Climate Report

2023 *Disclosure in accordance with the recommendations of the "Task Force on Climate-related Financial Disclosures" (TCFD)*

Thurgauer Kantonalbank

2023 Climate Report – Contents

Comprehensive sustainability report

Thurgauer Kantonalbank (TKB) uses several different channels to report on its commitment to sustainability. Detailed information can be found in the bank's annual report as well as in the "GRI Sustainability Report", which is prepared in line with the guidelines of the "Global Reporting Initiative". The climate report has supplemented the bank's comprehensive reporting since 2023. It forms an annex to TKB's annual report. All publications are released in March and can be found at tkb.ch/geschaeftsbericht

In the event of questions of interpretation between versions of this report in different languages, the German version shall prevail.

Introduction

Report 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 both people and the environment, which is why it is important to limit climate change and minimize its effects. TKB takes this challenge seriously and lives up to its responsibility. Because the bank itself causes greenhouse gas emissions – both directly as well as indirectly through its financing and investment activities. So the bank aspires to reduce its emissions to net zero by 2050.

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 that it addresses within the scope of its sustainability strategy. For this, the bank looks at both its own operations as well as its role as an intermediary in the financial system. Taking an active approach toward addressing the topic of climate change simultaneously opens up opportunities. The bank has integrated its approach to climate-related risks into its business and risk policies.

This report details how TKB deals with the risks and opportunities presented by climate change. TKB follows the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) and discloses information about the bank's governance, strategy and risk management as well as its key figures and targets. Through this report, the bank creates transparency on climate issues and complies with legal requirements.

TCFD: Reporting on climate issues

New provisions in the Swiss Code of Obligations require large companies of public interest to prepare a non-financial report. They must provide transparent reporting on topics such as the effects of climate change – in line with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) – from the 2024 financial year onward. TCFD is a global initiative to disclose climate-related risks and opportunities that is spearheaded by the financial industry. In this report, TKB implements the TCFD recommendations already for the 2023 financial year – on a voluntary basis.

Governance

Corporate governance with respect to climate-related risks and opportunities

Clear structures and processes

TKB's approach to dealing with climate change and the associated risks and opportunities is embedded in the organization. Corresponding structures and processes can be found in both the bank's sustainability management as well as its risk management.

Climate-related sustainability management

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. In its capacity as a strategic management body, the Board of Directors approves the sustainability strategy and assigns responsibility for its implementation – including any measures needed to reach the climate targets set by the bank – to the Executive Board. It has received training on climate-related issues, receives half-yearly updates on the progress of target achievement and assesses this across the climate targets. As a general rule, the Board of Directors organizes its tasks in committees. The Strategy Committee is responsible for preparing the sustainability strategy, including the climate targets, as well as the relevant reporting.

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-related matters. 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 are actively involved on climate-related matters. The Sustainability Office, which reports directly to the Chief Executive Officer, coordinates the activities. It additionally leads the process applied for preparing the sustainability strategy, which also involves formulating the climate targets.

An advisory council made up of five sustainability experts from outside the bank provides TKB with support with the 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-related risk management

The Board of Directors approves the enterprise-wide Risk Management Framework, which comprises structures, processes, responsibilities and instruments. It is reviewed at least once per year and adapted as needed. The 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 organizes its tasks in committees. The Risk and Audit Committee is responsible for monitoring climate-related risks and for preparing the climate report in line with the recommendations of the Task Force on Climate-related Financial Disclosures.

The Executive Board is responsible for implementing the requirements set forth in the enterprise-wide Risk Management Framework. Risks, including climate risks, are monitored and managed in line with the three lines of defense model. These are (1) the profit-oriented business units, (2) independent supervisory bodies such as Risk Control and the Compliance function as well as (3) Internal Audit.

The Chief Risk Officer (CRO) is a member of the Executive Board. The CRO reports to the Executive Board and the Board of Directors on the bank's risk situation on a monthly basis and also prepares a detailed risk report for the Risk and Audit Committee on a quarterly basis. The reporting framework for climate-related risks is currently under development and will be integrated into suitable channels. In the case of extraordinary developments regarding the bank's risk situation, the Chief Risk Officer immediately informs the Executive Board and the Board of Directors and – if necessary – the financial market supervisory authority.

