors. It is primarily pursuing an offer-based approach to decarbonizing its customer business. It is therefore actively sensitizing, advising and financially supporting its customers.

Transition plan

42% reduction in direct GHG emissions (Scope 1) by 2030

Key performance indicator (KPI)	Operational targets	Actions
Year-over-year reduction in absolute emissions (t CO_2 e) in accordance with target pathway (%)	Annual reduction in GHG emissions of 5.25%	• Reduction of emissions through structural changes to TKB's building portfolio
	Documentation and management of volatile emissions from air-conditioning systems	• Documentation of coolant refill quantities in the environmental management system • Swift action if noticeable problems arise

Reduction in indirect GHG emissions (Scope 2) by purchasing 100% renewable energy by 2030

Key performance indicator (KPI)	Operational targets	Actions
Share of renewable energy in %	80% of electricity from renewable sources by 2025 and 100% by 2030	• Purchase of Thurgauer Naturstrom Aqua Bio guaranties of origin • Switch of purchased electricity products to renewable energy

Reduction of GHG emissions in corporate bonds held by TKB

Key performance indicator (KPI)	Operational targets	Actions
Temperature rating in °C	Measure progress on a yearly basis and actively contact companies in the event of negative deviations	• Integrate ESG into the stock selection process • Introduce a guideline for dealing with controversial environmental, social and corporate governance topics as part of TKB's sustainability policy that excludes, among other things, the purchase of financial assets from emissions-intensive companies • Engage in active dialog with companies regarding their critical emission intensity by participating in Inrate's Responsible Shareholder Group (engagement)

Reduction in GHG emissions for business loans (for operations with up to 500 employees and with a term of more than one year)

Key performance indicator (KPI)	Operational targets	Actions
Assessment of materiality of impact/ suitability of actions	Raise awareness among business customers and establish the medium to long-term impact as well as planned actions	• Comprehensive training for all TKB employees on sustainability as well as advanced training on ESG and sustainable finance for advisors and sales-side organizational units in order to raise awareness among commercial and business customers • Proactively raise awareness of the topic of sustainable corporate governance (risks and opportunities for the business model) during advisory sessions • Joint offer in collaboration with the Competence Center for Renewable Energy Systems Thurgau (KEEST) and efforts to motivate commercial and business customers to install photovoltaic self-consumption systems • Proactively approach commercial and business customers with emissions-intensive business models regarding climate friendliness, transformation and their transition plans • Introduce a guideline for dealing with controversial environmental, social and corporate governance topics as part of TKB's sustainability policy that excludes, among other things, the financing of emissions-intensive companies

Reduction of GHG emissions in business loans (for operations with more than 500 employees and with a term of more than one year)

Key performance indicator (KPI)	Operational targets	Actions
Temperature rating in °C	Measure progress on a yearly basis and actively contact customers in the event of negative deviations	• Comprehensive training for all TKB employees on the topic of sustainability as well as advanced training on the topics of ESG and sustainable finance for advisors and sales-side organizational units in order to raise awareness among commercial and business customers • Proactively raise awareness of the topic of sustainable corporate governance (risks and opportunities for the business model) during advisory sessions • Joint offer in collaboration with the Competence Center for Renewable Energy Systems Thurgau (KEEST) and efforts to motivate commercial and business customers to install photovoltaic self-consumption systems • Introduce a guideline for dealing with controversial environmental, social and corporate governance topics as part of TKB's sustainability policy that excludes, among other things, the financing of emissions-intensive companies

Reduce GHG emissions by 40.5% per square meter by 2030 for mortgages (commercial real estate)

Key performance indicator (KPI)	Operational targets	Actions
Emission intensity in Scopes 1 and 2 in kg CO_2e/m^2	Raise awareness among owners about long-term value preservation and their buildings' energy efficiency	• Comprehensive training for all TKB employees on sustainability and advanced training for advisors and sales-side organizational units on ESG and sustainable finance and their application to customers and on raising awareness among customers • Systematically raise customers' awareness of long-term value preservation and energy efficiency as these pertain to buildings • Free offer for customers and non-TKB customers for energy advice provided by the Public Energy Advice Center (Energieberatungsstelle, EBS) of the Canton of Thurgau • Joint offer in collaboration with the Competence Center for Renewable Energy Systems Thurgau (KEEST) and efforts to motivate commercial and business customers to install photovoltaic self-consumption systems • Joint activities with other partners to raise awareness of the topic among the people of Thurgau; these could be offered in a variety of different channels (lecture series, compact seminars, events, trade fairs, etc.) • Energy mortgage with funding for individual components and comprehensive renovations, also for commercial and business customers

Reduce GHG emissions by 39% per square meter for mortgages by 2030 (residential real estate)

