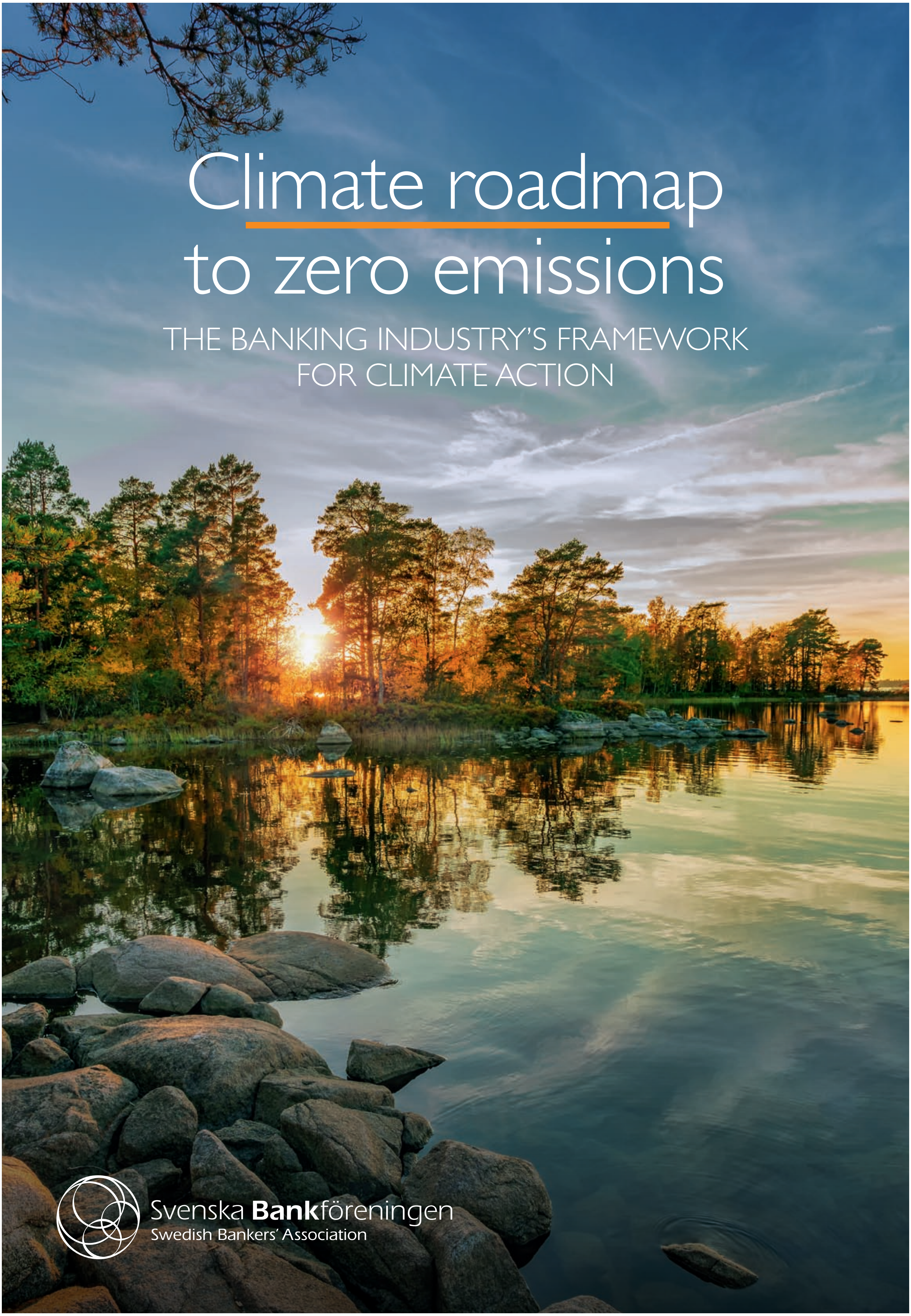
Climate roadmap to zero emissions

THE BANKING INDUSTRY'S FRAMEWORK FOR CLIMATE ACTION



Svenska Bankföreningen
Swedish Bankers' Association

About the Swedish Bankers' Association

The Swedish Bankers' Association represents banks and financial institutions in Sweden and currently has 31 member banks with operations in Sweden. Together, the member banks constitute four-fifths of the Swedish banking market. We are working to achieve healthy development of banking in Sweden, for the benefit of the banks' customers and society as a whole. Our goal is for the Swedish banking sector to be customer-friendly, stable, efficient and secure. We focus especially on activities that promote innovation and digital solutions in the financial sector. The Swedish Bankers' Association represents the banks in many banking issues. One important task is to help ensure that regulations and frameworks support the banks' role in growth and social welfare. The Swedish Bankers' Association is in regular dialogue with decision-makers in parliament and government, as well as with authorities such as the Swedish Central Bank and the Swedish Financial Supervisory Authority. Our experts frequently participate as specialists in government inquiries and committees. The association is also active at European level via the European Banking Federation (EBF) and through close collaboration with the Nordic and Baltic banking associations. The members are both the bank themselves, finance companies and mortgage credit institutions that are part of the banking groups. Branches of foreign banks operating in Sweden are also members of the Swedish Bankers' Association. For more information, see www.swedishbankers.se.

Foreword

Can Sweden, with only a few thousandths of the world's total carbon emissions, make any difference in slowing down the global temperature rise? And can the banks make any difference when it comes to Sweden's climate efforts? Our answer to both questions is yes.

In a globalised world, good ideas and effective solutions travel quickly. As a nation, Sweden is well on its way to becoming one of the world's first fossil-free welfare countries. The banks will play a central role on its way there.

Sound investments, which are supported by the banks, can encourage companies with large emissions to change to fossil-free without losing their competitiveness. Innovations and entrepreneurship can increase society's efficient use of resources. A journey that can inspire both our European neighbours and emerging countries in completely different parts of the world. In this way, Sweden can play a global role in tackling climate change, and the journey to fossil-free can be our next major export success.

The rate of climate reset in trade and industry is already high. Many sectors, not least in industry, have presented roadmaps for reducing their greenhouse gas emissions. We welcome these and, with the measures presented in this roadmap, we wish to ensure that funding issues will not be an obstacle but will instead help business and industry in tackling climate change.

It was against this background that the Swedish Bankers' Association initiated the process of developing a common climate roadmap for the banking industry. Now that the banks' roadmap for helping Sweden reach the goal of net-zero emissions has been launched, it is just the end of the beginning of a far-reaching process in which the banks will integrate climate aspects into their core business.

The work has involved not only employees of the banks and the Swedish Bankers' Association, but also experts from other industries, researchers, climate consultants, government officials and politicians. A special Sustainability Council, consisting of the member banks' sustainability managers, has guided the efforts and a reference group, consisting of those operationally responsible for different business areas at the banks, has worked actively on the report.

The consulting company, Material Economics, has assisted with thorough preparatory work and expert support during the preparation of the report. I would like to send a warm thank you to all who have helped!

The climate roadmap has been approved by both the Board of Directors of the Swedish Bankers' Association and Bankforum, which is the Swedish Bankers' Association's platform for the smaller and medium-sized banks. All members of the Swedish Bankers' Association actively support the roadmap.

Now the journey begins!

Hans Lindberg

Summary

Society is facing significant challenges to reduce emissions at a rate sufficient to achieve the climate goals and, thus, prevent the far-reaching costs that a high average global temperature rise entails. The responsibility rests primarily on the political system, but the financial system has both a responsibility and the ability and willingness to assist in financing the climate transition and adapting its operations to climate-related risks and opportunities.

The role of the banking industry in the climate action is to support its customers in the move to sustainable solutions and to integrate climate-related risks and opportunities into the banks' operations and lending. The banks per se have a relatively small direct impact on the environment and climate. First and foremost, the industry can help finance the climate action by helping to reallocate capital flows to low-carbon activities.

The banks' core activities have already been adjusted to the climate aspects. For many years now, banks in Sweden have been working to adapt their advice, lending and savings products to support projects with high climate benefits and to price higher risk correctly, in the form of negative climate impacts in projects.

Sweden's climate goal of net-zero emissions by 2045 entails major demands for change. With this roadmap, the banks wish to be instrumental in ensuring that financing issues will not be an obstacle, but rather a promoter, in reaching the climate goal.

The purpose of the roadmap is to supplement the banks' existing efforts to integrate climate aspects into their business by means of the following:

The Swedish Bankers' Association is joining the PRB, Principles for Responsible Banking, as a support organisation and is encouraging those members who have not yet made the commitment to sign the PRB.

TO ACHIEVE NET-ZERO EMISSIONS, THE FOLLOWING MILESTONES HAVE BEEN SET:	
1	**2021–2022:** The banks identify their individually most significant positive and negative effects on society, the economy and the environment.
2	**2021–2024:** The banks undertake to measure the carbon footprint from their relevant financing and investment activities for their own emissions and indirect emissions (scopes 1–3).
3	**2023–2026:** The banks ensure that strategies and goals for the Swedish operations contribute to achieving Sweden's adopted goal of net-zero emissions by 2045[1]. Based on the banks' climate reporting, in accordance with the PRB, the Swedish Bankers' Association will continuously compile and present the sector's common path towards the climate goals.

To achieve the net-zero emissions goal, incentives and transparency need to be strengthened so as to enable an efficient distribution of capital and support the transition to a low-carbon economy. Lending activities and risk management will be adapted to include climate aspects.

The Swedish banks therefore, have the goal of going further than the EU by taking into account the EU's taxonomy for sustainable investments when granting loans. The Swedish banks undertake to comply as soon as possible with the recommendations of the Global Task Force on Climate-Related Financial Disclosure (TCFD) initiative on climate-related financial disclosures. Several members have already started on this process, and the others are encouraged to follow suit.

The Swedish Bankers' Association summarises the work of the banking industry according to the climate roadmap.
This includes:

- Compiling relevant climate metrics and timings for accounting and follow-up in accordance with the PRB guidelines.
- Annually summarising progress in the action plans, which the banks produce in accordance with the PRB. Creating a structure for monitoring how the action plans contribute at the aggregated level to the banking industry's goals.

However, the major climate efforts in each bank happen by them competing to produce efficient and affordable green banking products. The roadmap creates a framework within which everyone can compete.

COMMON AREAS FOR CLIMATE INITIATIVES VIA THE SWEDISH BANKERS' ASSOCIATION:

To achieve the banking industry's goals and commitments in the climate field, two areas have been identified where the banks can work together via the Swedish Bankers' Association. These are:

1	Collaborating on the interpretation of international regulations and initiatives for how climate-related definitions, standards, regulations and initiatives will be applied in Sweden. In the areas where this is appropriate, strive for common interpretations with other Nordic or European countries.
2	Facilitate data gathering from customers and from authorities and other operators, where the banks see a need for supplementation in a Swedish context.

JOINT DIALOGUE VIA THE SWEDISH BANKERS' ASSOCIATION WITH LEGISLATORS AND OTHER OPERATORS

Such joint efforts could include identifying the need for new regulations in the form of new control measures, risk-sharing needs or removing barriers in industries financed by the banks in order to accelerate the climate action.