The risk management organization and the bank's approach to climate risks are described in the "Risk management" section of this report. Information about the bank's risk management can also be found in TKB's annual report starting on page 90.

Climate disclosures

Report	Frequency of publication	Committees responsible	Audience
Report on the implementation of the sustainability strategy, including climate issues	Twice per year	– Executive Board – Strategy Committee – Board of Directors	Internal
Annual report including climate report, in accordance with the TCFD recommendations	Once per year	– Executive Board – Risk and Audit Committee – Bank Committee – Board of Directors – Thurgau Grand Council (Grosser Rat)	Public
"GRI Sustainability Report"	Once per year	– Executive Board – Strategy Committee – Board of Directors	Public

Governance structure in climate issues

Board of Directors

- approves the sustainability strategy (including climate targets) and the "GRI Sustainability Report" (including reporting about climate targets)
- approves the enterprise-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 the climate targets) and reports to the Board of Directors
- implements the requirements of enterprise-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)

Head of the Sustainability Office
(in the "Strategy, Innovation, Sustainability" department)

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

Head of the "Risk Control" department

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

TKB's approach to climate-related risks and opportunities forms part of both its sustainability and risk management. There is also a "Sustainability Advisory Council" in addition to the organizational structures depicted here. This council is made up of experts from outside the bank and helps TKB implement the sustainability strategy, which also includes achieving its climate targets.

Strategy

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

Effective strategy

TKB influences the climate – both through its operations as well as its financing and investment activities. Against this backdrop, it endeavors to reduce its operational greenhouse gas emissions and steer the flow of capital toward climate-friendly activities.

The bank's overarching goal is to achieve "net zero" greenhouse gas emissions by 2050 – across all scopes, including financed emissions. To reach this goal, it joined the Science Based Targets initiative (SBTi) in 2023 and has formulated appropriate reduction pathways.

Climate protection as part of the sustainability strategy

Limiting climate change is a goal enshrined in the bank's sustainability strategy. This strategy defines the topics of "Climate and greenhouse gas emissions" and "Sustainable finance" as material and sets corresponding targets. 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 credit and investment portfolio as well as in its own financial investments. The bank's commitment to the climate is based on national and international initiatives and standards.

TKB's sustainability strategy

TKB has had a sustainability strategy in place for more than ten years. It is based on the bank's values and aligned with national and international standards such as the UN Sustainable Development Goals and the Paris Agreement. The expectations of stakeholder groups were also incorporated into the sustainability strategy. At the heart of the bank's sustainability commitment are 14 material topics that are assigned to four strategic thrusts: the bank's commitment to its customers, to its employees, to society and the region as well as to the environment. Targets are defined for each topic. Information on these can be found at tkb.ch/nachhaltigkeit

Climate-related initiatives and standards

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 a variety of realms. 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 Investments (UN PRI)	Six principles promote responsible investments. This sector-based initiative is supported by the United Nations. TKB pledged to uphold the principles in 2021.
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.
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. It has provided TKB with a framework for describing its flows of capital since 2022.
Paris Agreement Capital Transition Assessment (PACTA)	Financial service providers use climate compatibility tests based on this method to assess whether their investments and financing align with the Paris Agreement. TKB participated in this in 2020 and 2022.
Greenhouse Gas Protocol (GHG Protocol)	The internationally recognized standard enables organizations to comprehensively inventory their greenhouse gas emissions, which are broken down into three different scopes. TKB has been using this standard to calculate its greenhouse gas emissions since 2015.
Task Force on Climate-related Financial Disclosures (TCFD)	This initiative for reporting climate risks and climate opportunities is spearheaded by the financial industry. TKB's climate reporting has been aligned 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 Confederation, implement suitable measures and report on their energy consumption. TKB joined the program in 2019.

The table shows the national and international initiatives and standards that TKB follows when dealing with climate-related risks and opportunities.

Avoiding and reducing greenhouse gas emissions in operations

The bank uses an environmental management system to document its energy consumption and operational greenhouse gas emissions, which it inventories in accordance with the Greenhouse Gas Protocol. Based on its surveys, TKB sets targets and defines measures aimed at reducing energy consumption and greenhouse gas emissions and checks their effectiveness once per year. Avoiding negative impacts on the environment takes top priority. If this is not (fully) achievable, the bank works to improve the situation by optimizing its operating procedures, selecting climate-friendly variants such as renewable energy and motivating employees to embrace climate-friendly behaviors, for example. Finally, based on its remaining operational emissions, TKB supports a high-quality climate protection project through the "myclimate" foundation in Switzerland. The bank underpins its commitment by participating in the Energy Model of the Energy Agency of the Swiss Private Sector (EnAW) and by joining the Confederation's energy saving alliance.