Key performance indicator (KPI)	Operational targets	Actions
Emission intensity in Scopes 1 and 2 in kg CO_2e/m^2	Raise awareness among homeowners about long-term value preservation and their buildings' energy efficiency	• Comprehensive training for all TKB employees on sustainability and advanced training for advisors and sales-side organizational units on the topics of ESG and sustainable finance and their application to customers and on raising awareness among customers • Systematically raise customers' awareness of long-term value preservation and energy efficiency as these pertain to buildings • Free offer for customers and non-TKB customers for energy advice provided by the Public Energy Advice Center (Energieberatungsstelle, EBS) of the Canton of Thurgau • Cover remainder of the costs incurred by customers in connection with the preparation of cantonal energy certificates for buildings (known as CECBs) • Joint activities with other partners to raise awareness of the topic among the people of Thurgau; these could be offered in a variety of different channels (lecture series, compact seminars, events, trade fairs, etc.) • Energy mortgage with funding for individual components and comprehensive renovations

Key points at a glance

– **Targeted carbon reduction:** TKB measures its direct and indirect greenhouse gas emissions and aims to reduce them to net zero by 2050.

– **Operational and financed emissions:** A bank generates emissions both in its operations and in its financing business, for example through mortgages or business loans.

– **GHG in operations:** Operational emissions are recorded using the Greenhouse Gas Protocol (GHG Protocol) standard and comprise three scopes.

– **PCAF for financing:** TKB uses the global standard of the Partnership for Carbon Accounting Financials (PCAF) to calculate its financed emissions.

Annex

Explanations regarding the methodology
Glossary with list of abbreviations

Explanations regarding the methodology

TKB uses various standards to calculate and disclose its greenhouse gas emissions. The following information will help you understand and contextualize the reported data – especially the data contained in the "Metrics and targets" section.

Task Force on Climate-related Financial Disclosures

TKB follows the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) in disclosing its climate-related risks and opportunities. The recommendations relate to four thematic areas that correspond to the core elements of the bank's operations.

Thematic areas according to the TCFD recommendations

Thematic areas

Governance
This thematic area focuses on the bank's corporate governance in relation to climate-related risks and opportunities.

Strategy
This concerns the actual and potential impact of climate-related risks and opportunities on the bank's business, strategy and financial planning.

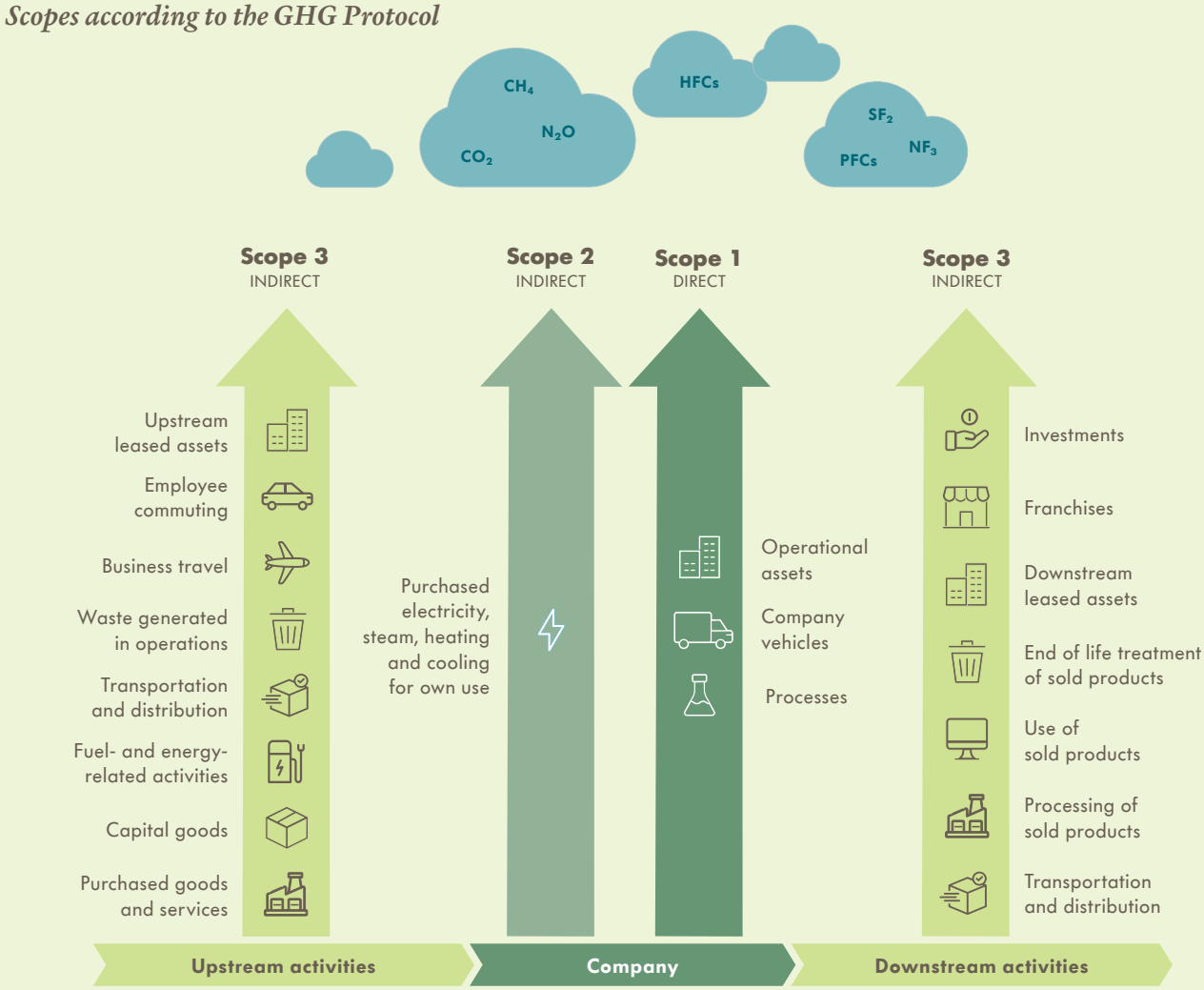
Risk management
This thematic area looks at the bank's processes for identifying, assessing and managing climate-related risks.

