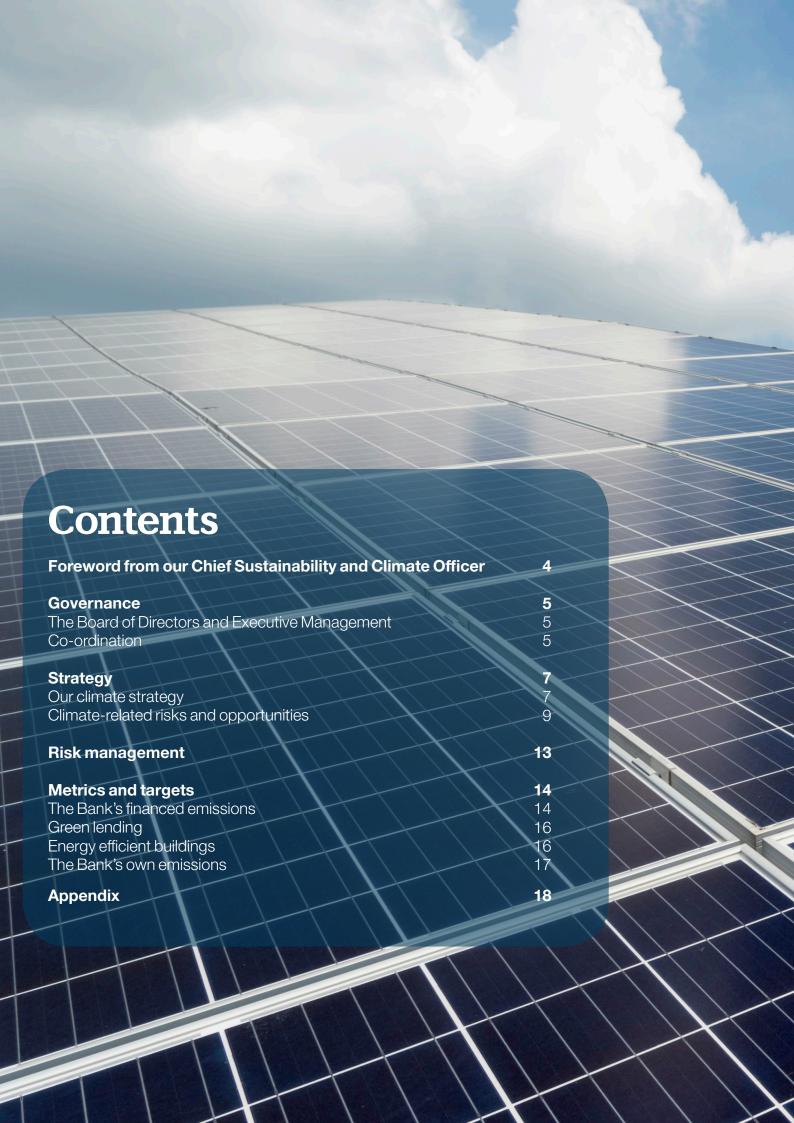
Handelsbanken's climate change progress report

# 2022





## **About this report**

The purpose of this report is to inform stakeholders about our progress related to climate change. The scope of the report is the lending operations of the Handelsbanken Group. For more information about our work with climate change mitigation in our role as Asset manager and Asset owner, please see the separate, publicly available reports at handelsbanken.com. With this report we hope to contribute to increased transparency and the continued development of forward-looking information related to climate change within the financial sector, as well as in the broader economy.

The report has been prepared in accordance with the recommendations of the Task Force on Climate-related Financial Disclosures.

## **About TCFD**

The international Task Force on Climate-related Financial Disclosures (TCFD) was formed in 2015 and tasked with correcting the scarcity of information regarding companies' work on, and management of, climate change. The TCFD has developed a reporting framework focused on providing useful information to lenders, insurers and investors.

The widespread adoption of the TCFD framework would allow for climate change to be factored into financial decision making, allowing a more efficient allocation of capital, and help smooth the transition to a low-carbon economy.

The TCFD published its implementation guidance June 2017, followed by an update in 2021, structuring its recommendations into four areas: Governance, Strategy, Risk Management, and Metrics and Targets. Together with underlying disclosures within each area, the framework provides a standardised and relevant way of helping investors and others understand how the reporting organisation assesses and manages climate-related risks and opportunities.



## Foreword from our Chief Sustainability and Climate Officer

As we issue this second climate change progress report covering the Bank's lending portfolio we do so with mixed emotions. On the one hand, eager to share our insights and proud to contribute them, and on the other hand we remain concerned about the state of the issue that compels our organisation to gather these insights in the first place: climate change.

Climate change is possibly the biggest challenge of our time and its consequences are increasingly severe and are felt worldwide as heatwaves, droughts, wildfires and floods are becoming more common and widespread. All bodies of society, both public and private, need to do more and accelerate the pace. At Handelsbanken, we are determined to do our part and support our customers through the climate transition by aligning our business decisions with the 1.5°C target and becoming a net-zero company by 2040.

In terms of global greenhouse gas emissions, 2022 did not deliver the reduction the world needed, by far. The global average temperature continues to rise and the window to stay below the 1.5°C limit stipulated by the Paris agreement alive is closing on us. This means that the world is edging increasingly closer to two costly outcomes: a delayed and thus disorderly transition with high costs as a result of stranded assets, or a transition which is too slow – or does not happen – with high costs as a result of adaptations to a warmer climate and the costs of disruption and destruction that come with a more unstable world.

But it is not all gloom and doom. Acknowledging that more will be needed from the global political agenda, the financial sector made significant progress in 2022 towards alignment with the Paris agreement. More than 60 members of the Net-Zero Banking Alliance, of which Handelsbanken is one, published science-based reduction targets for 2030, prioritising the most carbon intensive sectors or their most significant financial exposures. A lot of work lays ahead but a few fundamental pieces of the puzzle of aligning financial flows with the Paris agreement are gradually being put in place.

During 2022, Handelsbanken took several important steps towards this alignment and towards achieving our goal to be a net-zero company by 2040. We calculated our total financed emissions related to our real-estate lending portfolio and set an emission reduction target for 2030 in line with the 1.5°C limit. Significant progress was also made under our Responsible finance target of reaching 20 per cent green, social and sustainability-linked lending by 2025. On the governance side, we also strengthened our guidelines related to climate change to further align our lending to fossil energy with the 1.5°C limit. The Bank also updated its Green Bond framework to adapt it to market and regulatory developments but also to be able to support a wider range of customers, both corporate and private, in their transition and in their desires to make their business and homes more energy-efficient.

2022 was the first year in which we have been able to track progress towards our 2030 target for financed emission. Reported emission decreased with 7.4 per cent which is, albeit in line with the decrease required to reach the 2030 target, still a very early first indication of the direction needed. We remain humble to the challenges of data quality, changes in calculation methods, changed market conditions and regulations that all signal that we are in for a decisive decade but during which emission reductions are unlikely to be clear, linear and straight-forward.

In 2023, our work with the issue of climate change will continue to be an area of strategic focus for the Bank. Handelsbanken will further expand the scope of targets to include more high emitting sectors, with the aim to get targets approved by the Science Based Target Initiative. We will continue to develop products and services to support our customers on our common journey towards net-zero emissions.

This is Handelsbanken's second TCFD-report covering the Bank's lending portfolio and it focuses on those sectors that are the most material for the Bank from a climate perspective. Measuring, analysing, developing and reporting are all positives and powerful levers of change and for that reason we are proud to submit to our stakeholders this report and by doing so hopefully also contribute further insights to the broader market. There is still work to be done before the Bank has fully integrated all risk and opportunities related climate change into the Bank's operations, but we are determined to play our part and committed to transparency when it comes to our journey towards net-zero and Paris alignment.