Avoiding and reducing greenhouse gas emissions in the credit and investment portfolio

The bank calculates the greenhouse gas emissions generated in the financing and investment business using the methodologies of the Greenhouse Gas Protocol and the Partnership for Carbon Accounting Financials (PCAF). In addition to this, TKB participates in the Paris Agreement Capital Transition Assessment (PACTA) carried out by the 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 measures for the bank's own financial investments as well as for its financing and investment portfolio. In addition to measuring greenhouse gas emissions and defining related measures, the bank attaches great importance to the disclosure of climate information. Its sustainability reporting is aligned with the Global Reporting Initiative (GRI) standard. It follows the standard of the Task Force on Climate-related Financial Disclosures (TCFD) when reporting its climate-related risks and opportunities.

Climate-related opportunities and their effects

Climate change harbors risks, but also opportunities. The opportunities for TKB mentioned below are mainly based on an analysis and sometimes supported by quantitative data. Effects on the bank – in the form of changes to the products and services offered, for example – are also explained. No financial effects can be identified at present.

Time horizon for the assessment of climate-related risks and opportunities

Period of time	Number of years
Short 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 buildings sector, investments totaling nearly CHF 2 billion per year are needed to replace heating systems and renovate building envelopes. Given that the renovation rate is currently at around one percent, the potential for investment is correspondingly large. As the canton's leading mortgage bank, this is something that TKB will be able to capitalize on.

[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 is "Sustainable Finance – Investment and financing needed for Switzerland to reach net zero by 2050".

TKB offers sustainable products and services and is expanding its offerings 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 additional income. This, however, hinges on the availability of advisors who are highly 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 area of mortgages, the bank offers free energy advice in cooperation with cantonal advice centers, useful services like the renovation cost calculator and also covers some of the cost of obtaining a Cantonal Energy Certificate for Buildings (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 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

As a service provider, TKB's direct environmental impact is comparably low. The most major 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. An economical use of resources – particularly energy – protects the climate and helps the bank cut costs. Energy efficiency renovations to its properties enable the bank to reduce its energy consumption, for example, as well as its operating costs as a result. 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 increasing electricity costs. 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 steps on an ongoing basis to reduce the use of these resources and the associated costs.

Climate-related risks and their effects

Climate change harbors many different risks for the economy and society. The risks to TKB mentioned below are based on a qualitative risk analysis. The bank defines scenarios for the most important risks and calculates the loss potential. No material, direct financial impacts on TKB are visible at this point in time. Other effects on the bank – in the form of changes to the products and services offered, for example – are also explained.

The risk analyses reveal a minor climate-related risk for the bank in the short to medium term. This applies to both transition risks, meaning risks associated with the transition to a climate-friendly economy and society, and 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 risks is the most important aspect 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.

Credit risks

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

Transition risks 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 consequences 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 risks 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 properties financed 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 risks are likely to be the exception and will not have any appreciable impact on the bank's credit portfolio.

Transition risks 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 only have 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 consequences for the bank's credit portfolio.

Physical risks for business loans

Acute consequences of climate change such as flooding could have a twofold impact on companies: by causing damage to a company's buildings and facilities or by causing shutdowns, which would then result in shutdown-related costs. Since events such as these are generally limited to a specific area, only a small portion of TKB's credit portfolio would be impacted. Chronic developments such as ground erosion can threaten customers' business models. Since potentially harder-hit sectors such as agriculture and tourism do not account for any larger share of financing at TKB, the bank does not expect this to have any appreciable impact on the credit 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 heavily impacted by climate change – whether through transition risks or physical risks. As a result, the risk of sustaining losses in market value is low. TKB is unable to identify any climate-related effects on the bank's liquidity risks at this time.

Operational risks

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

Transition risks for bank operations

Society's growing awareness of climate-related issues as well as the introduction of regulatory provisions on the topic place additional requirements on companies with respect to data collection, disclosures and the structuring of advisory processes, for example. These new requirements give rise to operational risk for TKB. This affects the entire value creation process and becomes evident in slightly higher legal risks, for example.