Metrics and targets
Which metrics and targets does the bank use to assess and manage its climate-related opportunities and risks? That's what this is all about.

Greenhouse Gas Protocol

TKB uses the Greenhouse Gas Protocol (GHG Protocol) to inventory its greenhouse gas emissions. This standard distinguishes between three scopes, thereby enabling the bank to comprehensively describe the emissions it causes.

Scopes according to the GHG Protocol



Scopes

Scope 1

Scope 1 greenhouse gas emissions are attributable to the use of fossil fuels and renewable energy in the bank's operations. They occur, for example, when heating buildings, operating air conditioning systems or using company vehicles. Scope 1 greenhouse gas emissions are operational emissions caused directly by the bank.

Scope 2

Scope 2 greenhouse gas emissions result from the consumption of energy generated outside the bank. This applies to purchased electricity and steam as well as purchased district heating and cooling. Scope 2 greenhouse gas emissions are operational emissions caused indirectly by the bank.

Scope 3

Scope 3 greenhouse gas emissions occur along the value chain. They arise as a result of the bank's business activities but stem from sources that are neither owned nor controlled by it. That makes them indirect emissions. They arise through employee commuting, the procurement of paper and water, and the granting of loans. Scope 3 covers both operational and financed emissions. Operational emissions are described in categories 1 to 14; financed emissions are described in category 15.

Partnership for Carbon Accounting Financials

TKB uses the methodology of the Partnership for Carbon Accounting Financials (PCAF) to calculate its financed greenhouse gas emissions. They are disclosed in the table entitled "Financed greenhouse gas emissions according to PCAF", which starts on page 36 of this report.

Asset classes (table entitled "Financed greenhouse gas emissions", page 36)

Corporate bonds

The "Corporate bonds" asset class corresponds to the "corporate bonds" portion of the PCAF asset class "Listed equity and corporate bonds". This refers to corporate bonds held by TKB. The "listed equity" component is not included as it is insignificant at TKB. This asset class does not include bonds issued by the Pfandbriefbank or the Pfandbriefzentrale.

Business loans

The "Business loans" asset class corresponds to the "business loans" portion of the PCAF asset class "Business loans and unlisted equity". Sectors that are relevant from a banking perspective are listed in accordance with the General Classification of Economic Activities of the Swiss Federal Statistical Office (NOGA classification). The emissions were calculated using the EXIOBASE asset intensities provided in the PCAF database (as at 30 June 2024). As recommended by EXIOBASE, intensities were used at sector level for the Europe region. The "unlisted equity" component is not included as it is insignificant at TKB. Also not included in the disclosed data are loans to local authorities (designation according to PCAF: Governments and state administrative authorities).

Mortgages (commercial real estate)

The "Mortgages (commercial real estate)" asset class corresponds to the definition of the PCAF asset class "Commercial real estate". It comprises all non-owner-occupied real estate as well as office and commercial properties. Emissions were calculated using PCAF emission factors for Switzerland (as at: 30 June 2024).
A clear distinction between mortgages and commercial real estate is not always possible in mortgage-backed loans, particularly in the case of mixed-use properties. The bank tightened its allocation criteria in the reporting year (2024), resulting in slightly more borderline cases being allocated to commercial real estate.

Mortgages (residential real estate)

The "Mortgages (residential real estate)" asset class corresponds to the definition of the PCAF asset class "Mortgages". It is exclusively comprised of owner-occupied residential real estate. Emissions were calculated using PCAF emission factors for Switzerland (as at: 30 June 2024). A clear distinction between mortgages or commercial real estate is not always possible in mortgage-backed loans, particularly in the case of mixed-use properties. The bank tightened its allocation criteria in the reporting year (2024), resulting in slightly more borderline cases being allocated to commercial real estate.

Sovereign debt

Since the bank's "Sovereign debt" asset class is very insignificant compared with the other classes, the corresponding emission values will not be calculated or published for the time being.