Goals

BUSINESS OPERATIONS CONSISTENT WITH THE 2045 NET-ZERO EMISSIONS CLIMATE GOAL	
1	**2021–2022:** Current situation survey
2	**2021–2024:** Measurement methods and statistics
3	**2023–2026:** Strategies and objectives shall contribute to attaining Sweden's climate goals

Instruments

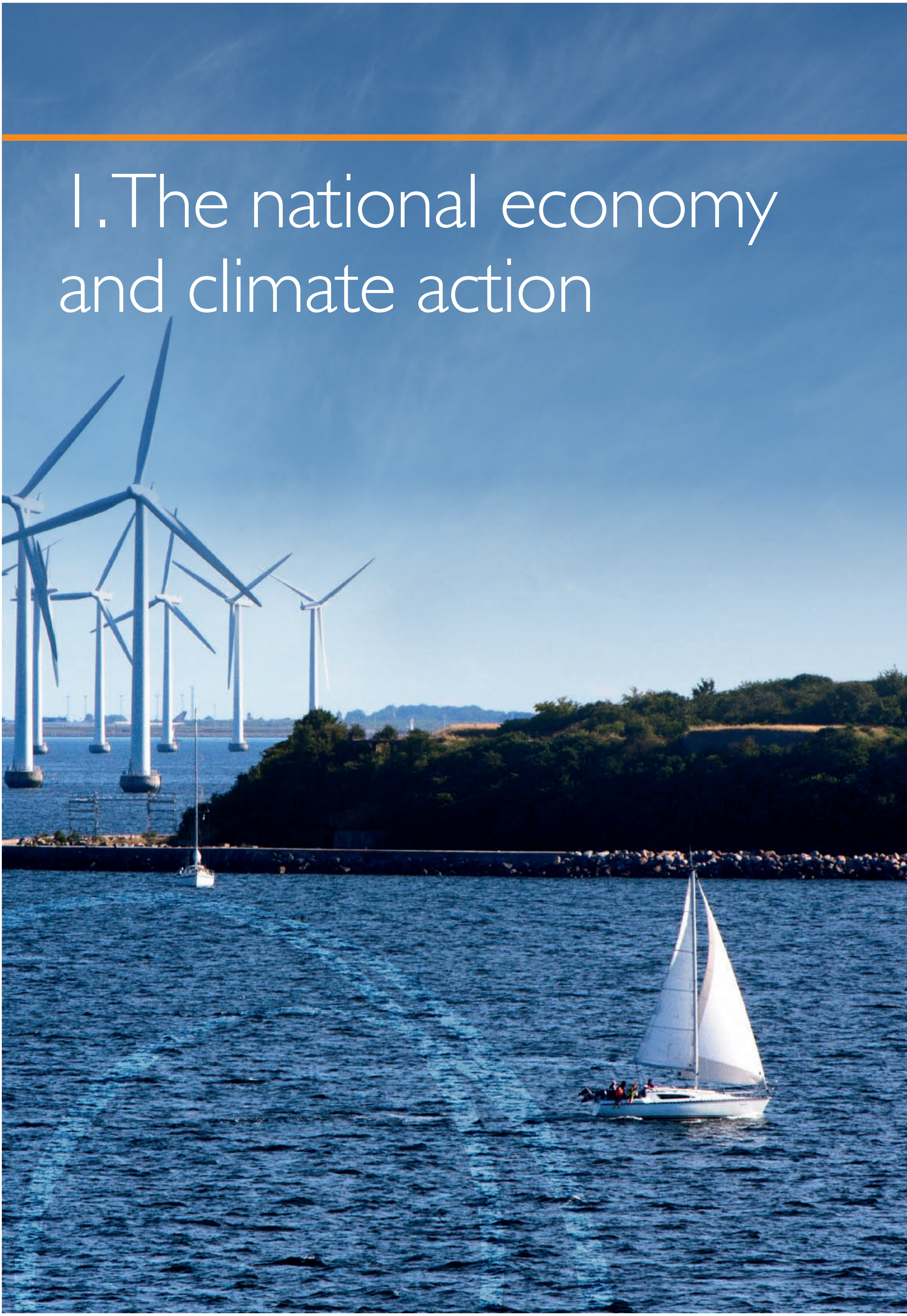
Lending activities include sustainability aspects	**Climate risks are applied in strategy and risk management**

Actions

Interpret regulations	**Facilitate the gathering of climate data**	**Collaborate with other operators**

Contents

1. The national economy and climate action



Tackling climate change involves both risks and opportunities for the economy and the financial system. For this reason, it is natural for the banks to want to assist with the climate transition because this is not only about minimising the risks to society and customers as a whole, but also because this will mean a huge demand for financial services. Transition also needs to happen in many large export markets and a Swedish-led development of innovative technology and the introduction of new innovations in Sweden can lead to export and development opportunities. For this reason, this chapter intends to illustrate in general terms how climate changes and the climate transition can be expected to affect the national economy as a whole, as well as what this means for new forms of risk and opportunity.

1.1 Political agreements

In a global effort to curb climate change, the Paris Agreement was signed in 2015. In the same way as the Kyoto Protocol, the Paris Agreement is linked to the UNFCCC Climate Convention, which is an international agreement under the UN. The agreement states that the global temperature rise shall be kept well under 2 degrees, but the aim is to limit it to 1.5 degrees. The agreement also means that countries shall successively strengthen their commitments and renew or update them every five years. A global review of the total commitments will also take place every five years, starting in 2023.

The EU has agreed to reach a climate-neutral EU by 2050, consistent with the Paris Agreement. The EU's goal for climate neutrality means net-zero emissions of greenhouse gases by 2050 at the latest. Net-zero emissions mean emissions that are as low as possible, where they are still released, that they are compensated by negative emissions or carbon uptake by other means. To attain the climate neutrality goal, greenhouse gas emissions must decrease by at least 55 per cent by 2030, compared to 1990 levels. This entails tightening up the EU's previous goal of 40 per cent lower emissions by 2030. In April 2021, the EU agreed to include the climate neutrality goal for 2050, and the stricter climate goal for 2030, in the EU's new climate law. This means that the goals are legally binding.

In Sweden, a climate policy framework has been adopted, which is a key component for achieving the Paris Agreement, with the long-term goal for Sweden to have no net greenhouse gas emissions by 2045. The framework means that the Swedish Government has an obligation to pursue a climate policy that meets the climate goal.

However, research is warning that the current global development is not fast enough for the world to achieve its goals. For example, the United Nations Environment Programme, UNEP, monitors every year the trend for global greenhouse gas emissions and compares this with what the development should be to prevent the worst consequences of climate change.

In the UNEP report Emissions Gap Report 2019, it was observed that the trend is weaker and that more rapid and larger reductions in emissions are required for every year that passes. In the Emissions Gap Report 2020, it was observed that the emissions most likely reduced in 2020, as a result of the COVID-19 pandemic, but that the effect will be temporary unless countries apply a recovery strategy that includes a focus on reducing greenhouse gas emissions[2]. Therefore, the challenge for Sweden and the global community is to reduce emissions at a sufficient speed in order to attain the climate goals.

1.2 Risks arising from climate change

Companies will have to manage the climate-related risks entailed by tackling climate change. Above all, this concerns two types of risks – physical risks and transition risks.

Physical climate risks arise as a consequence of the global warming that results from increased greenhouse gas emissions. They lead to an increased incidence of extreme weather but also rising sea levels, soil erosion and other similar events. Transition risks are the financial risks that may arise during the move to an economy with lower carbon dioxide emissions. Major events, such as changes in climate policy, regulatory framework, technology or the market situation in general could, for example, negatively affect business models for companies in industries that rely on fossil fuels or are energy-intensive. Moreover, transition risks consist of risks arising from the decrease in demand for certain goods and services, changes in customer behaviour or other structural changes that take place with the purpose of transitioning to a climate-neutral economy so as to combat global warming.

The IPCC – Intergovernmental Panel on Climate Change – has calculated the effects of increased greenhouse gases in the atmosphere based on several scenarios. In these calculations, the consequences for Sweden are clear. If emissions continue at the current rate, we can expect a temperature rise of between 4 and almost 8 degrees, an increase in precipitation of between 17 and 41 per cent and a rise in sea level of between 21 and 66 centimetres. In the optimistic scenario, where emissions are reduced successfully early enough, consistent with the Paris Agreement, the effects will be more manageable. The temperature rises by between 1.6 and 2 degrees, precipitation either increases or decreases in the range –8 to 21 per cent and the sea level rises by a few centimetres. In addition to effects within Sweden's borders, many Swedish companies have a global supply chain, which is affected by climate changes around the world.

In the final report from Swedish commission on Climate and Vulnerability[3], it is estimated that 200,000 buildings are located close to water in areas where there is an increased risk of collapse and landslides as a consequence of the increased water flows. Even if it is buildings that are exposed to the high risks, flooding also has consequences for roads, railways and other infrastructure. Furthermore, a rise in sea level means an increased risk of coastal erosion with negative consequences for buildings in low-lying areas in Skåne, Blekinge and Halland in particular.

1.3 Orderly climate action

Orderly climate action for Sweden not only means that the country's territorial greenhouse gas emissions are reduced to net-zero by 2045. Orderly action is also about how this is implemented and the extent to which the measures are predictable and cost-effective. The Network for Greening the Financial System (NGFS) has developed an analytical framework for assessing different scenarios for how the climate action can be implemented starting from these two perspectives (see Figure 1 on the next page). A successful transition is considered to mean that greenhouse gases are reduced sufficiently during an orderly, predictable and cost-effective transition.

For Sweden, this means that the greenhouse gas emissions reduce globally: in other words, that companies with high emissions today are given the opportunity to adapt, so their production facilities are not shut down in Sweden and the emissions, together with the production, transferred to other countries (so-called "carbon leakage"). It is also important that the transition is planned and takes place early in order to minimize the total greenhouse emissions over time, which is required if the world is not to squander the global carbon budget[4].

Moreover, for community solidarity, the transition needs to happen without having a negative impact on growth or having a disproportionate effect on private individuals or companies. By starting a transition early, Sweden can attract national and international capital that is needed for the transition. An early introduction of new solutions will, in addition, mean new export and development opportunities for Swedish companies. The extent of stranded assets[5] can also be limited, if the transition takes place in an orderly manner. As a result of this, Sweden's economy would continue to be financially stable, which means the transition is structured and no sudden control measures or regulations need to be introduced that would risk distortions in the economy.

Figure 1: Orderly climate action reduces greenhouse gases sufficiently while the transition is implemented in a structured and cost-effective way

Orderly (low transition risks)

Transition risks

Disorderly (high transition risks)

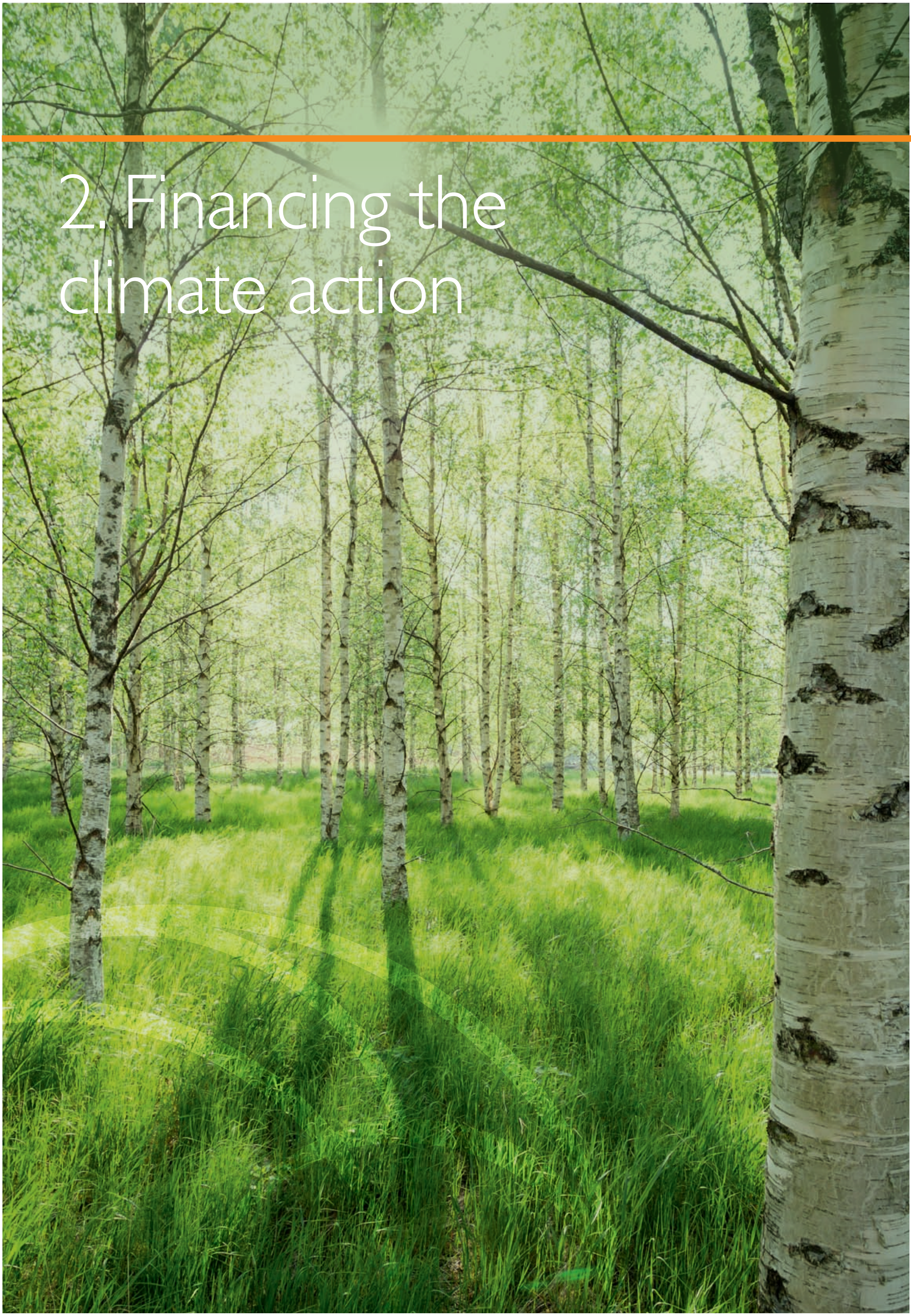
	Unmanaged ← **Physical risks** → Managed	
Orderly (low transition risks)	**1. A warmer world, "Business as usual"** The world continues to increase emissions and society, on the whole, does not change much. Primarily, all that is done is to mitigate new physical risks, caused by climate change, for example from more extreme weather. Climate change has a significant impact on the economy.	**2. Orderly and structured climate transition** The society´s climate transition starts on time and with sufficient resources, which creates a successful social transition that is both organised and cost-effective. The emissions are reduced in time and the international climate goals are met while the economy remains prosperous.
Disorderly (high transition risks)	**3. Too little, too late, leads to greater uncertainty and risks** Sweden and other countries do not do enough to achieve the climate goals. The efforts for climate action start too late and hastily, which creates higher costs and an unpredictable high-risk economy. New physical risks created by climate change lead to stressed and expensive decisions in order to try to prevent them.	**4. Difficult and costly but completed transition** The transition starts late, which requires a more hasty implementation of new technologies, business models and control measures. This creates more sudden and unforeseen actions. The climate transition, after a joint mustering of strength globally, is implemented but, aggregated, it is more expensive with more unsuccessful choices of technology and control measures that create distortions in the economy.