Physical risks for bank operations

With respect to operational risks, 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 the IT systems. TKB takes structural measures to protect itself against such events, with one example being floodwater protection. The bank is insured against most risks that cannot be eliminated through structural measures. 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 – keyword: greenwashing – and negative business performance. Since TKB attaches great importance to sustainability and provides transparent information, it assesses the reputational risk as fairly low overall.

Resilience of the bank's strategy with respect to climate change

When it comes to climate change, there are many different outlooks for the future. To assess its resilience to changes in the climate as well as the consequences 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 key figures and targets are explained in detail starting on page 21.

Significance of various climate scenarios

TKB analyzed the possible impact of climate change on the bank's business model and risk situation in the future. It also examined how its business activities could impact climate change. For TKB, the most important combinations of risk drivers and risk types give rise to low-level climate-related effects in the medium term, even if physical climate events harbor a latent increase in risk potential. Even assuming extreme conditions, climate-related loan defaults would only account for less than two percent of the bank's operating result. Since potential price increases in greenhouse gas levies are a key risk driver, the bank examined different price levels and evaluated these in terms of the bank's ability to distribute profits and build reserves as well as 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 Federal Office for the Environment was used as the baseline when calculating the flooding scenario. TKB aims to expand the methodology applied and 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 on climate change

With a view to the future, TKB carried out additional analyses in addition to calculating various climate scenarios. For example, it determined the conditions under which the net zero target is attainable for the greenhouse gas emissions arising in connection with the bank's financing activities and what impact these could have on the business model. Overall, it comes to the conclusion that climate change is not expected to have any serious impact on the business model because the bank's 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 the 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 federal government and the cantons are initiating legislative changes and incentive systems that promote energy efficiency building renovations. Finally, the bank supports its customers and helps them implement these measures appropriately.

Risk management

The processes used for dealing with climate-related risks

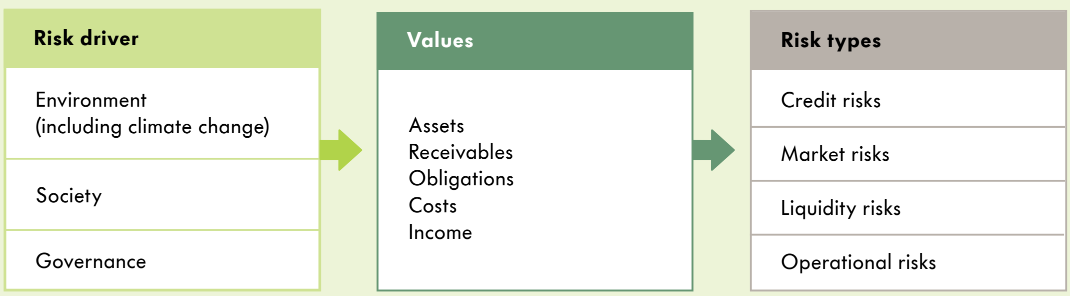
Systematic approach to risks

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

Integration of climate risks into overarching risk management

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 enterprise-wide Risk Management Framework is one of those key instruments. It defines the bank's risk policy, risk tolerance and risk 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 considers climate-related developments and events to be risk drivers that can have an impact on existing types of risk, namely credit risk, market risk, liquidity risk and operational 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.

Handling of climate-related risks across the risk management process

Climate-related risks are identified, evaluated and handled 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.

TKB's risk management process

Risk identification

TKB identifies climate risks by means of a risk analysis. It takes not only the short-term, acute consequences of climate change into consideration, but also the long-term, chronic effects. The purpose of the analysis is to establish an understanding of the risks by connecting the dots between cause and effect.

Risk assessment

The climate risks and their effects 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 describes its potential effects instead. It applies the TCFD recommendations in combination with the PCAF methodology when identifying and assessing the climate risks.

Risk 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 credit portfolio (Scope 3) is another key performance indicator for the bank. Efforts are currently underway at the bank to define corresponding emission reduction targets. For this, it is following the science-based approach of the Science Based Targets initiative (SBTi). Climate-related key figures are presented in the "Key figures and targets" section. Because the interdependencies of climate risks are hard to identify, TKB has not set any thresholds yet for several key figures. 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. The requirements applied and instruments employed are reviewed regularly and adapted as needed or further developed on an ongoing basis. The reporting framework for climate-related risks is currently under development and will be integrated into suitable channels; information will be provided to the Board of Directors and Executive Board on a regular basis – at least once per year. The bank provided information to the public once per year through this report. The "GRI Sustainability Report" also contains relevant key figures.