Energy reference area (table entitled "Financed greenhouse gas emissions", page 36)

Wherever possible, the energy reference area (ERA), which is needed to calculate receivables backed by residential real estate, was determined by an external provider of data services specialized in real estate. This was based largely on values obtained from the Swiss Federal Register of Buildings and Dwellings. The current data situation (based on the stock and quality of TKB's data) required additional corrective action in some cases:

- It was not always possible to clearly identify the residential units; appropriate assumptions were made in these cases.
- The energy reference area has been estimated for some of the mortgages in TKB's portfolio. To do this, a robust estimate of the average ERA per unit of collateral value was determined based on the data available for each property category.
- Implausible values, such as single-family homes with an energy reference area of several thousand square meters or very few square meters with a significant disparity to the collateral value were removed by replacing one percent of the largest and one percent of the smallest values with estimated values – similar to the approach used when estimating missing information.
- Due to the fact that agricultural buildings have unheated functional spaces or attached barns and stalls, they frequently have unusable ERA values. Implausible values were therefore replaced with a fixed value corresponding to the median ERA for single-family homes in TKB's portfolio.

Real estate values (table "Financed greenhouse gas emissions", page 36)

The currently available appraisals are used for the properties in accordance with supervisory requirements. These values may deviate from the values used at the time of financing. That means that the value used might not always be the original value of the property at the time of financing, as envisaged by the PCAF, but the value from the most recent appraisal.

Coverage ratio (table entitled "Financed greenhouse gas emissions", page 36)

The coverage ratio reflects the volume of receivables covered by the calculated emission values that are relevant in accordance with the PCAF standard. In the "Corporate bonds" asset class, the figure is 98%. This is due to the fact that Scope 3 greenhouse gas emissions could not be calculated for one company, and the bank therefore decided not to take it into account.

Data quality score (table entitled "Financed greenhouse gas emissions", page 36)

The data quality score is an indicator of the quality of the data reported, with 1 indicating high quality and 5 indicating low quality. Based on the available data, the method used, and the assumptions made, the calculated and reported values for mortgages and business loans should be understood as rough approximations of the actual greenhouse gas emissions. This is expressed in the published PCAF data quality score of 4 (mortgages) and 5 (business loans). The score for mortgages is based on the carbon emission intensities per square meter, broken down by building type. The emission values reported for the "Corporate bonds" asset class are based on the emissions published by the companies themselves – although these are not externally audited – which is expressed in the published PCAF data quality score of 2.

Science Based Targets initiative

TKB uses the approach developed by the "Science Based Targets initiative" (SBTi) to set near-term targets for reducing its greenhouse gas emissions. The targets are set out in the table entitled "Reduction targets for greenhouse gas emissions" on page 41 of this report.

Greenhouse gas emissions from business loans

The bank has formulated science-based climate targets for greenhouse gas emissions caused by loans with a term of more than one year granted to companies with more than 500 employees. Since no emission data will be available for the other business loans in the foreseeable future, the annual emission calculations are based on sector averages. The development of emission values depends largely on how frequently the averages are updated – which is not currently being done on an annual basis. TKB has therefore formulated temporary and mainly qualitative targets for the other business loans that are based on data that is systematically collected during meetings with customers. The bank is monitoring their development – particularly with respect to fundamental data – and implementing appropriate actions on an ongoing basis.

Coverage ratio (table entitled "Reduction targets for greenhouse gas emissions", page 41)

The coverage ratio reflects the percentage of inventoried greenhouse gas emissions to which the climate targets are applied. TKB has decided not to make any exclusions and to apply the targets in full, i.e. to cover all greenhouse gas emissions in the relevant area.

Methods (table entitled "Reduction targets for greenhouse gas emissions", page 41)

Absolute contraction

TKB is using the "absolute contraction" method to define targets for direct operational greenhouse gas emissions (Scope 1). The ambition level meets the SBTi requirement for a linear reduction in emissions of 4.2% per year from its base year of 2020. This value is based on the assumption that global warming can be successfully limited to 1.5°C if all players worldwide reduce their absolute emissions accordingly. Based on the SBTi base year of 2020, TKB is seeking to achieve a reduction of 42% by 2030 and 100% by 2050, which corresponds to a reduction to net zero.

Renewable energy target

TKB is addressing indirect operational greenhouse gas emissions (Scope 2) using the "Renewable energy target" method. The aim here is to switch to electricity from renewable sources. According to the thresholds set by the SBTi, the share of renewable energy is to be 80% by 2025 and 100% by 2030.

Temperature rating

TKB used the temperature rating methodology to derive its reduction target for both corporate bonds held by the bank and business loans to large companies with more than 500 employees in line with the SBTi requirements. This methodology is based on a model of a company's or an entire industry's future emissions and compares them with a global target pathway for greenhouse gas emissions that is compatible with the climate targets under the Paris Agreement. It examines whether the emission reductions planned by the company or industry are sufficient for achieving a specific temperature target (such as 1.5°C or 2°C). This methodology assigns the company or industry to a specific temperature range in a last step.