Unmanaged ← **Physical risks** → Managed

Source: Inspired by NGFS analytical framework for assessing climate-related risks. Network for Greening the Financial System (NGFS), "A call for action Climate change as a source of financial risk" (2019).

The scenarios can be compared to the development of different types of risk. Scenario 1 entails low transition risks but, on the other hand, physical risks. Scenario 4 entails the opposite, namely that the most serious physical risks are avoided but at the cost of extensive transition risks. For this reason, the optimal is scenario 2, where limited risks are realised under orderly, predictable and cost-effective forms.

2. Financing the climate action



To allow society to adapt and become climate neutral, current and new climate solutions need financing. Investments will be needed in areas such as transport, heavy industry, energy production, infrastructure, real estate and housing. Several of Sweden's industries have presented roadmaps, where their plans and needs for achieving the climate goals are described. The total investment need for achieving the climate goals is likely to be massive. For this reason, this chapter describes the challenges arising from financing a well-functioning climate transition.

2.1 Financing requirement for society

Estimates of the size of the financing requirement-vary slightly between different sources because the amount of the investment is affected by the underlying assumptions and the scope of the investments. Below are four estimates that indicate that there is a probable need for additional investment of 1–2.5 per cent of Sweden's GDP annually until at least 2030.

In step with the reduction in the uncertainty in new climate and technology investments, an increasing proportion of debt financing can be used which, all else being equal, means a lower financing cost. According to the OECD, the investments for the EU's climate actions 2030–2035 will need to be financed by 30 per cent equity, 50 per cent bank loans and 20 per cent by bonds[6]. For

A	According to the European Commission, additional investments of approximately EUR 470 billion are required annually to achieve the current climate and energy goals (for transport, energy, water and waste). The EU's GDP is EUR 18.3 thousand billion, which implies that these investments are equivalent to approximately 2.5 per cent of the EU's annual GDP.
B	According to calculations by Material Economics, additional investments of just over EUR 100 billion will be needed to reach net-zero in Sweden for transport, buildings, heavy industry, heating and electricity. Over 25 years, up to 2045, this is equivalent to approximately 1 per cent of Sweden's GDP.
C	According to calculations by Boston Consulting Group, Germany's climate action needs additional investments totalling EUR 1.5 to 2.3 thousand billion by 2050, compared to a scenario without any further reductions in emissions. This is equivalent to an additional annual investment of approximately 1.2 to 1.8 per cent of Germany's GDP.
D	According to the OECD, investments totalling USD 440–635 billion per year will be required for the EU's climate efforts between 2020 and 2035 for energy, cars and energy efficiency. This can be compared to the EU's current investment of EUR 258 billion per year (for transport, energy, water and waste), which is equivalent to around 0.6–1.5 per cent of the EU's annual GDP.

Sweden, this would mean a capital requirement of around SEK 15–40 billion in equity, SEK 25–65 billion in bank loans and SEK 10–25 billion in bond financing per year, on the assumption that the annual increase in investments is between 1–2.5 percentage points of GNP. Part of this funding could be financed by public investment.

The size of the investment requirement can be set in relation to the fact that the annual gross fixed investment by the business sector is over SEK 900 billion[7] (that is to say, around 20 per cent of GDP) and manufacturing industry's annual gross fixed investment totals SEK 160 billion. The need for bank loans can be set in relation to the fact that the banks' and other financial institutions' lending to companies increased by almost SEK 90 billion, to almost SEK 2400 billion, in 2019. Thus, the need for bank loans for climate investments is equivalent to a quarter or up to two thirds of the increase in corporate borrowing in 2019.

2.2 Various financing solutions

There are a number of aspects to consider when it comes to financing climate action. Many of the existing solutions in the climate field are about moving away from assets with high operating costs (vehicles with combustion engines, coal power) to capital-intensive assets with low operating costs (solar and wind power, batteries, electrification).

Investments need to be financed with capital from the financial sector, and ultimately private operators, to avoid financing from tax revenues. In general, there are two types of private capital for corporate investment: equity (share capital) and external capital (loan capital). What differentiates these types are the investment's level of risk, the cost of the financing and which stakeholders contribute to the financing.

Share capital finances investments with a higher risk profile and, therefore, also has a higher cost for financing than borrowed capital does. Share capital is financed by private individuals, institutional investors (insurance companies, funds and other asset managers), and venture capitalists (Venture Capital, Private Equity and so-called business angels). When investing in new technologies and business models, it is primarily these stakeholders who are responsible for the financing.

The second type of private capital, loan financing, is used for lower-risk investments and, consequently, has a lower financing cost compared to share capital. This is where the banks and other credit institutions support the financing of companies by different types of loans. If sustainability-related risks can affect a borrower's repayment capacity, the bank will take this into account when assessing the financial risks associated with providing the credit. Loan financing can also be made through the securities market, by means of corporate bonds. In this case, those who are responsible for the financing are mainly institutional investors.

2.3 The climate issue requires adaptations from industry, politics and the financial sector

The investments required by the climate action will entail the introduction of new technologies and business models that replace existing solutions. For investments that use well-known technology, well-known business models and where the projects are considered to be repayable within a reasonable time, the investment may be financed with loans. If the technology is new, the business model new or if, on the whole, the thing is otherwise too risky financially, loan financing will be difficult and the investment will likely need to be financed with

the help of equity. Since equity is a more expensive form of financing than loan financing, these risky investments will find it more difficult to find financing. In some cases, measures may be needed from the public sector in order to realise such investments.

At the same time, tackling climate change may result in significant financial risks. When new technologies, business models and products are introduced, there is an uncertainty about how successful they will be. There is a continuous transition underway in the economy, with an accompanying increase in risk but the urgency of the climate action entails greater uncertainties and therefore financial risks. It is difficult for many technologies that are necessary for achieving the climate goals to be financially competitive today, but these are expected to become competitive once the technology has matured. For this reason, a major challenge for financing the climate transition is the uncertainty surrounding the underlying willingness to pay, for example when new technologies are more expensive than existing technologies. For some technical solutions, the cost gap will be short-term; for example, it is estimated that battery-powered trucks will have a lower total cost during their service life compared to fossil-fuelled trucks from 2030. On the other hand, some new solutions that are required for the transition will have a long-term higher cost, for example the cost of producing low-CO_2 steel will be 20-30 per cent more expensive than traditional steel production[9].

One reason why the underlying ability to repay for some climate investments is lacking is the fact that greenhouse gas emissions are not priced at the level needed to make the green investments competitive with existing (fossil) solutions. This creates externality problems[10]. If the price of greenhouse gas emissions does not sufficiently compensate for the cost differences between existing technologies and low-emission technologies, the financial incentives for investments that reduce emissions is missing. This is one of the main reasons why many climate investments cannot be made today to the extent that would be required to achieve the international and national climate goals[11].

Since the risks associated with climate change are a problem for society as a whole, there may be reasons for the pricing, and the cost of insuring against these, to be paid by society. The state can support climate action by supporting risky projects with uncertain repayment ability, which will be required during the transition, in two different ways. Firstly, risky projects can be financed by government loans instead of private financiers' equity, which leads to a lower cost for capital. Secondly, there are investments without private capital because there isn't any economically viable business model during a transitional period. If the politicians consider these investments to be necessary for tackling climate change, they can be supported financially until the business model is profitable, which is required if they are to be financed with private capital. There are also a number of intermediate forms where other financiers can help and/or where financial instruments other than loans could be used. Apart from private capital, state funds are also available in the form of government loans, share capital and guarantees.

3. The role of the banks in tackling climate change

The banks have a central role to play if their customers are to implement the investments necessary for the climate action to be implemented efficiently, in a controlled way and as a contribution to a strong Swedish economy. For this reason, with this roadmap the banks wish to supplement the efforts that have already been made by providing additional pieces of the puzzle in the process of fully integrating the climate aspects into banking. The banks' activities, simply put, have to be adapted to encourage fossil-free.

The banking industry has already started work on integrating climate-related risks and opportunities into its business. The text below shows that the existing efforts go a long way, but not the entire way, towards the climate goals. Further steps need to be taken in order for the climate goals to be an integral part of the banks' activities. For this reason, the following chapter will look at what the banking industry is undertaking to do in the form of goals, collaborations and processes to address the remaining obstacles and to help implement the adaptation at the pace required.

THE BANKS' DIRECT EMISSIONS

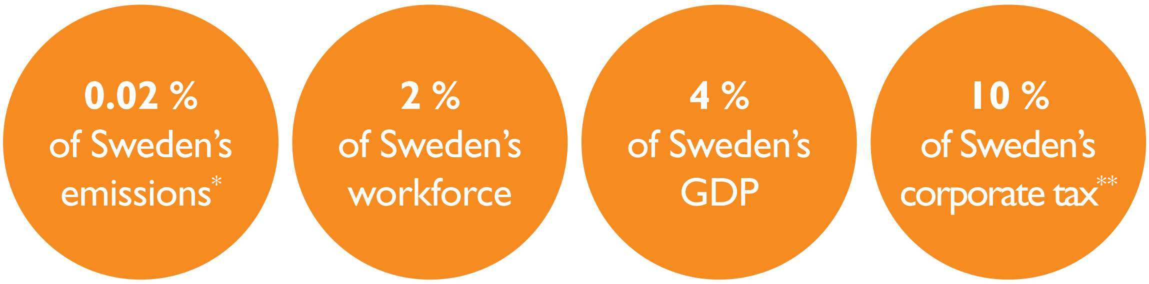
The banking industry has direct emissions of 12 kt CO_2 for the emission sources scope 1 and scope 2[12] in accordance with the Greenhouse Gas Protocol, which is equivalent to 0.02 per cent of Sweden's territorial emissions[13]. These are relatively small emissions compared to the banking industry's size in the economy, for example the financial sector (including the banking sector) accounts for 4 per cent of Sweden's GDP and 10 per cent of Sweden's corporate tax: see Figure 3. In compilations of emissions, such as for example, DI's sustainability index[14], banks are placed among the companies with the very lowest emissions in relation to their revenues. Many other industries have ten times higher emissions and some, such as the steel and aviation industries, nearly 1000 times greater. Therefore, the banks' own emissions are negligible – the industry's opportunities for achieving substantial social benefit in the climate field come, instead, from supporting their customers in the transition to sustainable solutions.