**Catharina Belfrage Sahlstrand**Chief Sustainability and Climate Officer, Handelsbanken

## Governance

#### The Board of Directors and Executive Management

The Board has adopted an overarching Policy for sustainability, which sets out the direction of the Group's sustainability work. Management of risks and opportunities related to climate change is an integral part of the Group's sustainability work. The direction of the sustainability work is that Handelsbanken aims to integrate financial, social and environmental sustainability into all of the Bank's operations, which means that the Bank is to run financially sound, sustainable operations and encourage and contribute to sustainable development. This way, risks and costs can be reduced, while new business opportunities can be identified, employees stay motivated, and confidence in Handelsbanken maintained.

Group-wide decisions concerning climate strategy, and targets linked to this area, are made by the Bank's Chief Executive Officer (CEO). The CEO also establishes guidelines describing how various risks related to climate change should be managed and reported, including for example the guidelines on the Environment and Climate change.

The Chief Sustainability and Climate Officer reports to the CEO and the Board on the Bank's overall sustainability activities, including climate change, every quarter. This includes matters of urgency to the organisation, and performance in relation to the sustainability targets adopted by the Bank, such as the net-zero target and Responsible finance target. This reporting shall also include any significant deviations and, where necessary, actions taken as regards Handelsbanken's sustainability work. No significant deviations were reported to the Board during 2022, but examples of matters that were discussed from a strategic perspective include the exclusion of certain climate relevant sectors from the Bank's funds and conflicting goals in the energy sector.

In the third quarter, a training course was held for the Board and executive management on the global causes and consequences of climate change. The Board has also been kept up to date on the forthcoming sustainability regulations to be introduced as part of the EU's European Green Deal.

In 2022 the Bank's guidelines for the Environment and Climate change were revised to better align the Bank's lending towards fossil energy with the 1.5°C target. The guidelines were complemented with further guidance in the form of a sector framework, detailing the specific criteria under which Handelsbanken considers a fossil energy company to be aligned with the 1.5°C target and thereby potentially eligible for financing. For more information about the specific criteria see Sector framework – Fossil energy.

#### **Co-ordination**

Handelsbanken's sustainability work is co-ordinated by a Group-wide specialist function headed by Handelsbanken's Chief Sustainability and Climate Officer, who reports directly to the CEO. The Chief Sustainability and Climate Officer is part of the executive management team which means that sustainability-related matters are factored into the ongoing executive work and strategic decision making.

The Chief Sustainability and Climate Officer is also the Chair of Handelsbanken's Sustainability Committee, which was formed in 2010. The Sustainability Committee analyses the sustainability work undertaken by the Group and, where necessary, takes on a co-ordinating role.

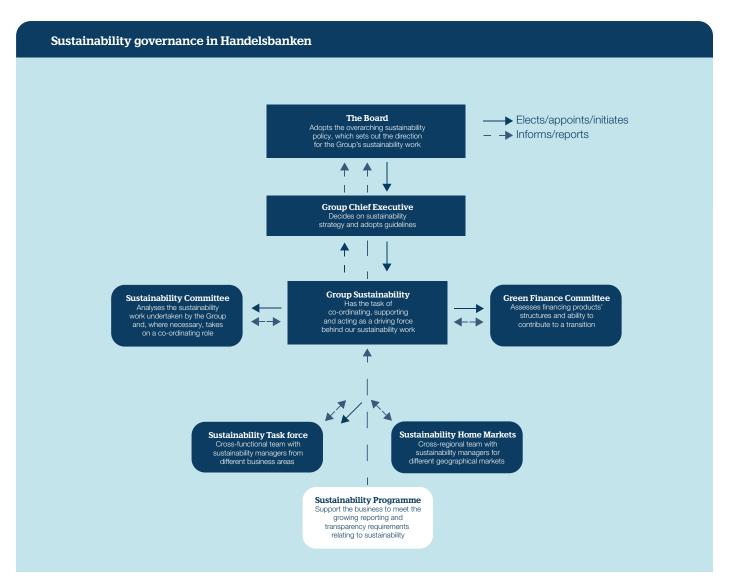


Potential problems and business opportunities are highlighted, and pre-emptive plans of action are established. Decision-makers from both the business operations and central departments make up the Sustainability Committee. Several of the members are also part of the Bank's executive management. The Sustainability Committee convenes at least three times per year, or more often if necessary.

In order to ensure that the Bank makes the best use of its capacity for innovation, and that all units across all parts of the Bank work together, there are additional working groups with a remit relating to sustainability. One example is the Green Finance Committee (GFC), which is responsible for determining technical criteria for green loans, and for approving assets for inclusion in Handelsbanken's portfolio of green assets. In its assessment, the Committee considers areas such as life-cycle analysis, positive effects on the climate, resilience and scientific targets.

There are also cross-regional teams with sustainability managers for different geographical markets, which are called Sustainability Home Markets. Both Norway and the UK have dedicated sustainability departments. In Norway, the Head of Sustainability is part of the management team for Handelsbanken Norway.

Furthermore, Handelsbanken has also launched a programme to meet the growing reporting and transparency requirements relating to sustainability. The programme will support the business operations and make it possible for the Bank to follow up and communicate on its sustainability targets, as well as to report according to regulations, requirements from public authorities and external obligations.



## **Strategy**

#### **Our climate strategy**

Sustainability is of strategic importance for Handelsbanken and the work is guided by our five group-wide sustainability targets. The targets address not only the Bank's long-term climate ambition, but also our determination to further and fully integrate sustainability into our core business - financing, savings & investments and advisory services.

#### Four pillars

Handelsbanken's climate strategy rests on four pillars:

- 1) Scientific targets
- 2) Measure and report
- 3) Support customers
- 4) Responsibility and collaboration

#### Scientific targets

Handelsbanken's climate goal is net-zero emissions of greenhouse gases by 2040 at the latest. The climate goal refers to the entire Group and covers lending, leasing and investments, as well as emissions from Handelsbanken's own operations, such as energy consumption and business travel. To ensure that the net-zero target and interim targets are in line with science, the Bank has committed to set emission reduction targets in accordance with the methods from the Science Based Targets initiative (SBTi). Handelsbanken has adopted an ambitious timeline, as the Bank is convinced that a rapid and orderly transition with the aim of limiting global warming to close to 1.5°C is best for the Banks's customers, the community in which we operate, and thus also for Handelsbanken.

The Bank will achieve its emissions reduction targets primarily by supporting customers via products and advisory services for reduced emissions and greater energy efficiency. The reduction in emissions is not expected to be linear over time, and in the short term, the reported emissions may rise. As the Bank continues its development of products and services, and these make their full impact over time, reported emissions are expected to decrease at the rate required for the targets to be achieved. The Bank notes, however, that we do not operate in isolation, and that climate change is a global problem requiring co-operation and global solutions. If the goals of the Paris Agreement are to be attained, ambitious global, regional and local climate policies will be needed to support these.

#### Net-zero 2040

Handelsbanken's climate goal is net-zero emissions of greenhouse gases by 2040 at the latest. The climate goal refers to the entire Group and covers lending, leasing and investments, as well as direct emissions from Handelsbanken's own operations.

In 2022, the Bank set its first interim reduction target covering its lending operations. The target is to reduce emissions ( $\rm CO_2e/m^2$ ) linked to the Bank's real estate lending with 36 per cent by 2030 from a 2021 baseline. The target encompasses approximately 80 per cent of the Bank's total lending to the public. The target is scientifically based and in line with the objective to keep the global warming at 1.5°C.

