SWEDISH CLIMATE POLICY COUNCIL

Climate Policy Council

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Foreword

This report constitutes the Swedish Climate Policy Council's annual assessment of the Government's overall policy in relation to the climate targets adopted by the Riksdag and the Government.

Part I is the recurring section of our reports. We begin with a description of the state of the climate and the climate targets, which form the basis for Sweden's climate policy work. We then assess Sweden's progress in relation to the climate targets and how policy in 2025 has influenced the achievement of these targets.

Part II contains an in-depth section focusing on climate policy across terms of office. Sweden is heading to the polls in September, and in this year's in-depth section we aim to draw on lessons from the current term of office to make a constructive contribution to the policies taking shape at the start of the next one. We present recommendations for both individual emissions sectors and for the Government's decision-making processes, both nationally and within the EU. We also discuss important cross-sectoral perspectives that should be included in the policies of the next term of office and in the next Government's climate policy action plan.

We have also chosen to conduct in-depth studies on permanent greenhouse gas sinks and the integration of climate considerations into the ongoing defence modernisation programme. Sweco and RISE have contributed a background report on total defence, and Linköping University has contributed a report on permanent sinks. Our conclusions based on this background information can be found in Part II, and the background reports for these in-depth studies are published on the Climate Policy Council's website.

We would like to express our sincere thanks to all the organisations, researchers, experts and practitioners who have contributed background material to the report, including during our dialogue meetings. In these meetings alone, over 50 representatives from the business sector, trade unions, the research community, municipalities, regional authorities, government agencies and civil society participated. The conclusions and recommendations presented here are those of the Swedish Climate Policy Council.

Stockholm, March 2026

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The Climate Policy Council and its remit

In June 2017, the Swedish Parliament adopted a new climate policy framework for Sweden by a large majority. The aim of the framework is to ensure the long-term conditions necessary for business and society to carry out the transition required for Sweden to achieve its climate targets. The framework brings order and clarity to climate policy and is a key component of Sweden's efforts to comply with the global Paris Agreement. The climate policy framework comprises three parts: the climate targets, the Climate Act and the Climate Policy Council. The Climate Act enshrines in law that the Government's climate policy work must be based on the long-term climate target and sets out how this work is to be carried out.

The Climate Policy Council is an independent, interdisciplinary body of experts. The Council comprises eight members with high levels of scientific expertise in relevant fields and is supported by a secretariat with four staff members.

According to the Government's instructions, the Climate Policy Council's remit is to 'assess how the Government's overall policy is consistent with the climate targets decided by the Parliament and the Government'.

Within the framework of its overall mandate, the Climate Policy Council shall, in particular:

- assess whether the direction of various relevant policy areas contributes to or hinders the ability to achieve the climate targets
- highlight the effects of adopted and proposed policy instruments from a broad societal perspective
- identify policy areas where further action is needed
- analyse how the objectives can be achieved in a cost-effective manner, both in the short and long term
- evaluate the evidence and models on which the Government bases its policy
- contribute to a broader public debate on climate policy.

By 31 March each year, the Climate Policy Council must submit a report to the Government. The report must contain the Climate Policy Council's assessment of the progress of climate action and emissions trends, as well as how the Government's policies align with climate targets. Every four years, when the Government presents its climate policy action plan, the Climate Policy Council must assess the plan.

International Climate Councils Network (ICCN) - a global network of national climate policy councils

In recent years, many countries have enacted national climate laws. At the same time, the number of established national climate councils is growing, with roles ranging from scrutinising government policy to advising the government. On the initiative of, among others, the Swedish Climate Policy Council, a network was formed in 2021 to facilitate the exchange of experiences and learning between climate policy councils: the International Climate Councils Network (ICCN). The ICCN currently has 25 members from all continents, has participated in the UN's annual climate conferences, COP, and organises, among other things, thematic seminars. Sweden is also represented by the National Expert Council for Climate Adaptation.

In 2022, a scientific advisory board on climate change, the European Scientific Advisory Board on Climate Change (ESABCC), was established within the EU as part of the European Climate Law. The European Scientific Advisory Board's remit is to advise the EU institutions on the scientific basis of climate policy, as well as on the European Climate Law and the EU's commitments under the Paris Agreement.

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Executive summary

In this report, we evaluate the Swedish government's policy and present recommendations on measures needed before and during the next term of office to achieve Sweden's climate targets.

Following a unanimous parliamentary inquiry in the autumn of 2025, all political parties in the Swedish Riksdag support Sweden's long-term climate goals and the proposal for a new interim target for 2030. Regardless of which parties form the government after the general election, concrete decisions are needed early in the term of office to ensure that the climate goals are achieved. This applies in particular to the upcoming 2030 targets. Our recommendations are therefore directed at all parties in the Riksdag, which share a responsibility to safeguard the climate targets and the framework. Ahead of the election, each party should draw up a plan for how the climate targets are to be achieved and, after the election, ensure that these plans are translated into decisions and implementation.