Sectoral decarbonization

TKB derived the reduction target for mortgages (residential and commercial real estate) using the Sectoral Decarbonization Approach. This approach is based on the idea that climate change needs to be addressed using a cross-sectoral approach and that different economic sectors need to follow different target pathways in order to contribute to limiting global warming. In keeping with this approach, TKB derived its target values for mortgages from the target pathway for the real estate sector. Starting from the base year, emission intensity in kg CO_2e/m^2 is calculated to reach the required target value by 2030.

Validation

The SBTi reviewed and validated TKB's near-term science-based climate targets in the reporting year. Validation was performed in accordance with version 1.1 of the criteria for financial institutions ("Financial Institutions' Near-Term Criteria, Version 1.1"). Two adjustments were made in the course of validation:

– The target value in the "Corporate bonds" asset class was reduced to 1.69°C because it is not permitted to be higher than the base value. The target value had previously been 1.75°C.
– The reduction target was increased in the "Mortgages (commercial real estate)" asset class: Emission intensity is now intended to drop by 40.5% by 2030 (previously: 40%). The target value has accordingly been reduced from 10.4 kg CO_2e/m^2 to 10.3 kg CO_2e/m^2.

The SBTi does not currently offer any validation of long-term climate targets for financial institutions. TKB has set itself long-term goals despite this. These can be found in the table entitled "Reduction targets for greenhouse gas emissions" on page 41.

Glossary with list of abbreviations

Lots of technical terms are used when talking about climate change and its impact on people and the environment. Abbreviations are also quite common. This glossary will provide you with a helpful guide to help you navigate the jungle of concepts: It explains and illustrates how things are connected.

Business loans with sustainability components

See ***Sustainability-linked loans***.

Cantonal energy certificate for buildings (CECB)

This cantonal certificate documents a building's energy efficiency. It may only be issued by certified professionals. This certificate, which is generally known as a CECB, lets property owners compare energy-efficient renovation options or classify a new building in terms of its energy efficiency.

Carbon dioxide

See ***CO_2***.

Carbon footprint

A ***carbon footprint*** indicates how many ***CO_2 equivalents*** a product, service, company, state, individual, etc. generates. A large footprint means that a lot of ***greenhouse gas*** is released into the atmosphere. The term "carbon footprint" was introduced by BP in 2003 as part of an advertising campaign. In it, the oil and gas company sought to convey to society that it is not the energy industry that is ultimately responsible for ***global warming***, but every individual consumer. Since then, the term has established itself as a kind of benchmark for environmental pollution.

Carbon sink

Carbon sinks permanently remove ***CO_2*** from the atmosphere. A distinction is made between natural and technical sinks. Natural sinks are ecosystems that absorb more CO_2 than they simultaneously release. These can be forests or peatlands, for example. Reforestation naturally reduces the air's CO_2 content; the same applies to the restoration of drained peatlands. Technical sinks are created and set up by humans. Collecting CO_2 for use in new products or to be injected into suitable rock formations are some examples of this. The carbon dioxide can be extracted from the atmosphere or captured directly where it is produced, such as in a coal-fired power plant. It is then processed, compacted and permanently stored. A lot of research is currently being done into technical solutions. While experimental projects are underway, there is still no technology suitable for widespread use. The costs are high, and it is not clear where large quantities of carbon dioxide should be stored in the long term. Discussions include discharging it into the sea or storing it in underground saline aquifers. Neither is undisputed.

Climate change
See ***Greenhouse effect***.

Climate stress test
The European Banking Authority conducts regular stress tests to assess how well banks are prepared to cope with extreme financial and economic events. This allows the supervisory authorities to identify weaknesses and then address them together with the banks. A stress test on climate risks was carried out for the first time in 2022. Various scenarios were used to examine how banks deal with ***physical risks*** such as droughts and floods. ***Transition risks*** were also evaluated. The test showed that banks are generally doing too little to mitigate climate risks. The results of the climate stress test were incorporated into the Supervisory Review and Evaluation Process (SREP) of the supervisory authorities.

Climate test
See ***Paris Agreement Capital Transition Assessment (PACTA)***.

CO_2
This is the chemical formula for carbon dioxide, sometimes simplified to "carbon". The compound made up of carbon and oxygen is a natural component of air, which is composed of different gases. CO_2 is produced when living beings – like humans – breathe: We inhale oxygen, convert it into carbon dioxide, which we then exhale. CO_2 is also released through the combustion of carbon-containing substances, such as wood and petroleum. The fact that the concentration of CO_2 in our atmosphere is currently more than 50% higher than pre-industrial levels is primarily a consequence of the large-scale consumption of ***fossil fuels***. Humankind emits roughly 100 million metric tons of CO_2 into the Earth's atmosphere every day through combustion processes. The consequences of this are serious because carbon dioxide is a ***greenhouse gas***. While humans produce carbon dioxide when they breathe, plants do just the opposite: they convert carbon dioxide into oxygen as they grow. The keyword here is photosynthesis. This is important as it allows humans to use plants as natural ***carbon sinks***.