In 2023, Handelsbanken will further expand the scope of emission reduction targets to include more high emitting sectors. The Bank's objective is to set climate targets for the lending operations in line with the SBTi criteria, and for these to be validated during 2023. For more information about our 2030 target, please see *Metrics and Targets*, page 14.

#### Measure and report

Measurement, reporting and transparency are key elements of Handelsbanken's climate strategy. The first TCFD report covering the Bank's lending operation was published in 2021, and updated in June 2022.

Work on calculating emissions from the lending portfolio continued in 2022, and during the year, total emissions linked to the Bank's property financing were calculated for the first time. In the coming year, the scope of emission calculations will be expanded to include a greater proportion of the portfolio and more sectors. To ensure transparency and comparability for calculations of financed emissions, Handelsbanken has joined the Partnership for Carbon Accounting Financials (PCAF), which provides models for such calculations.



#### Support customers

Handelsbanken aims to work alongside its customers on their journey towards net-zero emissions of greenhouse gases. Central to this is the Bank's development of products and services that contribute to such reductions. In order to steer its work and build momentum, the Bank has published a target for our financing operations - by 2025, at least 20 per cent of the Bank's financing volume shall consist of green financing, social financing or financing that contributes to the borrower's measurable, sustainable transition, such as a reduction of emissions.

## 20 per cent Responsible finance by 2025

By 2025, at least 20 per cent of the Bank's financing volume shall consist of green financing, social financing or financing that contributes to the borrower's measurable, sustainable transition, such as a reduction of emissions.

During the year, the Bank's work to achieve its target has been ongoing, with the continued development of products and services with sustainability related features for both private and corporate customers. Sustainable financing products receive internal interest rate discount, allowing business units to give favorable conditions to green projects and thereby supporting the transition and attracting sustainable clients. During 2022 the Bank launched several green products, for example green financing products for electric fleets and vehicles. A continued focus on our green financing products offering to customers also supports our progress towards the Bank's Responsible financing target. For more information about the Responsible financing target and our progress, please see *Metrics and Targets*, page 16.

Europe is going through an energy crisis affecting Handelsbanken and its customers. In order to mitigate its effects the Bank offer tips andadvice on measures aimed at improving energy efficiency on its website. In 2022, Handelsbanken also initiated a collaboration with an external technology consultancy company which offers our real estate customers advice and analysis of climate risks, energy consumption measures and other sustainability aspects relating to their properties. The measures proposed to the customer can then be financed by Handelsbanken.

#### Responsibility and collaboration

Climate change is a global problem requiring global solutions and co-operation. This is why Handelsbanken has endorsed the Principles for Responsible Banking (PRB) and the Principles for Responsible Investment (PRI) for several years, and why the Bank continues to support international initiatives aimed at achieving sustainable development. In 2021 Handelsbanken joined Net-Zero Banking Alliance (NZBA) as one of its founding signatories.

No sector can solve the climate crisis on its own, and if the financial sector is to properly fulfil its role in the transition, ambitious global climate policies will be needed. There are examples of such policies at regional and national level, not the least within the EU, but from a global perspective, current climate policies mean that the targets of the Paris Agreement will not be achieved. In an attempt to help shape political action to address climate change, Handelsbanken joined a number of other companies in signing an open letter to the participants of COP27 in November 2022. The letter was co-ordinated by the global "We Mean Business" collective and urges governments to maintain their undertaking and renew their plans to limit the global temperature increase to 1.5°C.

To promote transparency and comparability between banks' reporting of financed emissions, Handelsbanken was part of the founding of the Nordic working group through PCAF during 2022. The working group's objective is to ascertain common calculation methods for the Nordic market, to be a channel for improved data quality and aligning national guidelines across the Nordic region.



#### **Climate-related risks and opportunities**

The exact consequences of climate change (physical risks) and the global response (transition risk) to prevent continued global warming, are difficult to predict. These two risks are interconnected and at the overall level, a higher transition risk means a reduced physical risk, and vice versa. Handelsbanken is convinced that a rapid and orderly transition aimed at limiting global warming to as close to 1.5°C as possible, would be best for our customers, for the communities we operate in, and thus also for Handelsbanken.

A bank's exposure to risks and opportunities relating to climate change is materially affected by the geographical and sectorial composition of the credit portfolio. Our analysis of climate-related risks and opportunities uses this understanding as a starting point. Handelsbanken's loans to the public amounted to approximately SEK 2,469 billion at the end of 2022, and these loans were almost exclusively granted in the five markets in which the Bank currently has significant operations. An overwhelming majority of the lending is related to real estate, at more than 80 per cent.

#### **Loans to the Public** 31 December 2022 By sector SEK **Proportion of** By country total lending % bn Sweden 66.8% Private individuals 48.9 1.209 UK 9.7% of which mortgage loans 412 1,018 of which other loans with property mortgages 6.1 152 Norway 12.9% 11.7 Housing co-operative associations 289 Finland 6.3% 29.7 Property management 734 The Netherlands 3.9% Manufacturing 37 1.5 Other countries 0.4% 1.6 Retail 41 0.3 Hotel and restaurant 6 0.1 Passenger and goods transport by sea 3 0.4 By client type Other transport and communication 10 8.0 Construction 21 Electricity, gas and water 16 0.7 Private individuals 48.9% Agriculture, hunting and forestry 22 0.9 Corporates 39.2% Other services 22 0.9 Housing co-operative associations 11.7% Holding, investment, insurance 39 1.6 Sovereigns and municipalities 0.2% companies Sovereigns and municipalities 5 0.2 0.7 Other corporate lending 18 100% 2,469

#### Exposure to carbon-intensive sectors

The table on the right shows the volume of the Bank's loans to the public to carbon-intensive sectors. Groups and sectors are defined in accordance with the recommendations of the TCFD. The Bank's lending to high emitting sectors is dominated by real estate lending and lending to other sectors is relatively small.

Lending to TCFD-sectors 31 December 2022	SEK r
Energy	9,74
Oil and Gas	31
Coal	
Electric Utilities	9,43
Transportation	7,38
Air Freight	5
Passenger Air Transportation	
Maritime Transportation	2,81
Rail Transportation	1,27
Trucking Services	2,86
Automobiles and Components	37
Materials and Buildings	761,98
Metals and Mining	2,56
Chemicals	3,70
Contstruction Materials	70
Capital Goods	9
Real Estate Management and Development	754,92
Agriculture, Food, and Forest Products	31,65
Beverages	1,45
Agriculture	12,46
Packaged Foods and Meats	4,01
Paper and Forest Products	13,71
Total	810,77

#### Buildings – risks and opportunities

Buildings account for approximately 40 per cent of the EU's energy consumption and 36 per cent of its carbon dioxide emissions and the EU sees energy efficiency in buildings as critical part of achieving net-zero greenhouse gas emissions by 2050. Given the Bank's large exposure to real estate, our lending to this sector constitutes a potentially substantial climate-related risk and business opportunity. Properties can be exposed to both physical climate risks and transition risk, but also entail opportunities for increased business volumes, in terms of financing our customers' investments related to climate change mitigation and adaptation.

#### Transition risks

Handelsbanken uses Energy Performance Certificates (EPC) with Energy label to assess the energy efficiency of the Bank's collateral in properties. The Bank has analysed all its property related lending in Sweden, Norway, United Kingdom and The Netherlands and identified collaterals with a valid EPC. In 2021, the decision was made to initiate a process to divest the Bank's operations in Denmark and Finland, therefore they are not included in the analysis.