Key figures and targets

Key performance indicators for dealing with climate-related risks and opportunities

Ongoing measurement of results

TKB has committed itself to achieving “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. Key figures for monitoring and managing its emission-reduction targets as well as corresponding measures were also defined in this context.

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. Scope 3 covers categories 1 to 14. While TKB has been calculating its operational greenhouse gas emissions since 2014, the fundamental data and key indicators it uses for this purpose have been improved on an ongoing basis. The carbon footprint calculated on the basis of the bank’s operational emissions is formally audited by Swiss Climate. The bank reduced its operational greenhouse gas emissions by 5.7 percent during the year under review – from 2,150 metric tons to 2,027 metric tons.

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 bank buildings, running air-conditioning systems and using company vehicles, for example. Here, the bank makes a distinction between the 18 buildings it owns and the 13 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 uses 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 measures.

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 natural electricity generated in Switzerland for its proprietary and rented buildings that was previously considered to be completely renewable. 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 around 75 percent at present. The bank is currently examining steps it can take to enable the bank to purchase all of its electricity from a renewable source 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. At TKB, business travel, employee commuting and the procurement of goods and services – such as

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

GHG emissions recorded in t CO_2 e	**Change 2022/23** in %	**2023** (as at 31 Oct.)	**2022** (as at 31 Oct.)	**2021** (as at 31 Dec.)	**2020** (as at 31 Dec.)	**2019** (as at 31 Dec.)
Scope 1 Direct GHG emissions through the combustion of fuels	+9.2	283	259	383	401	410
Scope 2 Indirect GHG emissions through district heating and electricity (energy generation)	–2.4	742	760	682	702	675
Scope 3 Indirect GHG emissions from external data centers, business travel, commuting, paper, and water	–11.3	1,003	1,131	1,159	1,420	1,381
Scope 1, 2 and 3 Total operational GHG emissions	–5.7	2,027	2,150	2,224	2,523	2,466
Scope 1, 2 and 3 Operational GHG emissions in t CO_2 e per employee (FTE)	–8.7	2.7	2.9	3.1	3.6	3.6

- *The table shows the operational greenhouse gas emission figures of TKB in metric tons of CO_2 equivalents (t CO_2 e) for the period from 2019 to 2023.*
- *The 9.2 percent increase in direct emissions (Scope 1) during the period from 2022 to 2023 is attributable in particular to the leakage of refrigerants amounting to 65 metric tons of CO_2 equivalents.*
- *In compliance with the standards of the Global Reporting Initiative, the emission figures reported for Scope 3 are limited to significant emissions and comprise parts of categories 3.1, 3.3, 3.6, 3.7 and 3.8 of the Greenhouse Gas Protocol.*
- *The table additionally shows the intensity of greenhouse gas emissions measured in terms of emissions per employee (full-time equivalents).*
- *Since TKB publishes its climate report at the same time as its annual report, the reporting date has been October 31 (previously: December 31) since 2022; the period under review remains unchanged at 12 months. In order to harmonize the approach for both operational and financed greenhouse gas emissions, the bank will move the reporting date to 30 June from 2024 onward.*
- *The table contains rounded numbers; rounding differences are possible as a result.*

paper and water – are particularly important. 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 the data basis and to derive measures aimed at motivating employees to embrace sustainable mobility. The bank's progressive working-from-home rules and efforts to raise awareness among employees contribute to this.

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 is disclosing its material financing and investment activities for the first time for the 2023 financial year. The bank calculated the emissions generated in the two largest asset classes – residential and commercial real estate. The calculated emission figures cover receivables that amount to some 95 percent of the overall portfolio deemed as relevant in accordance with the PCAF. For future financial years, the bank will endeavor to make ongoing improvements to the fundamental data.