CO_2 equivalents
Carbon dioxide ***(CO_2)*** is one of many ***greenhouse gases***. The impacts of the other greenhouse gases are compared with those of carbon dioxide in order to draw conclusions about the overall impact of a process on the ***greenhouse effect***. Here's an example: Methane's impact on the greenhouse effect is 25 times greater than that of CO_2 over a period of 100 years; that means one metric ton of methane is equal to 25 metric tons of CO_2 equivalents. If a process releases five metric tons of CO_2 and one metric ton of methane, the total emissions correspond to 30 metric tons of CO_2 equivalents (5 plus 25). When talking about smaller emissions, CO_2 equivalents are sometimes stated in kilograms (kg CO_2e) instead of metric tons (t CO_2e).

Energy reference area
The energy reference area (ERA) is the sum of all floor space in a building – including that of surrounding walls and parapets – that are heated or air-conditioned such as offices, bedrooms, stairwells, etc. ERA does not include garages, balconies, unheated cellars or attics. ERA is usually expressed in square meters (m^2).

ESG

This acronym stands for environmental, social and governance, meaning that it addresses issues related to environmental, social and responsible corporate governance. Companies and investment instruments, for example, are evaluated based on these factors. Anything that meets the ESG criteria is colloquially considered sustainable.

Financed greenhouse gas emissions

Financed greenhouse gas emissions are caused when loans are granted and investments made. Unlike ***operational greenhouse gas emissions***, they are not generated by the company's own operations, but by other companies or private individuals. Financed emissions are assigned to Category 15 of Scope 3 in the ***Greenhouse Gas Protocol***. A chart is provided on page 49. The ***Partnership for Carbon Accounting Financials*** should be noted in connection with the financed emissions as it provides a method of calculating these emissions.

Financial portfolio

See ***Portfolio***.

Fossil fuels

Fossil fuels are produced through the lengthy decomposition and transformation processes of dead plants and animals. Petroleum, for example, was formed from dead microorganisms – mostly algae – that were deposited on the seabed as organic sludge and covered by sediments. Lignite and hard coal were formed when plant residues rotted in the absence of air and were then compacted at high pressures and temperatures. Fossil fuels primarily contain carbon and hydrogen; when burned, they release large amounts of carbon dioxide (***CO_2***).

Global warming

See ***Greenhouse effect***.

Greenhouse effect

In a greenhouse, the sun's rays enter the interior and warm up the air. Because the heat cannot easily escape, the inside of a greenhouse is warmer than its surroundings. A greenhouse effect also occurs at the global level: ***Greenhouse gases*** in the air allow sunlight to pass through unhindered but prevent the Earth's heat radiation from escaping entirely into space. The Earth's atmosphere warms up as a result. As a basic principle, this greenhouse effect is extremely positive – without it, Earth would be too cold for higher forms of life. An excessively strong greenhouse effect, on the other hand, will have negative impacts. Just how strong the greenhouse effect is depends on the concentration of greenhouse gases. The concentration of a specific greenhouse gas in the air can increase naturally. Shifts of the Earth's tectonic plates 50 million years ago released extremely large amounts of carbon dioxide, making the concentration of this greenhouse gas four times higher than it is today. The fact that concentrations of CO_2 in the atmosphere are now more than 50% higher than pre-industrial levels – and at the highest level seen in the last 800,000 years – is mainly due to massive consumption of ***fossil fuels***.
In short: The global warming we are currently experiencing is man-made. Its direct impacts include a rise in average temperatures and sea levels, a loss of biodiversity, frequent extreme weather events, and increased health risks. Indirect impacts include hunger and water shortages, threats to people's livelihoods, migration, and enormous adaptation costs.

Greenhouse Gas (GHG) Protocol

How should companies calculate and report on their ***greenhouse gas emissions***? The Greenhouse Gas Protocol, or GHG Protocol for short, provides an answer to these questions. It is the most widely used greenhouse gas accounting standard, with more than 90% of the top 500 companies worldwide using it. The GHG Protocol breaks a company's emissions down into Scopes 1 to 3. A chart is provided on page 49. Interesting to note: How to account for greenhouse gas emissions was a question that arose as early as the 1990s. Back then, the World Resources Institute (an environmental think tank) and the World Business Council for Sustainable Development launched a corresponding initiative together with various NGOs – and this was the beginning of the GHG Protocol.

Greenhouse gases (GHGs)

Greenhouse gases are components of the Earth's atmosphere that allow sunlight to pass through unhindered but prevent the Earth's heat radiation from escaping entirely into space. In doing so, they cause the atmosphere to heat up. Greenhouse gases include carbon dioxide (***CO_2***), methane (CH_4), dinitrogen monoxide (nitrous oxide; N_2O), the fluorinated greenhouse gases – referred to as F gases – and nitrogen trifluoride (NF_3). They have varying impacts on the ***greenhouse effect*** (see ***CO_2 equivalents***). The most important greenhouse gas by far is CO_2.

Investment portfolio

See ***Portfolio***.