The table on the right show the share of Handelsbanken's lending per energy label across the four markets. The proportion of properties with an energy label was the highest within residentials, with approximately 55 per cent of total lending within this category having an energy label.

However there are significant differences between countries looking at coverage of energy label, where our UK portfolio has the highest coverage at approximately 74 per cent of lending value and our Dutch portfolio had the lowest coverage at approximately 40 per cent.

Distribution energy labels				
Energy label	<b>Residen</b>	tials	Non-reside	entials
	SEK m	%	SEK m	%
A	13,936	1%	13,485	4%
B	60,595	4%	24,507	7%
C	166,768	10%	50,411	13%
D	239,587	14%	47,308	13%
E	295,999	18%	32,624	9%
F	144,706	9%	17,958	5%
G	59,835	4%	7,562	2%
Missing	689,294	41%	182,910	49%

The European Commission has presented a proposal for the revision of the Energy Performance of Buildings Directive. The proposal includes, among other things, the introduction of Minimum Energy Performance Standard (MEPS) for existing buildings. Should the proposal become reality, it would affect the Bank's customers and thus potentially also the Bank. Handelsbanken closely follows the development of the proposal.

#### **Transistion Risks**

Transition risks arising from regulatory requirements, such as a reduction in energy consumption or emissions of greenhouse gases, may be significant depending on the customer's capacity to bear the necessary investment costs.















Reduction requirements





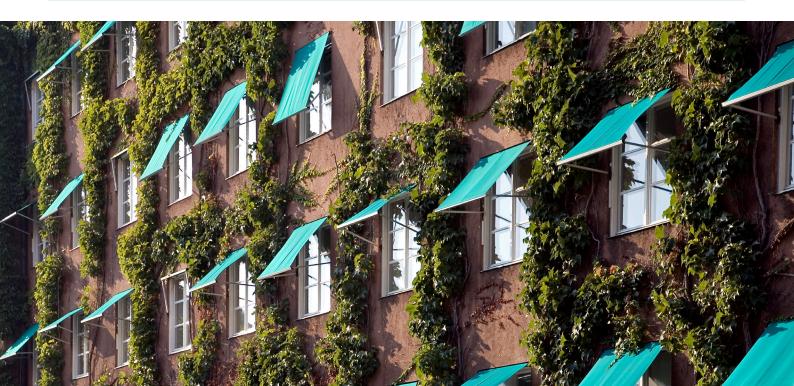


Costs









#### Physical climate risks

Physical climate risks are risks resulting from climatic events and are either acute or chronic. Acute risks include droughts, floods, extreme precipitation and wildfires. Chronic risks include rising temperatures, sea level rise and an accelerating loss of biodiversity.

The Bank performed a physical climate risk analysis on the Swedish property portfolio in 2021. The analysis covered two separate aspects – a nationwide and property-specific risk analysis covering mean sea level rise and a property-specific analysis covering both chronic and acute flooding risk in Stockholm.

The two analyses used climate scenarios provided by the Swedish Meteorological and Hydrological Institute (SMHI) based on the emissions scenario RCP 8.5. RCP 8.5 would result in an increase of global mean temperature of around 4.3°C by the year 2100 relative to pre-industrial temperatures. This is significantly higher than the goals set out in the Paris agreement and the UN estimates of where the world is heading given current climate policies, which they estimate would result in anincrease of roughly 2.8°C by the year 2100. Therefore, it could be said that RCP 8.5 represent a worst-case scenario in terms of physical climate risk.

The nationwide analysis covered flood risk of coastal properties due to mean sea level rise, i.e. chronic flooding. The result showed that less than 0.3 per cent of the Bank's exposure value to Swedish property collateral would be chronically flooded.

For the greater Stockholm area, an analysis of extreme sea level rise was performed. This demonstrated that a sea level rise of 1 metre would have a limited effect on Handelsbanken. The result of the property-specific analysis of flooding risk in the Stockholm area showed that less than 0.1 per cent of the exposure value was assessed as being chronically flooded due to a sea level rise of 1 metre. A similar analysis was performed for Gothenburg in 2020 with similar result. For more information, please the 2021 Climate change progress report.

During 2023, the Bank will expand on it analysis regarding physical climate risk in Sweden by incorporating flooding risk from rivers. As previous analysis covering flooding risk in Sweden, it will be performed on a property specific basis.

For its UK operations the Bank has sourced flood risk data at postcode level from external data provider JBA. JBA's flood risk assessment incorporates four flood risk types; river, coastal, surface water and groundwater chalk. The flood risk rating spans five bands, ranging from low to very high flood risk. As of 31 December 2022, 11 per cent of the collateral is in areas that have high or very high flood risk (2021: 11 per cent). Flood risk insurance is a condition of any lending and we do verify, and for larger exposures seek evidence, that flood risk insurance remains in place.

#### Opportunities

Among Handelsbanken's main climate-related opportunities are increased investments in energy efficiency in properties. To meet the EU's recently proposed target of a reduction in emissions of at least 55 per cent by 2030, buildings' energy efficiency must increase. As part of the post-Covid-19 recovery package, the EU has presented "A renovation wave for Europe" – a strategy aimed at improving buildings' energy performance via renovation. The renovation rate for buildings in the EU today is low – only 1 per cent of renovations improve buildings' energy performance. The aim is to at least double this annual rate with the renovation wave, so that 35 million buildings in the EU are renovated to be more energy efficient by 2030. According to the European Commission, annual investments of around EUR 325 billion will be needed to reach the set energy and environmental targets for 2030.

Increased investments in energy efficiency in properties may result in increased business volumes for the Bank due to our good market position, in terms of a large proportion of lending to the sector, coupled with good, long-term customer relationships. If undertaken to the requisite standard, renovations can lead to reduced energy costs, a stronger cash flow, and a higher property value.



#### Fossil fuels - risks

According to the UN, the burning of fossil fuels in the form of coal, oil and gas is the main cause of climate change, accounting for about 75 per cent of all global emissions of greenhouse gases. Reducing emissions from fossil fuels is therefore crucial to avert the worst effects of climate change.

According to the International Energy Agency (IEA), fossil fuels accounted for about 80 per cent of global energy consumption in 2020. All signs point to fossil fuels continuing to play an important role in the global energy supply for a long time to come, and ongoing investments in the maintenance of existing infrastructure will be required to secure the continued availability of energy before alternatives are sufficiently expanded. However, in order to reach the 1.5°C target, the use of fossil fuels must be reduced over time. In concrete terms, this means that no new oil or gas fields neither needs to nor should opened, and that no new coal mines are opened, or existing ones expanded. Between 2020 and 2030, the use of coal, oil and gas needs to be reduced by about 50 per cent, 20 per cent and 5 per cent respectively and by 2050, the reductions need to be about 90 per cent, 75 per cent and 55 per cent for coal, oil and gas respectively.



<sup>1</sup>Causes and Effects of Climate Change, United Nations <sup>2</sup>Net Zero by 2050 - A Roadmap for the Global Energy Sector, IEA

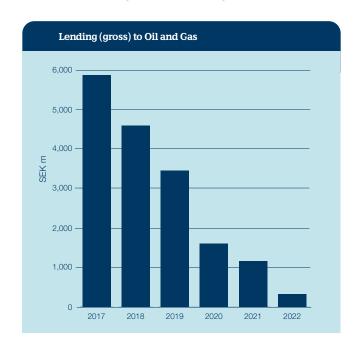
#### Lending to fossil fuels

In December 2015, the world took an important step towards stabilising the global climate through the adoption of the Paris Agreement, an agreement that has since then been ratified by all major economies and emitter's of greenhouse gases.