PCAF: Measuring financed greenhouse gas emissions

The Partnership for Carbon Accounting Financials (PCAF) is an initiative spearheaded by the international financial industry. It helps participating institutions measure and disclose the greenhouse gas emissions that arise in connection with their financing and investment activities. The PCAF standard distinguishes between seven different asset classes – including mortgages or business loans, for example – and specifies a detailed methodology for calculating their emissions. TKB has been applying the PCAF standard since 2022 to describe its financed greenhouse gas emissions.

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

Investment class	**Outstanding amount** (in CHF millions)	**Scope 1 and 2** GHG emissions (t CO_2 e)	**Scope 3** GHG emissions (t CO_2 e)	**Emission intensity** (t CO_2 e/ CHF million)	**Coverage** (%)	**Data quality score** (1 high, 5 low according to PCAF)
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 residential and commercial real estate financed by TKB.*
- *The reporting date for calculating financed emissions is 30 June 2023.*
- *The figures reported reflect the balance sheet item "Mortgage receivables" in accordance with the regulatory financial statements.*
- *The asset class "Mortgages (commercial real estate)" 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.*
- *The asset class "Mortgages (residential real estate)" 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.*
- *For mortgage-backed loans, a clear distinction between mortgages or commercial real estate is not always possible, particularly in the case of mixed properties.*
- *The currently available appraisals are used for the properties in accordance with supervisory requirements. These figures may deviate from the figures 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, rather the value from the most recent appraisal.*
- *Wherever possible, the energy reference area (ERA), which is needed for receivables backed by residential real estate, was determined by an external provider of data services specialized in real estate. This was based largely on figures obtained from the Federal Register of Buildings and Dwellings. Some of the data currently available needed to have some additional corrections made:*
  - *It was not always possible to clearly identify the number of residential units; appropriate assumptions were made.*
  - *The energy reference area is estimated for some 11 percent of all mortgages in TKB's portfolio. To do this, a robust estimate for 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 1 percent of the largest and 1 percent of the smallest 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. Accordingly, the area data delivered for agricultural operations was replaced in full by the bank's own estimates (based on data available for single-family homes and row houses).*
- *Due to the data available, the method and the assumptions, the values calculated should be considered to be an approximation of actual emissions. This is expressed in the published PCAF data quality score of 4. The score for the real estate properties is based on the carbon emission intensities per square meter, broken down by building type.*
- *Not enough data was available for the "Business loans" investment class on the reporting date to calculate reliable emission figures. Given this gap in the data, the bank has opted against disclosing any emission figures for this class. Disclosure is planned for next year.*
- *The "Listed equities and corporate bonds" asset class is small compared with the bank's other portfolios, which is why no corresponding emission figures were disclosed for 2023. Disclosure is planned for next year. The SBTi has a temperature rating devised exclusively for financial institutions. This rating has already been calculated for the bank and amounts to 1.69 °C (Scopes 1 and 2) and 2.31 °C (Scopes 1 to 3). That means the portfolio has no obvious negative features.*
- *The bank's "Sovereign debt" asset class is very small compared with the other portfolios. Since PCAF only published the new standard during the year under review, the Bank will probably calculate and publish the corresponding emission figures as part of the next disclosure.*

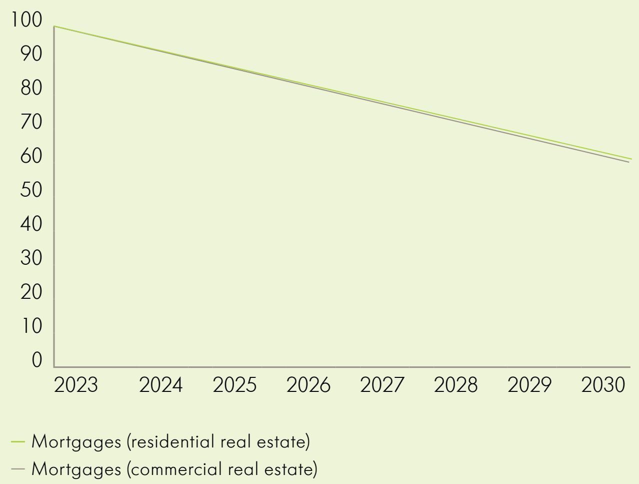
Targets and key figures

Both Switzerland and the Canton of Thurgau have climate strategies that pledge to achieve "net zero" greenhouse gas emissions by 2050. TKB also pursues this target in climate-related matters: By 2050, the bank wants to reduce its greenhouse gas emissions in scopes 1 to 3 to "net zero" – including for financed emissions. When drawing up its climate targets, the bank aligned itself with the methods of the Science Based Targets initiative. For this, it derived key performance indicators (KPIs) and defined operational targets and measures (see the transition plan at the end of the section).