Loan portfolio

See ***Portfolio***.

Net-zero target

Net zero means: No more ***greenhouse gases*** are emitted into the atmosphere than are removed through the use of natural or technical ***carbon sinks***. The concentration of greenhouse gases in the air will remain the same or decrease as a result. Switzerland aims to reach its net-zero target by 2050. More and more Swiss companies are following suit and are pledging to reduce their greenhouse gas emissions using this approach – along their entire value chains. Because not all emissions can be avoided completely – like in waste recycling, for example – it will be necessary to permanently remove greenhouse gases from the atmosphere and store them. These emissions are referred to as negative emissions. They ensure that the bottom-line result is net zero.

Network for Greening the Financial System (NGFS)

This network of central banks and financial market supervisory authorities is dedicated to the transition to a sustainable economy. Its members exchange their ideas and experiences on how to achieve the targets of the ***Paris Agreement***. Among other things, the network recommends that central banks and supervisory authorities incorporate climate-related risks into their financial stability monitoring and risk control and take sustainability aspects into account when managing their own ***portfolios***. The Swiss National Bank is a member of the network.

Operational greenhouse gas emissions

Operational greenhouse gas emissions are generated as a result of a company's own business activities. The ***Greenhouse Gas Protocol*** distinguishes between three scopes in which greenhouse gas emissions can occur. Operational emissions are found in all three scopes; in Scope 3, they are broken down into Categories 1 to 14. A chart is provided on page 49.

Paris Agreement

In December 2015, 197 nations and the European Union adopted the first legally binding treaty to slow down ***climate change*** and mitigate its impacts: the Paris Agreement. It calls for global warming to be limited to well below 2°C compared to pre-industrial levels; the participating states – all of which are recognized under international law – even want to try to limit global warming to 1.5°C.

Paris Agreement Capital Transition Assessment (PACTA)

This standardized tool can be used to check whether a ***financial portfolio*** is in line with the principles of ***the Paris Agreement***. This is the case if the investments and financing support the goal of ***net-zero*** greenhouse gas emissions by 2050. The test, which is known as PACTA for short, is open-access. In Switzerland, it is used by the Swiss Federal Office for the Environment, which invites all banks, asset management companies, pension funds and insurance companies to have their portfolios tested anonymously. And the Swiss federal government periodically documents how climate-friendly the Swiss financial sector is. Each participating company receives a report, which it may publish at its own discretion.

Partnership for Carbon Accounting Financials (PCAF)

If a bank wants to reduce its ***financed greenhouse gas emissions***, it needs to know how high they are. That calls for recognized methods and standards, and the Partnership for Carbon Accounting Financials, or PCAF for short, has developed a set. This initiative is dedicated to the assessment of CO_2 emissions generated by the financial industry. It was founded in 2015: 14 Dutch financial institutions joined forces after the Dutch government called on banks to increase their contribution to a low-carbon economy through their lending and investment activities. More than 400 institutions around the world now use the PCAF accounting standards to assess their greenhouse gas emissions. Those standards are also in line with the recommendations of the ***Task Force on Climate-related Financial Disclosures***.

Physical risks

Climate change entails a number of risks. Extreme weather events such as floods, storms and droughts are physical phenomena: They cause damage to property, injure people and cost lives. The same applies to long-term changes such as rising sea levels and persistent heat in parts of the world. Physical risks are accompanied by ***transition risks***.

Portfolio

A portfolio is a stock of components that are different but similar in type. The term was originally used in the art world – for a folder containing multiple works that an artist used when applying to galleries. The term is in widespread use in today's world. In banking, a "portfolio" refers to a specific set of financial products. An investor might hold a portfolio of equities, bonds, etc. at a bank. The bank, on the other hand, has a loan portfolio – which comprises all of the loans it has granted.

Principles for Responsible Investment (PRI)

The six Principles for Responsible Investment were formulated in 2006 by an international group of institutional investors. The United Nations promotes this initiative. Those who join the initiative and subscribe to the principles commit to incorporate ***ESG*** criteria into their investment decisions. More than 5,000 companies now participate in the initiative; together, they represent investment capital of more than $120 trillion. While critics complain that the initiative is based on self-commitment, many signatories demonstrate that they are serious about the matter: They invest and trade differently than in the past, formulate important criteria for their investment activities and incorporate them into their transactions in equities, bonds, real estate, etc.

Science Based Targets initiative (SBTi)

The Science Based Targets initiative, or SBTi for short, helps companies set their emission reduction targets based on scientific findings; there are different guidelines for different industries. The initiative was launched in 2015 by the United Nations Global Compact (a pact between the United Nations and for-profit companies), two non-profit organizations – the Carbon Disclosure Project and the World Resources Institute – and the WWF environmental protection organization. By the end of 2024, the SBTi initiative had more than 9,500 followers, more than 6,500 of which had their emission reduction targets validated by the SBTi.

Scope

Area of impact. See ***Greenhouse Gas Protocol***.