In 2016, Handelsbanken updated its guidelines on the Environment and Climate change and took a more restrictive stance towards the fossil fuel sector. The Bank decided that extra caution must be exercised in business relationships with companies operating in the fossil fuel sector.

During 2022 the Bank's guidelines for the Environment and Climate change was revised to better align the Bank's lending towards fossil energy with the 1.5°C target. The guidelines were complemented with further guidance in the form of a sector framework, detailing the specific criteria under which Handelsbanken considers an fossil energy company to be aligned with the 1.5°C target and thereby potentially eligible for lending. For more information about the specific criteria see Sector framework – Fossil energy.

The Bank has no lending to the coal sector and our lending to the oil and gas sector is small and has been decreasing for many years. Since 2017, lending to the sector has decreased with 95 per cent, from approximately SEK 5.9 billion to SEK 316 million, which represents approximately 0.01 per cent of the Bank's total lending to the public. The bank has no lending to upstream oil and gas companies.



## Risk Management

The Bank's process for identifying, assessing and managing climate risks is an integral part of the Bank's standard credit process. At Handelsbanken, the credit process is based on a conviction that a decentralised organisation with local presence ensures high quality in credit decisions.

Handelsbanken's view is that responsible actions are essential to long-term value creation. Climate-related risks may be associated with credit losses and capital costs due to a deterioration of customers' financial position. They may also be linked to inadequate compliance, which could eventually lead to legal consequences in the form of fines or other sanctions, risk of impaired reputation and decreased customer satisfaction. The management of climate-risks is thus a critical part of the Bank's general risk management.

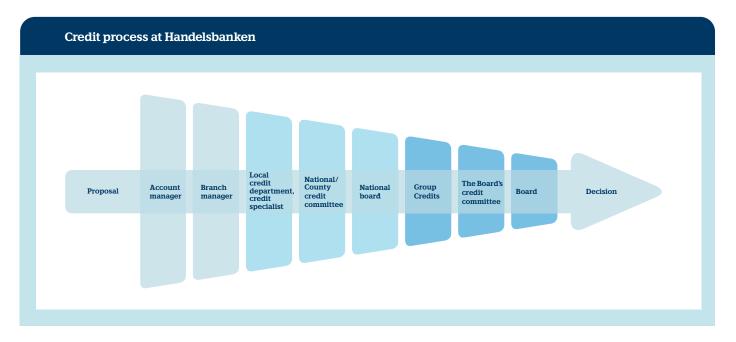
In accordance with the Bank's Policy for Sustainability, environmental risks, including climate risks, must be identified and be an integral part of risk assessment in the Bank's general risk areas, such as credit risk. Climate risks must be managed in line with Handelsbanken's generally low risk tolerance. The Bank seeks customers with high creditworthiness and the quality requirement may never be neglected in favor of higher credit volumes or to achieve higher returns. We must therefore assess and evaluate each customer based on established policies and guidelines related to lending as well as sustainability and climate.

The Bank can abstain from granting a credit if the climate risks are considered too high, and if, for example, a company does not adhere to such guidelines. Furthermore, the Bank avoids participating in financing of companies within sectors where high ESG risks are prominent. The Bank's guidelines on Environment and Climate change state for example, that the Bank will not enter into new business relationships with, or finance, companies that operate within coal mining, and is restrictive in its lending to companies that extract fossil fuels. Handelsbanken also excludes financing for new oil or gas extraction, or the expansion of existing oil or gas extraction, or any infrastructure directly linked thereto.

At Handelsbanken, the credit process is based on a conviction that a decentralised organisation with local presence ensures high quality in credit decisions. In Handelsbanken's decentralised organisation, each branch responsible for customers has full credit responsibility.

When assessing corporate customers and identifying potential ESG risks, the credit-granting process must consider environmental, social and governance factors and the associated risks – particularly environmental factors and the impact of climate change. This includes assessing whether, and if so to what extent, climate change affects the risk of financial strain and the credit risk that could arise thereof. Since the assessment is integrated into the Bank's standard credit process, the regular monitoring of the impact of ESG risks is also carried out in this process. The Bank's assessment creates an understanding of the customer's need for transition, and how Handelsbanken can support their work to reduce the risks in their business.

Handelsbanken will continuously develop and improve its capacity to identify, measure, manage and report risks associated with both physical climate-related risks and transition risks in the investment and credit processes, as well as the Bank's process for risk control and reporting. This involves developing existing procedures and processes in relevant areas, with the aim of being able to more effectively identify, value and also stress test assets exposed to climate-related risks.



## **Metrics and targets**

In order to track progress regarding our work regarding climate change, the Bank has developed a number of metrics and targets. The foundation for our metrics is our net-zero 2040 target and our target of having at least 20 per cent Responsible financing by 2025. The metrics presented are also used to measure and manage our climate-related risks and opportunities.

#### Net-zero 2040

Handelsbanken's target is to achieve net-zero emissions of greenhouse gases as soon as possible, and by 2040 at the latest. This includes lending, leases and investments, as well as the emissions generated from the Bank itself from its energy consumption and business travel, for example.

#### Responsible financing

To achieve net-zero financed emissions by 2040, we will set separate targets for individual asset classes and sectors.

By 2025, 20 per cent of the Bank's financing volume shall consist of green financing, social financing or financing that contributes to the borrower's measurable, sustainable transition.

Metrics used related to this target are:

- Green lending
- Sustainability-linked lending
- Energy efficient buildings

#### The Bank's own emissions

Handelsbanken's target is to achieve net-zero operations by 2040.

#### Responsible investment

The investment portfolios of Handelsbanken Fonder shall be in line with the goals and the transition pathway of the Paris Agreement, achieve net-zero emissions of greenhouse gases by 2040 at the latest, and increase the funds' contributions to the 2030 agenda.

Progress against this target is presented in Handelsbanken Fonder's Climate Report.

#### The Bank's financed emissions

As a bank, the absolute majority of Handelsbanken's emissions are indirect emissions in our value chain, and mainly derive from our loan and investment portfolios, which are referred to as financed emissions. The financial sector plays a major role in the transition to a net-zero economy and has a great responsibility, and great opportunities, to influence its customers. Therefore, Handelsbanken has set an ambitious net-zero target which includes the entire Group and covers lending, leasing and investments, as well as the Bank's own operations.

Given Handelsbanken's large exposure towards the real estate sector, with over 80 per cent of the Bank's total lending to the public being towards this sector, calculating our financed emissions from real estate related lending was our starting point. Work is underway to expand the scope of our financed emissions calculations to include more sectors, focusing on high-emitting sectors.

Calculations of financed emissions have been performed by applying methodology from Partnership for Carbon Accounting Financials (PCAF), providing a standardised methodology and thus aiding transparency and comparability of disclosed financed emissions.

#### Financed emissions from real estate lending

In October 2022, Handelsbanken published its first sector-specific target for the real estate sector, being that we shall reduce the greenhouse gas emissions from our real estate lending portfolio by 36 per cent per square metre by 2030, from a 2021 base year. This targets is in line with a 1.5°C pathway, based on data from the Carbon Risk Real Estate Monitor (CRREM).

## Target for our real estate lending portfolio

Handelsbanken commits to reduce its real estate lending portfolio greenhouse gas emissions by

36 per cent per square metre by 2030 from a 2021 base year.

The Bank's financed emissions calculations are based on Energy Performance Certificates (EPCs), when available. When EPC is not available, PCAF estimates on country and building-type level have been applied. The financed emissions calculations covers exposure secured by immovable property in Sweden, Norway, the UK and the Netherlands. For full calculation methodology, please see Appendix.