These indirect emissions are complex to deal with since, in some sectors, this concerns the customers' own emissions, while in other sectors it mainly concerns emissions from the customers' suppliers or end-users (for example, the food industry or automotive industry). Since the banking industry works with, and lends, to all sectors of the economy, the industry has a major indirect impact on all sectors that give rise to Sweden's territorial

Figure 2: Explanation of the emission metrics scope 1, 2 and 3

The scope 1–3 emission metrics		
1	2	3
Scope 1 contains direct greenhouse gas emissions, over which the business has direct control. For example, emissions from vehicles and machinery used by the business.	In **scope 2**, are placed indirect emissions from electricity, in other words, consumption of electricity, district heating and district cooling.	**Scope 3** is the indirect greenhouse gas emissions, in addition to purchased energy, which takes place outside the limits of the business and are neither owned nor operated by the company. For banks, this means, for example, emissions related to a loan to a customer.

Figure 3: The financial sector in Sweden



*This is equivalent to emissions solely from the banks. The banking industry has direct emissions of 12 ktCO_2 (scope 1+2).
**This corresponds only to the banks.
Source: Swedish Bankers' Association (2020), Banks in Sweden 2019; Statistics Sweden

emissions. The banks' major and global customers frequently have the majority of their greenhouse gas emissions outside Sweden's borders and these companies can influence emissions along their value chains.

The challenge for the banks, compared to many companies in other sectors, is that the banks must understand large parts of the economy's emission issues and climate goals so as to allow them to factor these into their business operations. In order for the banks to be aligned with the Paris Agreement, the banks' customers also need to be aligned with the Paris Agreement.

3.1 Ongoing climate efforts at the banks

The banks in Sweden have managed risks associated with weather and climate and have invested in renewable energy production and innovation for a long time. For several years now, the banks have intensified their work to incorporate new research and facts on climate changes and emission effects into their ordinary banking activities. Individually, the banks are working to factor in climate and sustainability in an increasingly structured way into their business functions, such as risk management. The banks have also developed a range of green products, such as green mortgages, green business loans, green bonds and green funds (see more examples later on in this section). Moreover, a number of international standards and voluntary commitments have helped to strengthen the role of banks in tackling climate change, such as the Principles for Responsible Banking (PRB), which includes the aim of increasing the positive impact of banks on the environment and society through their products and services. Another example is the Task Force on Climate-related Financial Disclosures (TCFD), which is a global initiative to, among other things, help banks to identify their climate-related financial risks and opportunities better.

THE BANKS CAN INFLUENCE THEIR CUSTOMERS' CLIMATE IMPACT THROUGH THEIR SERVICES AND PRODUCTS

Currently, the banks provide a range of services and financial products that are necessary for the economy to work. In simple terms, the banks' customer offering is broken down into them offering products and services in the segments: lending, saving and payment. In addition, advisory services and risk management are an essential part of all banking activities

It is through these banking functions that the banks can support and influence their customers to convert to a sustainable economy. The role of the banks in tackling climate change should continue to be driven by commercial considerations and acceptable risk management in order to maintain financial stability and maintain the credit supply to the economy. A limiting factor for banks, in the meantime, is the customers' own willingness to adapt. This also implies that the bank that places the highest climate requirements on its customers risks losing them to less ambitious competitors – therefore, common rules have a major role to play.

BANKS' EXISTING SUSTAINABLE PRODUCTS

The banks have been working for several years to develop new products and services to meet the customers' increasingly advanced demand for advice, sustainable investments and sustainable financing. In principle, all established banks in Sweden have launched new products and services for financing and investing in the area of sustainability in order to support their customers, among other things, in their transition and contribution to a low-carbon economy[15].

Figure 4: Examples of sustainable products

Lending

Green car leasing This solution is offered to customers who choose electric or biogas cars. As well as the cars that are leased being more climate-friendly than cars powered by fossil fuels, the financing is linked to a green bond.

Green building credit Banks are offering the opportunity to apply for green building credit to finance the construction of residential and commercial real estate regardless of size. This form of financing suits companies and housing associations that want to take environmental considerations into account during the new production of real estate.

Green mortgages Green mortgages are offered at a lower interest rate to those living in climate-smart houses. The loan is available to anyone with housing that meets the specific requirements: for example, A/B rated according to the Swedish National Board of Housing Building and Planning's energy classification, Nordic Ecolabelled, certified passive house or gold or silver certified environmental building according to the Sweden Green Building Council.

Green car loan To encourage customers to buy cars with more limited emissions, customers are offered a discount when they borrow to buy a more environmentally friendly car that meets given criteria.

Solar loan Favourable interest rate on loans for solar panels that enable reduced electricity costs.

Green business loan A flexible form of financing with the aim of supporting a positive climate impact and creating companies that are solid and sustainable in the long term. Green loans have good flexibility regarding, for example, maturity and volume, where specific terms and conditions as well as requirements are based on each borrower and the underlying purpose of the financing.

Sustainability-linked corporate loan These loans differ from ordinary green loans in the sense that they can be used for general business purposes rather than for a specific purpose. The loans are linked to the borrower's sustainability performance as measured by social or environmental sustainability criteria. How the company performs in the area of sustainability is thus linked to the loan's underlying margin in relation to predetermined sustainability targets. Improved sustainability performance lowers the interest rate and, thereby, reduces the financing costs. If the targets are not met, the interest rate may be increased.

Savings

ESG bonds The Swedish banks help other companies to issue green bonds so they can ensure that investors can invest in green bonds. Swedish banks have been pioneers in these efforts at the global level. One Swedish bank was included among the ten largest issuers of green bonds globally in 2019 and several other banks operating in Sweden are among the top twenty. In 2019, the Nordic Investment Bank issued a blue bond, the capital for which was earmarked for projects to reduce pollution and protect the sensitive aquatic environment in the Baltic Sea. A blue bond was also issued in 2020.

Sustainable funds Several large banks offer their own sustainable funds, which are managed in accordance with sustainability criteria. For example, this means that the funds exclude companies involved with fossil fuels and tobacco, while at the same time choosing companies that are actively promoting a reduced climate impact.

Sustainability-linked bonds Bonds with interest rate linked, for example, to environmental goals or specific ESG rating. The structure differs from traditional green bonds because the revenue can be used for general business purposes rather than for a specific purpose and does not require any green framework or regular reporting.

Risk management and consultancy

Sustainability-related advice Several banks offer sustainability-related advice to corporate customers, regarding both green savings and financing solutions as well as business development and analysis.

Marketplace to reduce the amount of carbon dioxide in the atmosphere Several banks are working together with other companies and organisations to create marketplaces for trading certificates in order to reduce the amount of carbon dioxide in the atmosphere. The certificates are independent documents confirming that one tonne of carbon dioxide has been removed from the atmosphere. Sellers of the certificate are developing technologies, for example, for removing and binding carbon dioxide, and buyers are stakeholders who want to compensate for their own carbon dioxide emissions.

Figure 5: Existing initiatives and control measures

Some initiatives and control measures for the climate	Requirement level	Description	Overall goals / principles	Reporting / follow-up
The Swedish Climate Act	Legislation	Ensures that government policy is based on the climate goals	■	
Non-financial reporting directive (RCD)	Legislation	EU Directive: Companies with more than 500 employees shall disclose non-financial information including sustainability issues		■
Sustainable Finance Disclosure Regulation (SFDR)	Legislation	EU requirements for information on sustainable investments and risks		■
The EU's taxonomy	Legislation	Classification tool for assessing economic activities based on their climate characteristics.	■	
EU Emissions Trading (EU-ETS)	Legislation	The EU's emissions trading system	■	
Principles for Responsible Banking (PRB)*	Commitment	The UN's initiative on Principles for Responsible Banking	■	■
Task Force on Climate-related Financial Disclosures (TCFD)	Commitment	Recommendations on reporting climate-related information for companies and investors		■
UN Global Compact	Commitment	The UN's 10 principles on social responsibility and sustainability		■
Equator Principles (project funding only)	Commitment	Framework for risk management for assessing environmental and social risks in projects	■	
Poseidon Principles (shipping only)	Commitment	Framework for assessing and accounting for whether the banks' lending to shipping is consistent with climate objectives	■	■
Science Based Targets Initiative (SBTi)	Commitment	Method for companies to set scientifically based climate goals consistent with the Paris Agreement with independent verification	■	
Paris Agreement Capital Transition Assessment (PACTA)	Tool	Shows how well portfolio holdings in listed shares and corporate bonds are aligned with the Paris Agreement		■
Carbon Disclosure Project (CDP)	Tool / standard	Evaluates and scores companies' climate work and measures for countering climate risks		■
Greenhouse Gas Protocol	Standard	International calculation and accounting standard that is used by countries and companies to quantify greenhouse gas emissions		■
Global Reporting Initiative (GRI)	Standard	Guidelines for reporting organizations' sustainability work in a comparable and structured way		■
Partnership for Carbon Accounting Financials (PCAF)	Standard	Cooperation between financial organisations to develop a method for measuring carbon dioxide emissions linked to loans and investments		■

Collective Commitment to Climate Action is a subgroup of PRB.

3.2 Banking regulations and initiatives

INTERNATIONAL INITIATIVES AND COLLABORATIONS

Globally, several climate-related financial and bank initiatives have been launched in recent years to strengthen the financial industry's efforts regarding the climate issue. The individual efforts of Swedish banks combined with international climate initiatives will take us a long way forward when they are fully introduced into the banks. There are also regulations, both nationally and internationally, governing the banks' climate efforts, for example the EU taxonomy. The financial sector has a major task ahead of it in interpreting and implementing these regulations and initiatives in its operations. Figure 5 presents an overview of some of the most important initiatives and regulations as well as which part of the climate efforts they involve: if they are overall goals or policies or are used for reporting and follow-up.

Existing initiatives and regulations support the banks' overall goals and reporting, but continuing efforts are required for implementation. Existing climate efforts, which have been developed or are evolving, include everything from legislation and commitments to voluntary tools and standards. Legislation embraces all of the banks in Sweden and creates a clear framework for the banking industry's climate efforts. There are also three important initiatives, which all major banks[16] in Sweden have undertaken to comply with: TCFD, PRB and UN Global Compact. Climate initiatives and regulations focus primarily on general goals and principles for the banking industry, which helps the sector move in the right direction, but also support the reporting and follow-up of the climate efforts implemented. The task that the banking industry is now facing is integrating climate-related risks and opportunities into all of the bank's operations. This is the challenge for the banks, translating long-term general goals into concrete action plans.

The banks have clear long-term goals and many of them are already working to ensure that the goals in the Paris Agreement will be achieved. That Sweden is on the way to zero net emissions by 2045 is clearly supported by Swedish and international legislation and climate goals. Sweden's largest banks have also committed themselves to complying with the Paris Agreement and to setting their own climate goals by joining the PRB. Although the end goal of the climate action is clear, it is less clear how individual sectors will contribute to the goals for 2030 and 2040. Sweden only has milestones for the non-trading sector, where the goal is a 63 per cent reduction in emissions by 2030 compared to 1990. The trading sector is regulated by the EU's emissions trading system (EU-ETS), which has the goal of reducing emissions by 43 per cent of emissions between 2005 and 2030.

In September 2020, a joint initiative was presented by, among others, the banks' international association, The Institute of International Finance, IIF, on creating a working group to develop a well-functioning marketplace for negative emissions. This entails a marketplace where measures leading to net negative carbon dioxide emissions can be financed by, for example, companies that want to carbon offset the emissions[17] from their own operations.