Sustainability-linked loans (SLLs)

This is the term for business loans where the interest rates are linked to sustainability indicators. If a borrower achieves the agreed sustainability targets during the term of the loan, their interest rates are reduced. This creates financial incentives for sustainable business activity.

Sustainable Development Goals (SDGs)

The United Nations stands behind the Sustainable Development Goals. These 17 political goals came into force on 1 January 2016 and are expected to be achieved by all member states by 2030. Examples of the goals are ending hunger and poverty, achieving gender equality, ensuring access to clean water and sanitation for all, making cities sustainable and conserving marine resources. The objectives are fleshed out with 169 sub-goals, one of which being: No subsidies for ***fossil energy (fuels)***.

Sustainable finance

This buzzword refers to a sustainable financial world that strives not only to achieve financial, but also environmental and social goals. By steering financial flows into sustainable activities, the financial sector can change markets and help shape economic systems to make them sustainable. Sustainability impacts banks' business activities in every important area of business – investing, lending, financing, the capital market and securities issuance – in their interactions with customers, as an employer, and in the public eye. The Swiss Bankers Association (SBA), of which TKB is also a member, made sustainable finance a strategic priority in September 2018. Together with its members, the association has since drawn up guidelines for the private client advisory process, published a study on the investment and financing requirements for achieving a climate-neutral Switzerland by 2050, and published a discussion paper on climate-efficient mortgages. The SBA has formulated binding requirements for its members that govern advisory processes on both the investment and financing sides. It also recommends that its members join international net-zero alliances and sustainability initiatives in the banking sector. The SBA and the banks systematically incorporate ***ESG*** skills into their training and education; their goal is for all client advisors to have knowledge of ESG and to apply this knowledge in the advisory process. All these steps have contributed to the fact that the Swiss financial center is now one of the pioneers when it comes to sustainable finance.

Swiss Climate

This consulting firm is active in the areas of ***CO_2*** management, sustainability, climate protection and energy. It helps companies sustainably optimize their business processes. It audits companies' ***carbon footprints***, for example.

Task Force on Climate-related Financial Disclosures (TCFD)

The Task Force on Climate-related Financial Disclosures, or TCFD for short, was an international working group in the area of finance. It was founded in 2015 by the Group of 20 (G20) major developed and developing countries and the Financial Stability Board, an international organization that monitors the global financial system. The working group brought together experts from different areas of finance and provided information on what countries and companies are doing to mitigate the risks of climate change and how they make this transparent in their climate-related financial information. The TCFD was created in response to the lack (at that time) of any international standards for disclosing commitment to the ***Paris Agreement***. The TCFD considered its mandate fulfilled at the end of 2023 and disbanded. However, its recommendations still remain valid and have shaped, among other things, the accounting standards of the ***Partnership for Carbon Accounting Financials***.

Transition

This word means a change from one state to another. In the context of ***global warming***, it refers to the transition to a low-carbon economy and society. This is needed to limit ***climate change*** and mitigate its impacts on people and the environment. The resulting social changes can pose more of an opportunity or a threat to a company or person, depending on their starting point. We refer to these as ***transition opportunities*** and ***transition risks***.

Transition opportunities

The transition to a low-carbon economy and society presents opportunities. It can lead to new products and offers, and entire sectors of the economy can benefit from new circumstances. Examples include solar energy and electromobility.

Transition plan

With a transition plan, a company sets out how it intends to move into the non-fossil future; for example, how it will translate its ***net-zero target*** into operational steps. Transition plans can be used to outline the need for financial resources for the changeover. Banks often need transition plans from their customers to make financing decisions. However, they also draw up their own transition plans, which focus on improving the climate-friendliness of their ***portfolios***, for example.

Transition risks

The transition to a low-carbon economy and society entails risks. Political actions like a carbon tax could lead to an increase in the price of fossil fuels, and new laws requiring changes to buildings could necessitate major investments. New technologies could displace old ones, and changing consumer preferences and societal expectations could influence existing business models.

Good to know

What do the abbreviations stand for?

CECB	Cantonal energy certificate for buildings (Gebäudeenergieausweis der Kantone; GEAK)
EBS	Public Energy Advice Center of the Canton of Thurgau (Energieberatungsstelle des Kantons Thurgau)
EnAW	Energy Agency of the Swiss Private Sector
ERA	Energy reference area
ESG	Environment, social, governance
GHG	Greenhouse gas
GHG Protocol	Greenhouse Gas Protocol
GRI	Global Reporting Initiative
KEEST	Competence Center for Renewable Energy Systems Thurgau (Kompetenz-Zentrum Erneuerbare Energie-Systeme Thurgau)
NGFS	Network for Greening the Financial System
PACTA	Paris Agreement Capital Transition Assessment
PCAF	Partnership for Carbon Accounting Financials
PRI	Principles for Responsible Investment
SBTi	Science Based Targets initiative
SDG	Sustainable Development Goals
SLLs	Sustainability-linked loans
TCFD	Task Force on Climate-related Financial Disclosures
t CO_2e	CO_2 equivalents in metric tons

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