Since our baseline year of 2021, the financed emissions intensity per square metre from our real estate lending has reduced by 7.4 per cent across the entire real estate lending portfolio, with the residential portfolio reducing the most at 9.0 per cent. The reduction is primarily driven by two factors - improvement in EPC coverage and improved energy efficiency in the portfolio. Compared to 2021, the share of collateral with an energy label has increased significantly and as reported emissions based on energy label data tend to be lower than estimates, this has had an impact on our financed emissions intensity. As the energy label coverage has particularly increased in Sweden, where the emission intensity is lower compared to, for example, the UK and the Netherlands, this has further enhanced the reduction in emissions intensity in the overall portfolio. Secondly, the distribution of properties with an energy label has improved, with a higher exposure towards more energy efficient properties. This is both due to an inflow of properties with a high energy efficiency and an improvement of the energy efficiency of buildings that were previously part of our lending portfolio, thus lowering the emission intensity of the portfolio.

During 2022, Handelsbanken has focused its decarbonisation efforts related to real estate within two main tracks. Firstly, we have worked with our customers in order to support their decarbonisation efforts by offering products and services that contribute to this work. The progress in this area can be seen both from our reduction in financed emissions intensity (kgCO $_2$ e/m²) as well as an increase in total green lending in our lending portfolio. Secondly, a lot of focus has been on increasing data availability and data quality because without good data, real world progress cannot be measured and improved. While data availability and data quality has improved since our baseline calculations as at 2021, there is much more work to be done and we will continuously be working to improve data quality and bettering methodologies accordingly.

In the coming year, we will continue our work towards our target of reducing the financed emissions from our real estate lending portfolio with 36 per cent by 2030. We will do this by continued focus on supporting our customers in increasing energy efficiency and switching to low emissions energy sources. Furthermore, we will continue to further develop our change and impact analysis in order to better establish to what extent different factors contribute to any changes of our emissions intensity. We expect that data availability and data quality improvements will have effects on our reported emissions intensity going forward, but we are intent on being transparent about our progress towards our sector target.

near estate w	ith an Energy	label				
Asset class	Exposure (SEK m)	Total financed emissions (tCO <sub>2</sub> e)	Economic emission intensity (kgCO <sub>2</sub> e/SEK m)	Physical emission intensity (kgCO <sub>2</sub> e/m²)	Data quality score PCAF (1-5, 1 = Highest data quality)	Change fron base year* (kgCO <sub>2</sub> e/m²)
Residentials	981,387	269,097	274	7.2	3.3	-10.2%
Non-residentials	193,753	123,475	637	19.4	3.6	-17.5%
Total	1,175,140	392,571	334	9.0	3.4	-8.4%
Residentials	(SEK m) 679,702	<b>emissions</b> (tCO <sub>2</sub> e) 213,688	emission intensity (kgCO <sub>2</sub> e/SEK m) 314	emission intensity (kgCO <sub>2</sub> e/m²) 9.5	PCAF (1-5, 1 = Highest data quality) 4.2	base year* (kgCO <sub>2</sub> e/m²)
Non-residentials	181.405	213,688	1.308	9.5 25.1	4.2 4.4	-4.8% 4.5%
Total	861,107	451,042	524	14.1	4,2	-1.6%
Real estate to	tal					
Real estate to	Exposure (SEK m)	Total financed emissions (tCO <sub>2</sub> e)	Economic emission intensity (kgCO <sub>2</sub> e/SEK m)	Physical emission intensity (kgCO <sub>2</sub> e/m²)	Data quality score PCAF (1-5, 1 = Highest data quality)	Change from base year* (kgCO <sub>2</sub> e/m²)
	Exposure	emissions	emission intensity	emission intensity	PCAF	base year
Asset class	Exposure (SEK m)	emissions (tCO <sub>2</sub> e)	emission intensity (kgCO <sub>2</sub> e/SEK m)	emission intensity (kgCO <sub>2</sub> e/m²)	PCAF (1-5, 1 = Highest data quality)	base year* (kgCO <sub>2</sub> e/m²)

#### **Green lending**

The Bank has set an ambitious target for Responsible finance - by 2025, 20 per cent of the Bank's financing volume shall consist of green financing, social financing or financing that contributes to the borrower's measurable, sustainable transition. This target requires additional focus on both products, services and distribution and thus aims to speed-up the Bank's business development within Responsible finance to position us for the years to come and ultimately reduce emissions.



The Bank's volume of green lending amounted to over SEK 63 billion at the end of 2022. This represents an increase of almost 130 per cent compared to the previous year. In addition to green lending, the Bank also has significant sustainability-linked lending, amounting to SEK 59 billion at the end of 2022. During 2022, we have had an increased focus on developing our sustainability-linked lending and lending to green buildings and green mortgages, contributing to both these segment more than doubling.

With a higher proportion of green lending, we are contributing to aligning lending and environmental objectives as well as reducing the climate risks in our portfolio. Furthermore, this also reflects our efforts in supporting our customers in their transition to become more sustainable and thus supporting a decarbonisation of the economy. For example, by supporting our customers within the real estate sector to make their properties more energy efficient, the proportion of green assets on our balance sheet will increase as the emissions from the same properties will decrease.

#### **Energy efficient buildings**

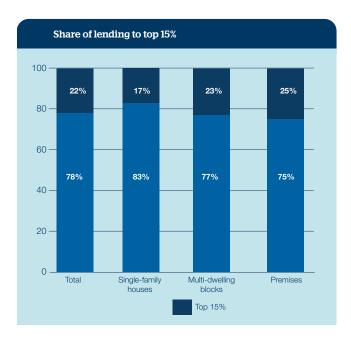
Major investments in society are needed to achieve the 17 Sustainability Development Goals and the targets of the Paris Agreement. To accelerate development, the EU has developed an action plan for financing sustainable growth with ten areas for action. Handelsbanken supports the EU's action plan for financing sustainable growth and we work actively to incorporate the various parts of the action plan into our business operations.

The Bank's reporting of key figures linked to the EU taxonomy will, over time, become increasingly important as a metric of climate change opportunities.

As part of the analysis of Energy Performance Certificates (EPC), Handelsbanken has analysed what share of lending fell within the 15 per cent with the highest energy efficiency. This can be said to correspond to the EU taxonomy's requirements with regards to climate change mitigation within the category *Acquisition and ownership of buildings*. In order for an activity to be taxonomy-aligned, it also needs to comply with the do no significant harm criteria. The analysis was performed on the Bank's real estate lending in Sweden, by property type and based on loan data as of 31 December 2022 and EPC statistics from January 2023.

Top 15 % per building type	
Building type	Energy performance (kWh/m²)
Single-family houses Multi-dwelling blocks Premises	63 86 84

Of the total analysed lending volume with an EPC, 22 per cent was to buildings within the top 15 per cent most energy efficient for their respective building type.



The share of buildings within the top 15 per cent differs between the different building types. Most notable is premises, where 25 per cent the Bank's lending to this category is to buildings qualifying for the top 15 per cent most energy efficient buildings. Within all categories, more than 15 per cent of the analysed volume is towards the top 15 per cent most energy efficient buildings, meaning that the Bank's lending in terms of volume is positively skewed towards buildings with higher energy efficiency.