REPORTING AND DISCLOSURE REQUIREMENTS

Most climate initiatives require reporting of the banks' climate efforts. There are clear definitions for how greenhouse gas emissions are measured in different sectors, for instance using the Greenhouse Gas Protocol (GHG Protocol) and industry collaboration PCAF (Partnership for Carbon Accounting Financials)[18]. There are also initiatives that standardise climate reporting and comparison. The Task Force on Climate-related Financial Disclosures (TCFD), which is a global initiative, presented in 2017 its recommendations for how companies can report climate-related financial risks and opportunities. Apart from TCFD, there are many standards and frameworks for integrating sustainability information into the companies' accounts. Worthy of note here is the EU Regulation on Sustainability-Related Disclosure (the Disclosure Regulation) which set requirements for certain sustainability-related information to be provided by financial market operators and financial advisors[19].

There is also a revision underway of the EU Directive on Sustainability Reporting (NFRD). The new draft directive on the companies' sustainability reporting (CSRD) involves tightening up the NFRD and places requirements on all large companies and all listed companies to report sustainability information regularly. Other examples are ISO, GRI, SASB and the UN Global Compact. There is also work underway to try coordinating so standards will be comparable. For example, the Carbon Disclosure Project (CDP), the Climate Disclosure Standards Board (CDSB), the Global Reporting Initiative (GRI), the International Integrated Reporting Council (IIRC) and the Sustainability Accounting Standards Board (SASB) are working together. In a joint statement, it states that cooperating organisations shall have a common vision for what is needed to achieve coherent and comprehensive reporting. The organisations shall provide joint guidance to the market on how their framework and standards should be applied together, as well as how the framework and the standards generally complement accepted accounting principles[20].

RISK MANAGEMENT INCLUDES THE CLIMATE

Climate-related risks can potentially affect banks and their customers in different time horizons. In the short to medium term, the reputation risk[21] can increase, if there are concerns about banks' management of climate-related risks, a greater interest from the supervisory authorities and stricter regulations.

Several national and international initiatives have been developed by supervisory authorities and central banks to enable better monitoring and to prevent the impact of climate risks on the financial system. The global network for central banks and supervisory authorities, the Network for Greening the Financial System (NGFS), has stated that climate-related risks are a source of financial risk. NGFS is now publishing regular reports and guidance on how banks are integrating sustainability risks and how supervisory authorities can monitor the financial sector on the basis of climate risks. The European Banking Authority (EBA) has been given the mandate to produce a report on how ESG risks should be integrated into the banks' risk management and supervision of banks, which will be published in June 2021. The EBA shall also consider whether there is a need to take climate risks into account in capital requirements and will submit a report by June 2025, at the latest.

The Swedish Financial Supervisory Authority, the supervisory authority for Swedish banks, is increasingly integrating climate risks into its day-to-day supervision. It also participates actively in the international efforts – both globally and at EU level. The Swedish Central Bank is also taking into account climate-related risks in its efforts to promote financial stability and is actively participating in the international efforts. The Swedish Central Bank also publishes speeches and research articles on the subject[22].

CLASSIFICATION OF SUSTAINABLE ACTIVITIES

The EU's taxonomy for sustainable investments is a classification system for assessing whether an economic activity is environmentally sustainable (see Figure 6 and the next page). It contains detailed criteria and definitions for determining whether an economic activity can be classified as "green" according to the taxonomy in different sectors and can thus be an important tool for understanding the impact of businesses on the climate. The EU Commission's Delegated Act for EU Taxonomy was published in April 2021 and establishes technical review criteria for determining whether an activity makes a significant contribution to the climate goals. Technical review criteria for the other four goals will be developed in the next step[23]. The implementation of the EU taxonomy will take place in stages between 1 January 2022 and 1 January 2023. Larger companies and financial market operators will start reporting in accordance with the taxonomy's climate goals at the end of 2021.

Since the EU's taxonomy is expected to be, in principle, comprehensive and guide the EU's efforts to control capital flows, it is the Swedish banks' ambition to anticipate the EU by taking into account the EU taxonomy in lending (more on this in the next section).

Figure 6: Different areas of climate regulation

Classification of sustainable activities	**Reporting and disclosure**	**Risk management and supervision**
• EU taxonomy for sustainable activities	• Task Force on Climate-related Financial Disclosures (TCFD). • Sustainable Finance Disclosure Regulation (SFDR) • Non Financial Reporting Directive (NFRD)	• Methodology for assessing significant ESG risks • Inclusion of ESG risks in risk management and supervision

The EU's taxonomy

Background

What it is:

- The EU taxonomy is a negotiated EU tool that classifies economic activities as environmentally sustainable or not.
- In concrete terms, threshold values as well as information and reporting requirements are provided for activities that are considered environmentally sustainable.

What it is not:

- The taxonomy is not, and will not be, a mandatory list of activities to invest in, nor a standard or exclusion list.

For whom

- Companies obtain clarity regarding the requirements their activities must meet in order to be considered environmentally sustainable according to the EU taxonomy. Living up to the standards of the taxonomy can help companies obtain funding for green and transformative ("greener") projects.
- Investors who wish to invest in environmentally sustainable companies and projects will better understand and be able to compare different "green financial products" offered on the market and it will be a tool for comparing these products better in terms of their environmental impact.
- Financial market operators offering environmentally sustainable financial products are given a common framework for identifying investable assets with a significant contribution to environmental goals - without prejudicing other methods or investment strategies they can follow. Since there is no geographical limitation set for the identified green activities, the taxonomy can potentially be applied to assets worldwide.
- The banks already apply sustainability aspects in their operations. The taxonomy is intended to be an additional important tool, but there will also be other ways to assess the sustainability of investments and financial products.

Purpose

The aim is to provide the financial sector with common guidelines for which investments should be called green, which facilitates green investments.

- Financial market operators offering environmentally sustainable financial products shall disclose if, and the extent to which, these investments are compatible with the taxonomy. The information shall specify the proportion of the product invested in environmentally sustainable activities according to the taxonomy.
- This will provide investors, financial institutions, and companies with clarity and transparency regarding environmental sustainability.
- In this way, capital flows can be directed towards activities that are deemed positive for the climate and, thanks to transparency, the financial sector can better price climate risks.

Important building blocks

- The taxonomy will be updated regularly in order to try to mirror the latest political and technical developments.
- Contains only economic activities that have a positive impact on the climate and the environment and thus contribute significantly to the EU's environmental objectives. Not being on the list does not necessarily mean that these activities are considered "brown", that is to say, have a significant negative impact on the environment, but only that they lack categorisation. The taxonomy has the ambition to be technology neutral.
- It also includes activities in economic sectors that have a negative impact on the environment, as long as they significantly reduce the negative impact. In this way, the transition of sectors that are not yet green is supported.

"Banks have good experience of analysing and financing specific investments that are green. The challenge is to spread experience, obtain access to complete data and to integrate the analysis of climate-related financial risks and opportunities in all parts of the banking activities."

3.3 Remaining challenges and next steps

THREE CHALLENGES IN INTEGRATING THE CLIMATE EFFORTS INTO THE ENTIRE BANKING BUSINESS

Banks have good experience of analysing and financing specific investments that are green. The challenge is to spread the experience, gain access to complete data and to integrate the analysis of climate-related risks and opportunities into all parts of the banking activities. The banking industry is addressing these challenges with concrete commitments, as presented in chapter four. The challenges that remain are:

1. **Setting goals and measuring progress linked to the climate impact.** The difficulty for the banking industry is the fact that the climate impact is indirect via the customers, making it more complicated for banks to measure and influence the emissions. This also makes it more difficult for banks, and departments at the banks, to set concrete goals for the transition period up to 2045, because it is ultimately other sectors in the economy that need to reduce their emissions. For many sectors of society, for example, heavy industry, the emissions are mainly direct (scopes 1 and 2), making it easier to measure the activities' own emissions and to set goals. However, there are large companies in other sectors that also have significant indirect emissions in their supply chains (scope 3). For smaller companies, the availability of data and knowledge about climate impacts are more limited, which means that the banks need to assist their customers in the development towards measuring and monitoring their climate impact.
2. **Classify what is sustainable for other sectors of the economy, that is to say, the banking customers.** The banking industry works with all sectors of society and, for this reason, needs an understanding of the investments that help to meet Sweden's climate goals. The EU's taxonomy is intended to be central to the way banks' and investors' priorities and pricing are controlled, but much work remains to be done to interpret and apply the taxonomy in its context.
3. **Integrating climate aspects across all of the bank's business operations.** The climate aspects should be part of all business decisions, in terms of both the customer's opportunities and risks. For this reason, it should be made clear that climate is a natural aspect in investment decisions, credit rating, decisions on the choice of counterparties, subcontracting decisions and parties to various joint projects. The major challenge for the banks is to obtain enough climate data to make robust analyses. The banks need data for decision-making, for instance in investment and credit analyses, but, currently, climate data is often lacking, from both bank customers and official climate data. It is, above all, from smaller companies that data is lacking, because producing it is resource-intensive and complicated. Moreover, there is no forward-looking data and data for the indirect emissions (scope 3) is frequently associated with uncertainty, since such data tend to be estimates. Apart from data from bank customers, the banks also need data that is provided via public authorities and other operators. Where data is lacking, or cannot be produced, the banks must, together with other operators, construct standardised data to help produce the most robust analyses possible.

Even though climate aspects are successfully integrated in the banks' customer offering, a large responsibility rests on the political system to make society adapt. Since the banking industry's climate impact is indirect, other sectors must be both willing to and be able to adapt in order for Sweden's climate goals to be reached. The banks will proactively support the other sectors transition with financing, advice and dialogue, as well as a close cooperation to overcome jointly the barriers that exist. Ultimately, however, the responsibility rests on the political system, via control measures such as correct global pricing of emissions, to create incentives for companies and households to adapt.

4. The banks' commitments

The members of the Swedish Bankers' Association want to help facilitate and accelerate the climate action in order to tackle the major climate challenges that society is facing, and the impact of the financial sector. Ultimately, the efforts are about integrating climate aspects into all of the banks' customer offering and, thus, helping their customers to adapt.

The members of the Swedish Bankers' Association have identified a number of specific commitments, which they have undertaken to work on. These commitments will, when taken together, ensure that the banks' operations are ready to offer products and services that support the customers during the transition to sustainable solutions. The banks' offering creates the conditions for companies and individuals to finance investments and activities that can help Sweden attain its climate policy commitments.

The Swedish Bankers' Association will join, as supporting organisation, the internationally recognised initiative, Principles for Responsible Banking, PRB, and it is encouraging member banks that have not yet signed the agreement to do so, which is discussed in section 4.1. Thereby, the banks undertake, among other things, to implement the climate measures for the greatest possible climate benefit and present the efforts where the aim is that the banks' customers will assist in achieving the Paris Agreement's goals. The common goals of the banks' work to tackle climate change are described in more detail in section 4.2.

To achieve the net-zero emissions goal, incentives and transparency need to be strengthened so as to allow an efficient distribution of capital and to support the transition to a low-carbon economy. Lending activities and risk management will be adapted to include the climate aspects. For this reason, the banks, among other things, are anticipating the EU and are starting the work to take into account the EU's taxonomy in the banks' lending. The banks are also committed to adapting their strategy and risk management by complying with the global TCFD recommendations (Task Force on Climate-related Financial Disclosures). These commitments are described in section 4.3.

To facilitate the achievement of the goals and to create customer benefit, two areas of cooperation for the climate efforts between the banks will be initiated via the Swedish Bankers' Association to interpret regulations and facilitate the gathering of climate data, which is described in section 4.4.

To ensure that the industry is driving the climate action, the Swedish Bankers' Association will annually summarise the banking industry's climate efforts, which is described in more detail in section 4.5. The Swedish Bankers' Association will summarise the banks' climate measures to illustrate how the entire sector is moving regarding climate action. Thereby, the goals will, hopefully, be strengthened and further areas identified and communicated over time. All of this in an effort to support and promote climate action in society.

To help in achieving the overarching climate goals, the banking industry will cooperate with other operators (see section 4.6).

In addition to these common goals, the member banks have since long ago had their own objectives for their climate efforts. The figure on the next page describes how this climate roadmap sets goals for the banks jointly.

The goals and the joint initiatives enable the industry to adapt so that climate aspects can be fully integrated into the banks' customer offering. The industry is facing a major task to introduce new ways of working and to meet its commitments to the climate. This climate roadmap makes it clear that the Swedish Bankers' Association and its members are prepared to implement this process.