TKB devised science-based greenhouse gas emission reduction targets. Part of this involved estimating the degree to which target achievement is realistic. The reduction targets seem ambitious yet attainable. One key prerequisite for reaching the net-zero target by 2050 is for the political framework conditions to be set up in such a way that greenhouse gas emissions in the economy as a whole can be reduced in line with the formulated aspiration. With its insights on the matter, TKB makes an active contribution toward planning measures for implementing the climate strategy at cantonal level.

TKB uses selected key figures to monitor the development of the target values and any deviations from these in the portfolio. Key figures geared toward the individual asset classes are currently being implemented at TKB.

Reduction pathways for emissions in connection with mortgages



The chart shows TKB's reduction targets for the mortgages it finances. For residential real estate, the bank wants to reduce the greenhouse gas emissions per square meter by 39 percent by 2030 and by 40 percent for commercial real estate. The base year is 2023.

Reduction targets for greenhouse gas emissions

Topics	**Targets**	**Target values**	**Base year**	**Base values**	**2023 values**	**Degree of coverage**	**Method**
Direct operational GHG emissions (Scope 1)	100% reduction in absolute GHG emissions by 2050	2030: 42% reduction in absolute GHG emissions	2022	259 t CO_2 e	283 t CO_2 e	100%	Absolute contraction
Indirect operational GHG emissions (Scope 2)	100% of purchased electricity from renewable sources by 2030	2025: 80% of purchased electricity from renewable sources	2022	75% of purchased electricity from renewable sources	75%	100%	Renewable energy target
Listed equities and corporate bonds held by TKB	Temperature rating reached by 2040 for Scope 1+2: < 1.75°C Scope 1+2+3: < 2°C	By 2028 Scope 1+2: 1.75°C Scope 1+2+3: 2.22°C	2023	Scope 1+2: 1.69°C Scope 1+2+3: 2.31 °C	Scope 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)	Temperature rating reached by 2040 for Scope 1+2: < 1.75°C Scope 1+2+3: < 2°C	By 2028 Scope 1+2: 2.39°C Scope 1+2+3: 2.78 °C	2023	Scope 1+2: 2.66°C Scope 1+2+3: 3.10°C	Scope 1+2: 2.66°C Scope 1+2+3: 3.10°C	100%	Temperature rating
Mortgages (commercial real estate)	40% reduction in GHG emission intensity (kg CO_2 e per m^2) by 2030	2030: 10.4 kg CO_2 e/m^2	2023	17.3 kg CO_2 e/m^2	17.3 kg CO_2 e/m^2	100%	Sectoral decarbonization
Mortgages (residential real estate)	39% reduction in GHG emission intensity (kg CO_2 e per m^2) by 2030	2030: 12.6 kg CO_2 e/m^2	2023	20.4 kg CO_2 e/m^2	20.4 kg CO_2 e/m^2	100%	Sectoral decarbonization

- *The degree of coverage reflects the percentage of inventoried greenhouse gas emissions that are applied for the respective target topics. TKB has decided not to make any exclusions and to apply the targets for all topics.*
- *The SBTi's absolute contraction approach is used to define the targets for direct operational emissions. The target's ambition level complies with the SBTi requirements. – The 9.2 percent increase in greenhouse gas emissions is attributable in particular to a leakage of refrigerants amounting to 65 metric tons of CO_2 equivalents.*
- *Indirect operational emissions are addressed through the complete switch to electricity from renewable sources in accordance with the SBTi's renewable energy target method.*
- *The target both for listed equities and corporate bonds as well as for corporate loans to large companies with more than 500 employees was derived in line with the SBTi requirements in accordance with the temperature rating.*
- *Since no individual emission data will be available for the other business loans in the foreseeable future, the annual emission measurements are based on sector averages. The trends for these figures depend largely on how frequently they are updated, something not currently being done on an annual basis. As a result, TKB has formulated mainly qualitative targets for the time being that are based on data systematically collected during meetings with customers. The bank actively monitors their trends going forward – particularly with respect to fundamental data – and is implementing appropriate measures on an ongoing basis.*
- *Targets for mortgages (residential and commercial real estate) are derived based on the STBi's sectoral decarbonization method. Starting from the base year, the emission intensity is determined in kg CO_2 e/m^2 with a view to the target value required by 2030.*
- *The table contains rounded numbers; rounding differences are possible as a result.*