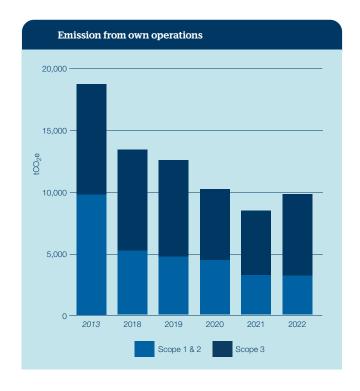
Due to lack of available market data on top 15 per cent within our home markets other than Sweden, these have not been included. Handelsbanken will continuously work to increase the scope of the analysis to include more of our home markets, as data availability allows.

#### The Bank's own emissions

Handelsbanken's target of achieving net-zero emissions of greenhouse gases as soon as possible, but no later than 2040, applies to the Group's lending, leasing and investments as well as Handelsbanken's own operations, such as the emissions from our energy consumption and business travel.

The Bank's direct impact derives mainly from energy consumption, business travel and transport as well as use of resources such as paper. In 2022, emissions increased by 1,336 tonnes compared to 2021. This was partly attributable to the fact that new emission sources have been included in the calculations, as more supplier data has become available. Also contributing was less stringent Covid-19 restrictions which have led to more business travel, but levels are lower than before the pandemic, due to changing travel habits.

Systematic environmental work is continuously performed within Handelsbanken to reduce the environmental impact of our own operations. Since 2013, the Bank has reduced its greenhouse gas emissions by 45 per cent. Handelsbanken's strategy for decreasing emission from its operations and for achieving net-zero operations focuses on a number of areas. Please see table below for examples of how we work to achieve net-zero operations.



Focus area	
Energy efficiency	A significant share of the emissions from our own operations comes from energy consumption, for heating and cooling of our offices and electricity used. An important step towards net-zero operations is therefore to focus on energy efficiency, in order to ensure that we do not consume more energy than necessary. Since 2018, 100 per cent of our electricity consumption is from renewable sources.
Emissions from business travel	We intend to minimize travel emissions where possible and as part of this Handelsbanken strengthened its guidelines for business travel in 2021 aiming to promote use of more sustainable modes of travel where possible and limit travel by air.
Engaging our colleagues	In order to achieve net-zero emissions, it is key to engage all employees to work towards our common goal. Handelsbanken's decentralised way of working creates commitment and gives every employee both responsibility and opportunities to make an impact on the Bank's operations.
Carbon offsets	Emissions that cannot be avoided are offset through high quality carbon offsets. Handelsbanken purchases carbon offsets through projects that are certified based on the Gold Standard, a certification endorsed by more than 80 non-governmental organisations (NGOs) that ensures the projects contribute to long-term sustainable development. The Bank strives to select projects with high additionality, which means that the projects would not have been implemented without financing by means of climate compensation. As an extension of this work, the Bank also invests in carbon removal certificates with the aim of supporting the market development for high quality carbon capture and storage.

## Appendix:

## Financed emissions methodology

#### Methodology

The financed emissions calculations in this report are based on data as at 31 December 2022 and only includes on-balance-sheet exposures. For inclusion in the analysis, the base requirement is that the exposure is secured by immovable property. As eligible exposures are the only part of the exposure which has an attributed real estate collateral according to Handelsbanken's capital requirements allocation, it is possible that an agreement can have a larger exposure than included in the analysis.

The collateral allocation used in the analysis is the one used in Handelsbanken's capital requirements calculation. The property value applied to the calculations depends on if the exposure to the property existed in the previous calculation of our financed emissions or not. If the exposure did not exist in the previous calculation, the value of the latest approved valuation is used. If the exposure did exist, and has not been refinanced (loan value has not increased), the property value used in the previous calculation is applied. If the exposure did exist, and has been refinanced (loan value has increased), the property value is updated and the value of the latest approved valuation is applied. The fluctuation in property value due to exchange rate fluctuations over time is eliminated.

Property-specific energy data applied in the calculations are collected from national agencies or independent data sources for each country respectively. Where information on energy label for a property is split between several buildings on one property, we firstly calculate the emissions from each building before aggregating this to property level.

The granularity of the emission factors applied to the calculations will depend on whether the energy label for a building is available, and also how much of the underlying data to the energy label is available. This creates five different scenarios, which will determine calculation method, emission factor data applied and data quality score. For all scenarios, the attribution factor is calculated by dividing the loan value by the property value (LTV). The property emissions are multiplied by the attribution factor to get Handelsbanken's financed emissions per property.

Scenario	Calculation method	Emission factor data	Data Quality Score
Energy performance, heated area and specific energy source	Energy performance (per m²) for a building is multiplied by its heated area to get the total energy usage for a building. The energy usage per building is then multiplied by the relevant emissions factor, depending on main heating source, to get the building emissions. If a building has a combination of two heating sources, a 50/50 distribution between these is assumed.  If a property has more than one energy certificate (indicating several buildings), total emissions for the property is calculated using weighted average emissions for each building, based on heated area.  Data on tenant activity or property electricity (for multi-family buildings) per kWh/m² is multiplied by the property's total heated area and the emission factor for electricity to get the total emissions from tenant activity or property electricity.  For the calculations included in this report, this scenario only applies to Swedish real estate due to limited data availability for other markets.	Emission factors for different energy sources, see Table Emission factors, Sweden.  Household or tenant electricity, see table Household and tenant electricity consumption, Sweden.	3

Scenario	Calculation method	Emission factor data	Data Quality Score
Energy label and heated area	Energy label of the property is matched against PCAF estimates on emissions per m², which is based on the specific Energy label (A-G) and type of property, to get the emissions (kgCO₂e/m²) for the property, including emissions from household electricity.  Emissions per m² (kgCO₂e/m²) is multiplied by the area of the property to get the total annual emissions for the property.	PCAF estimates on emissions per m² (kgCO <sub>2</sub> e/m²).	3
Energy label and estimated area	Energy label of the property is matched against PCAF estimates on emissions per m², which is based on the specific Energy label (A-G) and type of property, to get the emissions (kgCO₂e/m²) for the property, including emissions from household electricity.  Emissions per m² (kgCO₂e/m²) is multiplied by the average area of the specific type of property to get the total annual emissions for the property.	PCAF estimates on emissions per m² (kgCO <sub>2</sub> e/m²).  Estimates on average heated area, see table Average building areas.	5
No energy label but heated area	For properties without an EPC, the average emissions per m² (kgCO₂e/m²) for the specific building type is applied for the calculations. This includes household electricity.  Emissions per m² (kgCO₂e/m²) is multiplied by the area of the property to get the total emissions for the property.	PCAF estimates on emissions per m² (kgCO <sub>2</sub> e/m²).	4
No energy label and estimated area	For properties without an EPC, the average emissions per m² (kgCO <sub>2</sub> e/m²) for the specific building type is applied for the calculations. This includes household electricity.  Emissions per m² (kgCO <sub>2</sub> e/m²) is multiplied by the average area of the specific type of property to get the total annual emissions for the property.	PCAF estimates on emissions per m² (kgCO₂e/m²). Estimates on average heated area, see table Average building areas.	5

#### Input data

Average building a	Average building areas (m <sup>2</sup> ) <sup>3</sup>			
	Sweden	Norway	UK	Netherlands
Single-family houses	127	154	192	132
Muliti-family houses	1,092	1,192	2,046	576
Premises Apartments	356	929	570	554
	67	91	61	80

Emission factors, Sweden <sup>4</sup>	
Energy source	<b>Emission factor</b> (gCO <sub>2</sub> e/kWh)
Biofuel	0,0
District heating	46,1
Electricity	9,0
Gas	204,8
Geothermal	0,0
Oil	267,3

Household a	Household and tenant electricity consumption, Sweden <sup>5</sup>		
Building type		kWh/m²	
Single-family hou Multi-family hous Premises Tenant-owner as: Tenant-owned ar	sociations	35 51 127 15 36	

### Methodology for tenant-owner associations and tenant-owned apartments

For asset classes tenant-owner associations and tenant-owned apartments, PCAF does not currently provide a methodology. Handelsbanken has therefore developed a method to calculate financed emissions from these asset classes, which has been applied to our lending to tenant-owner associations and tenant-owned apartments in Sweden and in Norway.