4.1 Banks commit to net-zero emissions through the PRB

The Principles for Responsible Banking (PRB) are an existing international framework for banks whose climate ambitions are ambitious and aligned with the Paris Agreement and national climate policy frameworks in accordance with the PRB's first principle (for example, in Sweden, this means that climate neutrality shall be reached by 2045). PRB is an international initiative that facilitates compliance for the Swedish banks that themselves, or whose customers, operate internationally. The Swedish Bankers' Association. will sign the PRB and thus obtain "supporter status" to demonstrate the importance of working on this initiative. The Swedish Bankers' Association. encourages those members who have not yet signed the PRB to do the same[24].

Many of the Swedish Bankers' Association's members have already started working on the commitments in accordance with the PRB framework. Other banks have a relatively larger task implementing the commitments in the PRB. The Swedish Bankers' Association will work to assist individual members to comply with the commitments they give within the framework for the PRB. Signing the PRB, together with the relevant Swedish and European legislation, provides a clear ambition and goal for the banking industry.

The PRB initiative is based on six principles for a sustainable banking system, which the banks undertake to follow. In the first step, the banks shall analyse both their positive and negative material impact on humans and the planet. After this, goals in at least two areas have to be set and implemented. The Swedish Bankers' Association

Figure 7: The Climate Roadmap's Commitments

1

Business operations consistent with the 2045 net-zero emissions climate goal

The Swedish Bankers' Association and the banks sign the Principles for Responsible Banking.

2

1) 2021–2022: The banks identify their own most significant positive and negative effects on society, the economy and the environment.

2) 2021–2024: The banks undertake to measure the carbon footprint of their relevant financing and investment activities up to scope 3.

3) 2023–2026: The banks ensure that strategies and goals for the Swedish operations contribute to reaching Sweden's adopted goal of net-zero emissions by 2045 at the latest.

3

Lending activities include sustainability aspects

The taxonomy is taken into account in the banks' lending.

Climate-related risks and opportunities are applied in strategy and risk management

The guidelines in TCFD are implemented.

4

Interpret regulations

Common interpretation of regulations, climate-related definitions, standards and initiatives.

Facilitate the gathering of climate data

Facilitate collection of data and development of models and standards.

Collaborate with other operators

Such as the public sector and trade and industry

Principles for Responsible Banking (UN's Principles for Responsible Banking)

PURPOSE

The PRB is an ambitious initiative aimed at increasing and making visible the contribution of the global banking sector to sustainable development.

- The intention is to ensure that participating banks are consistent with the UN Sustainable Development Goals, the Paris Agreement and other national and international climate goals.
- The principles constitute the framework for a sustainable banking system and help the industry to show how it makes a positive contribution to society.

ORGANISATION AND PARTICIPATING BANKS

- The principles have been developed by the United Nations Environment Programme Financial Initiative (UNEP-FI), which is a collaboration between the UN and the global financial sector.
- More than 200 banks have signed the initiative.
- All the major Nordic banks have signed the agreement.

CONCRETE COMMITMENTS

The initiative means that banks will increase their positive impact and reduce their negative impact.

- Participating banks shall first identify where they have the greatest positive and negative impact on society. Based on the results of such an analysis, and in cooperation with customers and stakeholders, a decision will be taken on how best to increase the bank's own positive impact and reduce the negative impact.
- The banks also undertake to follow up and report their sustainability work in a transparent manner.
- The principles are the only framework for banks that applies to the entire business and they provide guidance at the strategic, portfolio and transaction level in all business areas.

The principles

PRINCIPLE 1: **ALIGNMENT**

We will align our business strategy to be consistent with and contribute to individuals' needs and society's goals, as expressed in the Sustainable Development Goals, the Paris Climate Agreement and relevant national and regional frameworks.

PRINCIPLE 2: **IMPACT & TARGET SETTING**

We will continuously increase our positive impacts while reducing the negative impacts on, and managing the risks to, people and environment resulting from our activities, products and services. To this end, we will set and publish targets where we can have the most significant impacts.

PRINCIPLE 3: **CLIENTS & CUSTOMERS**

We will work responsibly with our clients and our customers to encourage sustainable practices and enable economic activities that create shared prosperity for current and future generations.

PRINCIPLE 4: **STAKEHOLDERS**

We will proactively and responsibly consult, engage and partner with relevant stakeholders to achieve society's goals.

PRINCIPLE 5: **GOVERNANCE & CULTURE**

We will implement our commitment to these Principles through effective governance and a culture of responsible banking.

PRINCIPLE 6: **TRANSPARANCY & ACCOUNTABILITY**

We will periodically review our individual and collective implementation of these Principles and be transparent about and accountable for our positive and negative impacts and our contribution to society's goals.

“The banks ensure that strategies and goals for the Swedish operations contribute to achieving Sweden’s adopted goal of net-zero emissions by 2045 at the latest.”

recommends that one goal should concern the climate. Follow-up shall be reported annually in the annual report (first reporting to take place 18 months after signing) in a self-assessment template. Some of the data shall be reviewed by a third party. Each bank’s reporting of how the efforts are progressing shall be published and contribute to the overall report, which is published by the United Nations Environment Programme Finance Initiative (UNEP-FI) every two years.

4.2 Milestones leading to reduced emissions

The banks that sign the PRB undertake to, in addition to setting their own goals, identify current climate impact and to report externally how the bank is introducing the principles for responsible banking. In addition, the Swedish Bankers’ Association’s member banks support Sweden’s climate goal. To achieve the ambition in these commitments, the following milestones have been set by the association’s member banks (the members which signed by the PRB early on follow the more ambitious timeframes while banks that have not yet signed follow a more extended timetable).

1. 2021–2022: The banks identify their own most significant positive and negative effects on society, the economy and the environment, including the climate. In accordance with the PRB, which covers the bank’s core activities, the banks identify and publish a first assessment of where they can achieve the greatest positive effect on the climate and where they can reduce significant negative effects. This includes the banks’ direct and indirect influence on climate emissions and investments for tackling climate change and thus also the actions of the banks’ customers to achieve the climate goals, within the framework of available data and standard measures.

2. 2021–2024: The banks commit to measuring the carbon footprint in their relevant financing and investment activities, within the framework of available data and standard measures for direct and indirect emissions (scopes 1–3). The Swedish Bankers’ Association recommends that the climate metrics are based on international standards and will act to ensure that similar metrics are used between the banks to facilitate measurability and comparison. There are advantages with using the same format at the Nordic level and adaptation to the future development of international standards for climate metrics will take place. The Swedish Bankers’ Association will publish the industry’s carbon footprint at an aggregated level each year based on the banks’ individual sustainability reports and in accordance with the PRB.

3. 2023–2026: The banks ensure that strategies and goals for the Swedish operations contribute to achieving Sweden's adopted goal of net-zero emissions by 2045 at the latest. Each bank is responsible for producing individual milestones and measures for attaining the final objective: in this way, competition is promoted and consideration given to the banks' different profiles and conditions. Based on the banks' climate reporting in accordance with the PRB, the Swedish Bankers' Association will continuously summarise and present the sector's common path towards the climate goals. The banks commit, within the framework of their own business and, thus, the factors under their own control, such as incentives, targeted management of investments, advice and innovative financing solutions, to contribute to the conditions needed to allow Sweden to reach net-zero by 2045 at the latest. This assumes that trade and industry and the rest of society share the banks' aspirations and efforts to make the goal a reality.

4.3 Sustainability aspects are taken into account when granting credit and in risk management

4.3.1 THE TAXONOMY IS TAKEN INTO ACCOUNT IN THE BANKS' LENDING

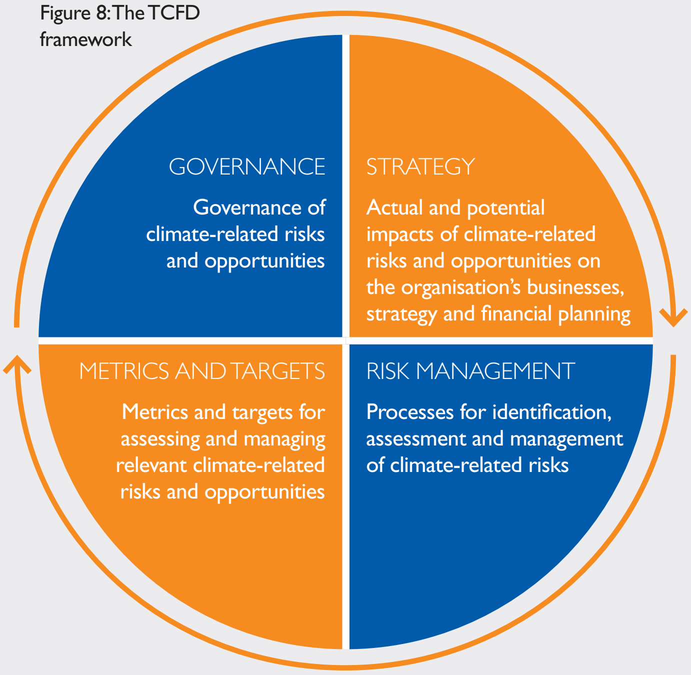
In order to integrate sustainability aspects into the granting of credit, both comprehensive data and comparison levels are needed for different sectors to control against. The EU's taxonomy is seen as an important building block for current and future measures for sustainable finance and it is expected to guide the EU's efforts to control capital flows. For this reason, it is the objective of the Swedish banks to start taking into account the EU's taxonomy in advance when granting credit. The EU's taxonomy has its greatest focus on the securities market but, because banks finance a large part of their lending by issuing bonds, pricing on the securities market will be passed on to the end customer. Regardless of the loan product to the customer, and how it is financed by the lender, the securities market's demand for investments in sustainable projects will influence lenders' interest in financing these projects. The price effects of the taxonomy will be transferred from the securities market to the credit market. For this reason, the banks wish to play an active part in this and identify the investment projects that live up to the requirements in the taxonomy. Lessons can be learned, including from the pilot project where UNEP-FI together with the European Banking Federation (EBF) has taken the initiative, where a number of banks have participated and investigated the opportunities for applying the taxonomy regulation in their credit portfolios. UNEP-FI and EBF have initiated a continuation of the project on how the taxonomy can be applied to credit portfolios. The Swedish Bankers' Association. will participate in this project.

The taxonomy is not comprehensive and, for this reason, will need to be supplemented with Swedish individual target levels and databases. For this reason, the banks also intend to cooperate on various possible supplementary projects to ensure that investments with positive net effects for the climate and the environment will be able to be treated correctly during the granting of credit.

4.3.2 THE RECOMMENDATIONS IN THE TCFD ARE APPLIED IN RISK MANAGEMENT

The Swedish banks undertake to follow the recommendations from the global initiative, Task Force on Climate-related Financial Disclosure (TCFD)[25]. The TCFD recommendations on climate-related disclosures will make it easier for operators in the financial market to understand both their climate-related risks and opportunities. It aims to increase and harmonise the companies' climate-related financial reporting to their stakeholders and lead to more informed decisions on investments and lending. TCFD presents recommendations for climate reporting in four main areas: governance, strategy, risk management and metrics and targets. In principle, this means that companies are encouraged to review their entire business based on the recommendations. TCFD is currently voluntary in the EU but it is expected to become binding legislation. Several of the Swedish banks have already

Figure 8: The TCFD framework



expressed their support for the TCFD's recommendations and started their efforts to integrate them into their reporting and in their strategic decisions and risk management.

For this reason, the Swedish Bankers' Association's members wish to start immediately on preparing for future legislation and complying with the recommendations of the TCFD as soon as possible in their reporting and risk management.

4.4 Common frameworks

In order to achieve the goals and commitments of the banking industry in the climate field, two important areas have been identified where the banks can cooperate in the Swedish Bankers' Association:

1) Interpreting regulations and

2) facilitating the gathering of climate data.

These measures are important for creating a functioning framework for the banking industry's climate efforts. The ambition is for the areas for the climate efforts to have as wide a geographical coverage as possible, in some cases at EU level and in other cases within the Nordic region or Sweden. The structure for the cooperation will be developed between the banks and the Swedish Bankers' Association in order to create forms of cooperation that are as effective as possible for each area.