Transition plan

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 focus on avoiding and reducing negative effects. It optimizes operating procedures, implements structural measures in TKB buildings, prioritizes climate-friendly variants such as renewable energies and motivates its employees to embrace climate-friendly behaviors. With respect to efforts to decarbonize the customer business, the bank primarily pursues an offer-based approach. That means active steps are being taken to raise customer awareness, advise them and provide financial support.

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

KPIs (key performance indicators)	Operational targets	Measures
Year-over-year reduction in absolute emissions (t CO_2 eq) 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

KPIs (key performance indicators)	Operational targets	Measures
Percentage of renewable energy	80% of electricity from renewable sources by 2025 and 100% by 2030	• Purchase of guaranties of origin for "Aqua Bio" electricity from Thurgauer Naturstrom • Switch to renewable energy sources for purchased electricity products

Reduction in GHG emissions for business loans (for operations with up to 500 employees)

KPIs (key performance indicators)	Operational targets	Measures
Assessment of materiality/impact/suitability of measures	Raise awareness among business customers and clarify the medium-to-long-term impact as well as planned measures	• 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 a photovoltaic self-consumption system • Proactively talk to commercial and business customers with emissions-intensive business models about the topics of climate friendliness, transformation and the company's transition plans

Reduce GHG emissions for business loans (for operations with more than 500 employees)

KPIs (key performance indicators)	Operational targets	Measures
Emission intensity Scope 1 and 2	Review target values communicated by customers and actively approach customers in the event of negative deviations from those targets	• 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 a photovoltaic self-consumption system

Reduce GHG emissions by 40% per m² for mortgages by 2030 (commercial real estate)

KPIs (key performance indicators)	Operational targets	Measures
Emission intensity Scope 1 and 2	Raise awareness among owners about long-term value preservation and their building's energy efficiency	• Comprehensive training for all TKB employees on the topic of sustainability and advanced training on the topics of ESG and sustainable finance for advisors and sales-side organizational units about the application and to raise awareness among commercial and business customers • Systematically raise customers' awareness of the topic 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 (EBS; Energieberatungsstelle) of the Canton of Thurgau • Joint offer in collaboration with the Competence Center for Renewable Energy Systems Thurgau (KEEST) and efforts to motivatecommercial and business customers to install a photovoltaic self-consumption system • 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 m2 for mortgages by 2030 (residential real estate)

KPIs (key performance indicators)	Operational targets	Measures
Emission intensity Scope 1 and 2	Raise awareness among homeowners about long-term value preservation and of their building's energy efficiency	• Comprehensive training for all TKB employees on the topic of sustainability and advanced training on the topics of ESG and sustainable finance for advisors and sales-side organizational units about the application and to raise awareness among commercial and business customers • Systematically raise customers' awareness of the topic 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 (EBS; Energieberatungsstelle) of the Canton of Thurgau • Cover remainder of costs incurred by customers in connection with the preparation of a Cantonal Energy Certificate for Buildings (CECB) • 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

The most important abbreviations at a glance

CECB	Cantonal Energy Certificate for Buildings
EBS	Energieberatungsstelle des Kantons Thurgau (Public Energy Advice Center of the Canton of Thurgau)
EnAW	Energy Agency of the Swiss Private Sector
ERA	Energy reference area
ESG	Environment, social, governance
GHG	Greenhouse gas
GRI	Global Reporting Initiative
KEEST	Kompetenz-Zentrum Erneuerbare Energie-Systeme Thurgau (Competence Center for Renewable Energy Systems Thurgau)
KPI	Key performance indicators
PACTA	Paris Agreement Capital Transition Assessment
PCAF	Partnership for Carbon Accounting Financials
SBTi	Science Based Targets initiative
SDG	Sustainable Development Goals
SLLs	Sustainability linked loans
TCFD	Task Force on Climate-related Financial Disclosures
t CO_2 e	CO_2 equivalents in metric tons
UN PRI	United Nations Principles for Responsible Investment

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