The methodology will be further developed over time, and figures possible revised, as more data becomes available, calculation methods are improved and our own understanding develops.

As all banks with exposure to tenant-owner associations and tenant-owned apartments will face the same difficulties in finding a method for estimating the financed emissions for these asset classes, Handelsbanken is collaborating with other banks in the Nordics to establish a common methodology in order to promote transparency and comparability.

#### **Tenant-owner associations**

For the tenant-owner association, building emissions are calculated using one of the scenarios presented in on page 18, depending on data availability. To avoid double counting, a distribution factor is applied, meaning that the building emissions are divided between the tenant-owner association and the tenant-owned apartments. The distribution factor applied is based on the average loan-to-value ratio of tenant-owned associations in Sweden and Norway, respectively.

The Bank's financed emissions are calculated by multiplying the property emissions attributable to the tenant-owner association by the association's attribution factor.

#### **Tenant-owned apartments**

When calculating the emissions from individual tenant-owned apartments, the emissions intensity per square metre of the building in which the apartment is located is applied. The emission intensity per square metre is multiplied by the floor area of the specific apartment, giving the emissions for that apartment. If no area for the specific apartment is available, an average apartment area for the specific country is applied.

The Bank's financed emissions are calculated by multiplying the emissions attributable to the apartment by the attribution factor of that apartment.

Distribution of emissions <sup>6</sup>			
Country	% to tenant- owner associations	% to tenant- owned apartments	
Sweden Norway	29% 11%	71% 89%	

<sup>&</sup>lt;sup>3</sup> PCAF European building emission factor database <sup>4</sup>IPCC 2014; Swedenergy 2021; EEA 2021; Swedish Environmental Protection Energy

<sup>&</sup>lt;sup>5</sup> Swedish Energy Agency 2022; Swedish National Board of Housing Building and Planning.
<sup>6</sup> Finansinspektionen; Statistics Norway

#### Calculations broken down per country, asset class and energy label availability

Asset class	Exposure	Financed emissions	Economic emissions intensity	Physical emissions intensity	Data quality so
	(SEK m)	(tCO <sub>2</sub> e)	(kgCO <sub>2</sub> e/SEK m)	(kgCO <sub>2</sub> e/m <sup>2</sup> )	(1-5, 1= Highest data of
Single-family houses	571,226	133,434	234	6.6	3.7
With energy label	172,967	17,603	102	2.6	3.0
Without energy label	398,259	115,831	291	8.5	4.0
Tenant-owned apartments	307,284	27,598	90	4.1	-
With energy label	264,324	21,831	83	3.8	-
Without energy label	42,960	5,767	134	5.9	-
Tenant-owner associations	204,989	20,348	99	1.7	-
With energy label	179,461	17,094	95	1.6	-
Without energy label	25,527	3,255	127	2.4	-
Multi-dwelling blocks	179,604	66,044	368	6.6	3.2
With energy label	140,970	45,838	325	6.0	3.0
Without energy label	38,634	20,206	523	8.3	4.0
Premises	175,090	167,987	959	16.7	3.6
With energy label	84,431	21,002	249	6.1	3.0
Without energy label	90,659	146,985	1,621	22.1	4.1

Asset class	Exposure (SEK m)	Financed emissions (tCO <sub>2</sub> e)	Economic emissions intensity (kgCO <sub>2</sub> e/SEK m)	Physical emissions intensity (kgCO <sub>2</sub> e/m²)	Data quality so PCAF (1-5, 1= Highest data
Single-family houses	86,752	10,380	120	5.0	4.1
With energy label	39,678	4,785	121	5.3	3.7
Without energy label	47,074	5,596	119	4.7	4.4
Apartments	27,285	1,982	73	4.8	4.1
With energy label	17,098	1,229	72	4.8	3.8
Without energy label	10,187	754	74	4.6	4.5
Tenant-owned apartments	10,554	879	83	4.7	-
With energy label	6,520	574	88	5.1	-
Without energy label	4,034	304	75	4.1	-
Tenant-owner associations	28,650	291	10	0.5	-
With energy label	1,081	16	15	0.7	-
Without energy label	27,568	275	10	0.5	-
Multi-dwelling blocks	18,514	2,309	125	4.8	4.5
With energy label	3,040	420	138	5.7	3.8
Without energy label	15,475	1,888	122	4.6	4.6
Premises	104,436	7,872	75	2.7	4.0
With energy label	57,986	3,394	59	2.6	3.7
Without energy labe	46,450	4,478	96	2.7	4.3

Asset class	Exposure (SEK m)	Financed emissions (tCO <sub>2</sub> e)	Economic emissions intensity (kgCO <sub>2</sub> e/SEK m)	Physical emissions intensity (kgCO <sub>2</sub> e/m²)	Data quality so PCAF (1-5, 1= Highest data of
Single-family houses	83,483	67,237	805	35.6	3.4
With energy label	64,961	52,738	812	35.8	3.2
Without energy label	18,522	14,499	783	34.9	4.4
Apartments	15,867	7,264	458	27.6	3.5
With energy label	13,835	6,309	456	27.3	3.3
Without energy label	2,032	955	470	29.5	4.5
Multi-dwelling blocks	55,473	102,280	1,844	30.0	3.7
With energy label	45,282	76,170	1,682	30.2	3.6
Without energy label	10,191	26,110	2,562	29.5	4.5
Premises	74,234	127,186	1,713	57.8	4.7
With energy label	46,168	84,636	1,833	58.4	4.6
Without energy label	28,066	42,550	1,516	56.6	5.0

Asset class	Exposure (SEK m)	Financed emissions (tCO <sub>2</sub> e)	Economic emissions intensity (kgCO <sub>2</sub> e/SEK m)	Physical emissions intensity (kgCO <sub>2</sub> e/m²)	Data quality sco PCAF (1-5, 1= Highest data qu
Single-family houses	34,985	25,440	727	35.3	4.8
With energy label	18,568	15,183	818	36.4	4.7
Without energy label	16,417	10,257	625	33.8	5.0
Apartments	35,827	16,932	473	29.1	4.9
With energy label	13,482	9,224	684	28.4	4.7
Without energy label	22,345	7,709	345	29.9	5.0
Multi-dwelling blocks	595	367	616	28.7	4.8
With energy label	121	85	701	25.4	4.3
Without energy label	475	282	594	29.9	5.0
Premises	21,397	57,783	2,700	101.5	4.9
With energy label	5,168	14,443	2,795	87.9	4.6
Without energy label	16,229	43,340	2,670	107.0	5.0

#### Data quality score

To transparently disclose the data quality in the analysis, the PCAF methodology provides a data quality matrix. With the exception of tenant-owner associations and tenant-owned apartments, all of the included exposures have been assigned a data quality score based on the data quality matrix from PCAF. When data with different data quality scores have been used in the calculations, this is indicated by a weighted average data quality score, calculated according to the PCAF methodology.

Since our first calculations as at 2021, the data quality score of our real estate lending portfolio has improved slightly, due to better energy label coverage across all countries included in the calculations. We will continue to work to further better the data coverage and the data quality where possible.