There are several examples of previous successful cooperation between banks

- The banks have identified a need but no single bank has been able to solve the need on its own
- The cooperation has not obstructed competition but has, instead, contributed to increased efficiency
- The area of cooperation is outside the banks' area of competition (for example, money laundering)
- The basic idea has been to create standards and common definitions (e.g. bank giro or ATM)
- Product development has benefited from several banks working together to develop the product (for example, ATM, Swish)
- The product (for example, Swish) has simplified banking services for the end customers

** Invidem was formed by six Nordic banks to create a common standard and platform for Know Your Customer information (KYC)*

IDENTIFYING AREAS OF COOPERATION

The aim of launching the cooperation in the field of climate change is to make it easier for the customers to accelerate the climate action. There are already examples of cooperation in other areas that the banks have implemented with good results, such as bank giro, the Swedish Anti-Money Laundering Institute, SIMPT, Invidem (contributes to the banks' efforts to comply with the money laundering regulations regarding Know Your Customer, KYC), BankID and Swish.

To formulate the common areas of work that are proposed in this climate roadmap, a number of needs that meet the challenges described in chapter three have been identified. These needs are:

- Transparency regarding the climate's impact on the banks' own and their customers' operations, which will require the gathering of climate data. Banks are already working actively on sustainability but need to gather climate data. Moreover, the banks need to manage the large number of new international climate regulations and initiatives, build-up knowledge linked to climate issues and work with other operators to manage regulations and control measures in the climate field.
- Collaborations make the overall efforts more efficient, allowing the banks to introduce new solutions faster and better. The banking industry should, with combined forces, coordinate tackling climate change with other organisations and experts (e.g. authorities, other trade associations, international bodies and sustainability experts) where this is relevant. The collaborations will start from a Swedish context but will have an international perspective, since many banks and their customers frequently operate internationally.
- The banks will only cooperate in areas where competition is maintained and where there is an added value from facilitating, implementing and/or improving the climate action. The collaborations implemented must not obstruct competition between the banks, not only from a legal but also from a business-related point of view. Moreover, cooperation has to be based on commitments and work already done – it is important not to 'reinvent' initiatives that the banks have already signed-off on or to create parallel efforts that are already under development elsewhere.

The areas for the banks' cooperation in the climate field to meet these needs are described below.

4.4.1 INTERPRETATION OF REGULATIONS

In order for banks to adapt their customer offerings based on their customers' climate impact, functioning frameworks and uniform interpretations of accounting requirements are required. The roadmap's commitments, to set targets based on the PRB and to take the taxonomy into account when granting credit and comply with the TCFD recommendations, require extensive implementation work. The same is true for various EU and EBA regulations. Figures 9 and 10 below show when different regulations were adopted or will be adopted, which will later need to be introduced in the Swedish banks.

Each industry will need to assess how the EU taxonomy should be interpreted in a Swedish context. Here, the banks can be involved in the work as one of the clients and hold a dialogue with each industry.

Instead of each bank interpreting the meaning of the regulations and initiatives individually, it is worthwhile for customers and counterparties of the banks to follow developments jointly via the Swedish Bankers' Association and continued responses to referrals for consideration concerning the formulation of new regulations and how these shall be implemented in Sweden. The competition between the banks will not be obstructed by a common interpretation. Instead, this will create a common market and make it easier for customers who are required to report to the banks.

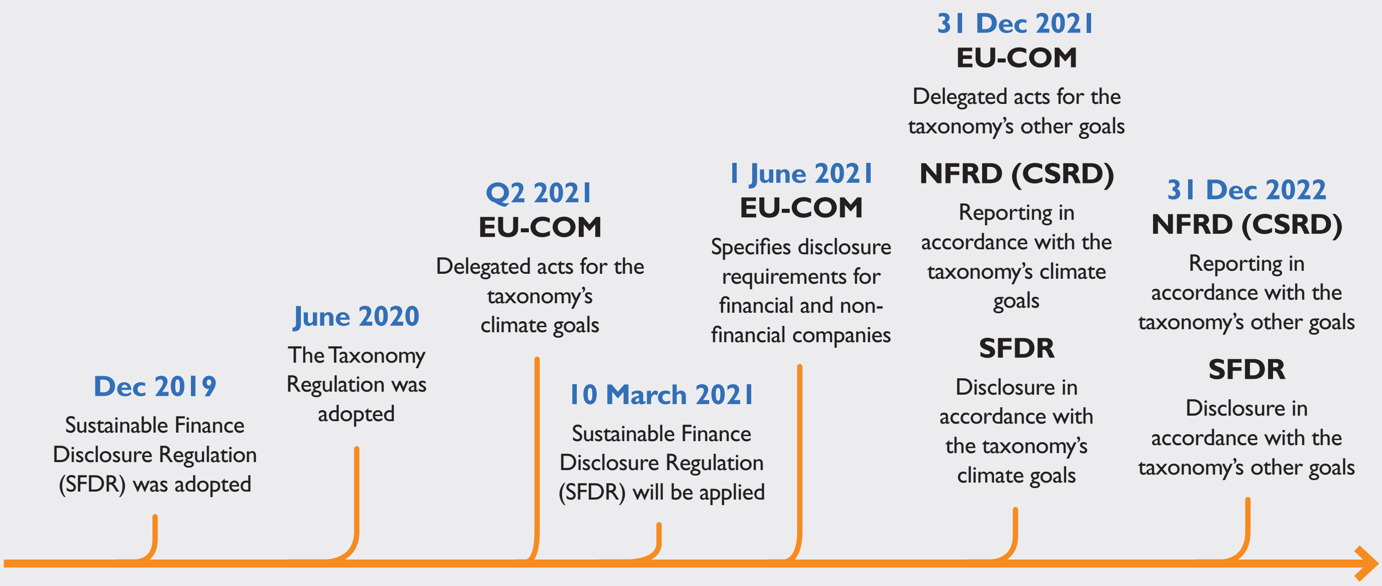


Figure 9: Timetable for EU sustainability reporting and disclosure

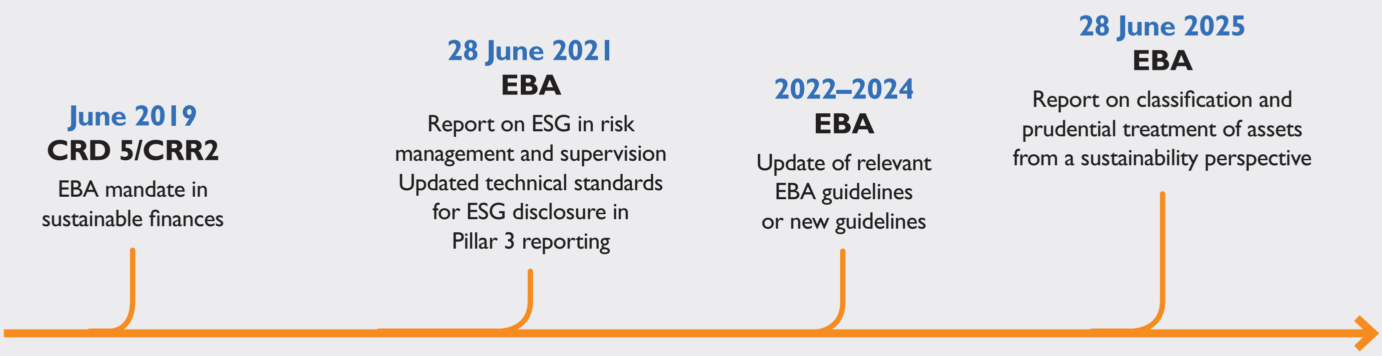
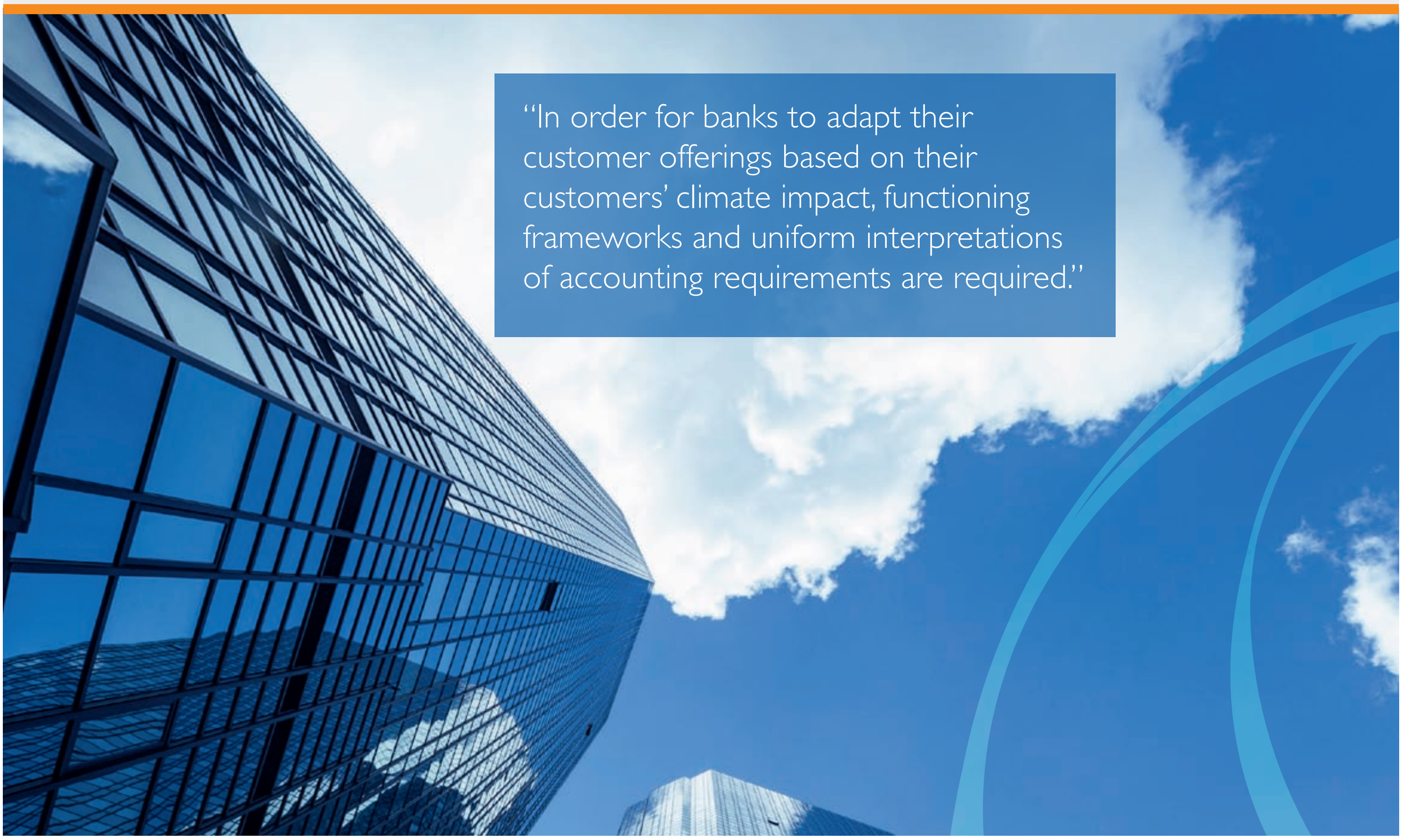


Figure 10: Timetable for EU risk management and supervision regarding sustainability

INTERPRETATION OF REGULATIONS, UNIFORM DEFINITIONS AND COMMON STANDARDISED DATA

This may make it easier for banks to clarify overarching climate goals into more specific action plans for different areas of activity and joint efforts where an existing clear international standard is already in place. This creates transparency and makes data more comparable. In concrete terms, this involves three parts.

- **Interpretation and application of regulations:** Interpretation of how international climate-related initiatives and binding regulations will be applied in the Swedish context, such as the EU taxonomy, NFRD and TCFD. Transparency and credibility are created for the banking industry while climate-related data becomes comparable between banks. These interpretations will clarify how the banks can apply the taxonomy in their operations. This work will involve interpreting questions such as "how will the specific objectives of the taxonomy be interpreted in Sweden?" The work will be done in collaboration with the relevant authorities[26] and industries.
- **Uniform definitions:** A couple of years ago, the banks' fund companies did solid joint work in defining green savings in the form of funds and other asset management. Now, similar efforts are needed regarding the granting of credit. For now, the banks have different definitions of green products, which makes it difficult for customers to make comparisons. Joint efforts via the Swedish Bankers' Association, building on existing international definitions, market standards and future regulation in the EU field, to define green products would create a level playing field. In this way, the banks are not competing over different definitions of what is green, but instead about the conditions and quality of the green products. The Swedish Bankers' Association will be responsible for running the collaboration on interpreting standards and definitions of "green" products and services, where there is not already a clear definition or where a translation into a Swedish context is needed. The work can build on existing definitions from international initiatives and regulations, such as the EU taxonomy and the banks' previous work. One such project could be working together on defining green mortgages.
- **Common standardised data for Sweden:** The work to develop common standardised data should be carried out together with relevant trade associations and authorities. One challenge in factoring the climate into decision-making when it comes to credit is a lack of climate data, especially from small and medium-sized companies. Standardised data need to be used to calculate the climate impact and improvements over time for these smaller companies. To ensure the comparability of the banks' climate efforts and to reduce the administrative burden on corporate customers, common standardised climate data should be developed via the Swedish Bankers' Association.



"In order for banks to adapt their customer offerings based on their customers' climate impact, functioning frameworks and uniform interpretations of accounting requirements are required."

4.4.2 FACILITATING THE GATHERING OF CLIMATE DATA

Data and information are needed for decision-making in the banks, for example during credit decisions, but currently climate data from both banking customers and official authorities is often lacking. Moreover, banks want different climate data from the bank customers, which makes it resource-intensive for the customers to produce data, if they have multiple banks or change banks. To resolve this, two commitments are proposed: facilitating the gathering of climate data from customers and authorities respectively.

- **Facilitate the gathering of regulatory climate data from customers:** Starting from the results of the work to find common standards and standardised data. The role of the Swedish Bankers' Association may be, for example, to investigate methods for how information is collected from small and medium-sized enterprises (SME), standardise forms or develop other methods to facilitate the work and increase the customer benefit.
- **Facilitate the gathering of climate data from authorities:** The Swedish Bankers' Association will continuously identify what information banks may need from authorities. Based on the nature of the needs, the Swedish Bankers' Association presents the question to the authorities within the framework of current legislation, such as banking secrecy issues. Thanks to the banks jointly requesting data from the authorities[27], the data gathering is made more efficient and a higher quality is achieved in the analyses.

4.5 Summary of the industry's efforts

The Swedish Bankers' Association will compile and summarise how the industry is succeeding with the common goals. How the other joint commitments are progressing will also be summarised. The banks' own goals and their achievement of these goals will be reported by the banks themselves. The process of reaching the common climate goals for the members of the Swedish Bankers' Association consists, primarily, of the following three areas.

- **Compiling relevant climate metrics and timings for reporting and follow-up:** In accordance with the PRB, banks will set sustainability targets in at least two areas, monitoring the implementation and publishing reports. For the members of the Swedish Bankers' Association, it is recommended that one of the chosen areas should be climate. The Swedish Bankers' Association recommends that climate metrics be based on international standards and will work to ensure that similar metrics are used between banks to make comparison easier. The Swedish Bankers' Association will publish emissions data according to the central emission areas (scopes 1–3) in accordance with the Greenhouse Gas Protocol at an aggregated level for the entire member circle. The banks will publish their own climate and sustainability metrics separately.
- **Annually summarise progress with the action plans in accordance with the PRB:** The Swedish Bankers' Association will support the banks' efforts in formulating action plans for the Swedish banking industry based on the PRB's reporting guidelines. In addition to the reporting requirements for the PRB, the banks will periodically present their progress with respect to the action plans. The Swedish Bankers' Association will create a structure for reporting the overall impact of the action plans and annually summarise the industry's contribution to climate goals.
- **Run joint climate cooperations:** The Swedish Bankers' Association will initiate and run the proposed areas for joint climate cooperations; interpret regulations and facilitate the gathering of climate data. The results of these collaborations will be evaluated annually and developed based on the evaluation.

4.6 Joint cooperation with other operators

The banking industry will act to support the climate action and, in these efforts, a constructive dialogue with other stakeholders is needed. According to a report from the Swedish Climate Policy Council (2021), assessing whether the government's overall policy is consistent with the climate goals that the Swedish parliament and the government have adopted, the emissions do not reduce at the required rate, instead wide-ranging investments are demanded. For example, the council writes that "The Climate Policy Council has previously pointed out that there are good technical and economic opportunities for reducing emissions to zero emissions by 2045, but this requires the necessary investments to be timely" and that "several significant obstacles remain, however, and several of them concern cross-sector challenges concerning the need for expanded modernised electricity grids, new infrastructure and the right conditions for fossil-free hydrogen as well as shorter lead times for environmental permits. These obstacles must be eliminated to allow industry's transition towards zero emissions to happen quickly enough[28]."

The banking industry has the unique role of being involved in all sectors of society and has, for this reason, insights and a role to play in implementing climate action. Instead of the banks individually talking with other operators, it becomes more powerful and more coordinated if a united message is sent out where the majority of banks are involved. For this reason, the Swedish Bankers' Association intends to cooperate with a number of operators.

- **Joint dialogue with legislators:** The Swedish Bankers' Association can identify the need for new regulations in the form of new control measures or removal of barriers in industries that are financed by the banks in order to accelerate the climate action. One such example where banks can help the legislators is in developing a brown taxonomy. The Technical Expert Group of the European Commission (TEG) has concluded that the taxonomy will only be fully developed when a brown classification is also included[29]. For this reason, the adopted Taxonomy included a mandate to a new expert group, the EU Sustainable Finance Platform[30], which was established in autumn 2020, to present, among other things, a proposal for a possible brown taxonomy, which is planned to be presented in 2021. A complementary brown taxonomy may be useful in financing the climate action, if it is properly designed.
- **Joint work with trade and industry:** The banks are already working with trade and industry as well as trade associations to help different sectors achieve their respective goals and implement their climate roadmaps. The Swedish Bankers' Association wants to help make more such collaborations easier. Examples of such collaborations could concern the risk management scenarios used by banks, identifying solutions for financing needs and creating a common view of what counts as green in the future. A dialogue with trade and industry can also support other climate cooperation, such as the demand for climate data from authorities and companies. By reviewing climate roadmaps and their overall climate benefits, the banks can respond to what they can finance and whether regulations are an obstacle to any financing.

In conclusion, the banks, with the goals and metrics as proposed in this climate roadmap are contributing to a better and more sustainable future. Swedish Bankers' Association and its members look forward to working together with legislators and industry to drive the climate action forwards as set out in this and other industries' climate roadmaps.

Footnotes

[1] This presumes that trade and industry and the rest of society share the banks' aspirations and efforts to make the goal a reality.

[2] UNEP estimated in its 2019 report that it requires a 35–40 per cent reduction in greenhouse gases by 2030 to reach the target of a temperature rise well below 2 degrees and 50 per cent for 1.5 degrees temperature rise (UNEP, 2019). The level that emissions need to reduce to by 2030 remained in the 2020 report and the emission reduction that happened in 2020 risks being a temporary effect of the Covid-19 pandemic, unless recovery strategies include a focus on reducing greenhouse gas emissions (UNEP, 2020).

[3] Sweden in the face of climate change – threats and opportunities, SOU 2007:60. See also KLIMATOLOGY No. 48/2017, Future sea levels in Sweden (SMHI, 2017).

[4] The global carbon budget is the limited total quantity of carbon dioxide that can be released into the atmosphere to manage a given temperature target (for example, the 1.5 degree target).

[5] Stranded assets are assets (such as a factory) that need to be decommissioned or its value impaired prematurely compared to its expected economic life.

[6] OECD, "Mobilising Bond Markets for a Low-Carbon Transition", Green Finance and Investment (2017)

[7] Statistics Sweden, GDP from the use side (ESA2010), supply balance after use, 1980–2018

[8] Gilbert-d'Halluin A; Harrison P, Trucking into a greener future, 2018.

[9] Material Economics, "Industrial Transformation 2050 – Pathways to Net-Zero Emissions from EU Heavy Industry" (2019).

[10] Externality exists if an economic transaction affects, positively or negatively, the benefits to third parties, for example the environment, without the price or benefit being part of the transaction price.

[11] See, for example, IMF World Economic Outlook, October 2020 and OECD (2018). Effective Carbon Rates 2018 and GISD (2020), Renewed, Recharged and Reinforced – urgent actions to harmonize and scale sustainable finance. There, it is estimated that in 2020, 22 per cent of global emissions were covered by a carbon price and, of these, less than 5 per cent were priced at a level compatible with the Paris Agreement.

[12] GHG Protocol has developed a standard for categorising emissions in 3 groups: Scopes 1, 2 and 3. Scope 1 emissions are direct emissions from sources owned or controlled by the company, scope 2 emissions are indirect emissions from purchased energy (but still emissions over which companies have great control) and scope 3 emissions are indirect emissions, other than scope 2, from sources that are not owned or controlled directly by the company.

[13] The banking industry's direct emissions from scopes 1 and 2 are based on the average direct emissions per employee for Handelsbanken, SEB, Nordea and Swedbank and then scaled for the total number of employees in the banking industry in Sweden. Sweden's climate impacting emissions (greenhouse gas emissions excluding carbon dioxide removals) were 51.8 million tonnes in 2018, according to the Swedish Environmental Protection Agency.

[14] Dagens Industri, "Di's Climate Index".

[15] Based on annual reports for 2020 from SEB, Handelsbanken, Swedbank and Nordea.

[16] Danske Bank, DNB, Handelsbanken, Nordea, SEB and Swedbank.

[17] IIF, The Taskforce on Scaling Voluntary Carbon Markets, "Private Sector Voluntary Carbon Markets Taskforce Established to Help Meet Climate Goals" (2020).

[18] Partnership for Carbon Accounting (PCAF)

[19] The Disclosure Regulation was adopted in December 2019 and will apply from 10 March 2021, EUROPEAN AND COUNCIL REGULATION (EU) 2019/2088 of 27 November 2019 on sustainability-related information that shall be provided in financial services sector.

[20] CDP, "Five global organizations, whose frameworks, standards and platforms guide the majority of sustainability and integrated reporting, announce a shared vision of what is needed for progress towards comprehensive corporate reporting – and the intent to work together to achieve it." (2020).

[21] Reputation risk refers to a risk likely to lead to a reduction in confidence in the bank and, by extension, financial damage to the bank. This can occur, for example, by the bank's share price dropping or the bank losing customers. The reputation risk may also increase the bank's financing costs and, in the worst case scenario, the bank will find it difficult to finance itself on the market. Reputation risk must be managed by the bank in its risk management system in the same way as other risks associated with its business.

[22] See, for example, the Swedish Central Bank, "Economic Comments - Sea level rise due to global warming entails an increased risks to housing" (2020) and the Swedish Central Bank, "This is how The Swedish Central Bank contributes to climate policy" (2020).

[23] The EU Taxonomy Regulation adopted on 18 June 2020 delegated the Commission with adopting delegated acts with technical review criteria for determining what is required for an activity to make a significant contribution to any of the six environmental goals. The criteria are not adopted once and for all, but will be reviewed at certain time intervals.

[24] Only financial institutions can become "signatories" of the PRB. Supporter status involves a role that the organisation undertakes to disseminate information about the initiative among its membership, encourage banks to join and to provide support when the initiative is introduced in the banks that join.

[25] TCFD recommendations on climate-related financial disclosures

[26] For example, the Swedish Financial Supervisory Authority, the National Board of Housing and Planning, the Swedish Energy Agency and the Swedish Transport Agency.

[27] For example, Statistics Sweden, SMHI and the National Board of Housing and Planning. One example is that the Swedish National Board of Housing and Planning can produce data and models that simplify the banks' analysis of building's real energy efficiency in relation to the average stock in Sweden.

[28] Climate Policy Council report, 2021. Pages 67–68.

[29] EU Technical Expert Group on Sustainable Finance, "Taxonomy: Final report of the Technical Expert Group on Sustainable Finance" (2020).

[30] European Commission, "Platform on sustainable finance"

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