Increased global uncertainty calls for strong and consistent climate leadership

In 2025, the world became a more uncertain place, with shifts in the rules-based world order, increased political polarisation, growing disinformation and threats to democracy. At the same time, global warming continues, and the last three years have been the warmest ever recorded globally. The direct cost of extreme weather has risen sharply in Europe, and climate change is also contributing to other threats to society's security.

The uncertain global situation is no excuse for weakening climate policy - quite the contrary. In this situation, it is important to remember why countries around the world have enacted climate laws and set climate targets: to prevent costs and damage and to provide long-term rules for businesses, municipalities, households and other stakeholders. If the world fails to halt global warming, the ambitions for a safer and more sustainable world will be more difficult to achieve. Reduced dependence on fossil fuels strengthens both security and prosperity.

The Swedish government needs to work actively at EU level to integrate climate change into efforts to strengthen Europe's security and competitiveness. Sweden should safeguard regulations and strengthen the EU's global climate leadership, as well as contribute to stable conditions for business. At the national level, the government needs to ensure that climate targets and EU commitments are met. Sweden is well placed to be a pioneer in the climate transition and to strengthen its competitiveness through the climate transition.

Inadequate climate policies during the current term of office

CLIMATE POLICY COUNCIL ASSESSMENT

- Under current policies, Sweden is not on track to achieve either its **national climate targets** for 2030 and 2040 or **the EU commitment for the ESR sector for 2030**. The gap to the targets has widened during the term of office.
- The gap to **the long-term net-zero target for 2045** has narrowed slightly during the term of office but remains significant. Emissions increases in the near term mean that the expected cumulative emissions for the period up to 2045 have increased.
- The latest statistics for **the land-use sector (LULUCF)** show a sharp increase in net removals in 2022–2024, which has improved the prospects of achieving Sweden's LULUCF commitment for 2030, although this will require high net removals in the coming years as well.

In our reports, we have repeatedly concluded that the government's overall policy is not sufficient to meet the climate targets. Last year, we highlighted that 2025 would be a decisive year for improving the conditions for meeting the climate targets before the end of the electoral term. Despite this, we are now forced to conclude that the gap to the climate targets has nevertheless widened.

Overall, our assessment of the term of office reveals the following:

- **Necessary decisions have been postponed.** The government's climate policy action plan from 2023 had several shortcomings, and only about half of its initiatives have resulted in concrete decisions. The term of office has been characterised by uncertainty regarding the target and inconsistency in the development of policy instruments.
- **Climate policies for transport and machinery have been weakened.** This has contributed to slower electrification, increased traffic and higher use of fossil fuels.
- **The cost-effectiveness of nationally determined climate policy has declined.** This is a consequence of policy inconsistencies, reduced carbon pricing and technology-specific investments. At EU level, however, cost-effectiveness has increased during the term of office through strengthened and expanded emissions trading and climate standards for vehicles.
- **The conditions for investment in new nuclear power have improved, but for other fossil-free energy sources they have deteriorated.** Energy efficiency has been a low priority during the term of office.
- **The conditions for industrial transition have been strengthened to some extent, primarily through a focus on more efficient permitting processes.** However, reduced political ambition and inconsistency in the government's risk-sharing arrangements have recently increased uncertainty for industry.
- **Plans and policy instruments for the land-use sector (LULUCF) and agriculture's contribution to climate targets are largely lacking.** This makes it more difficult to achieve both short- and long-term climate targets.
- **Sweden has largely championed the EU's climate policy.** In the final negotiations on the EU's climate targets for 2040, Sweden played a leading role in reaching an agreement and has helped to maintain the level of ambition in key parts of the 55% package. At the same time, Sweden's rising domestic emissions and the widening gap to the 2030 targets have contributed to a decline in Sweden's climate leadership within the EU.

It is still possible to achieve the climate targets in the short and long term. The climate policy action plan, which under the Climate Act is to be presented at the start of the next term of office, is the plan that will need to guide the way towards Sweden's climate targets for 2030. This places high demands on the specificity of the action plan and on the government's ability to take action. The tight timeframe means that the government will largely need to draw on proposals that have already been examined. At the same time, long-term reforms need to be initiated during this term of office in order to create the conditions for continued transition during the 2030s, both nationally and within the EU.

Based on our assessment of the term of office and previous evaluations of the policies pursued, we are making recommendations on the focus and content of the next climate policy action plan.

Clear leadership and effective governance to achieve climate targets

During the next term of office, we call for clearer leadership and more effective governance in order to achieve climate targets. The government needs to implement the following:

1. Present a concrete climate policy action plan alongside the budget bill in autumn 2027

A concrete action plan presented early in the term of office is necessary to achieve the climate goals. Based on our evaluation of previous action plans, we recommend the following to the government:

- **Make use of existing proposals** from the large number of inquiries and government agency proposals that have already been carried out.
- **Use cost-effective instruments** that ensure, with a margin, that climate targets are achieved in the short term and that address undesirable distributional effects with complementary, targeted measures that do not undermine the effectiveness of the policy.
- **Grant a permanent and well-resourced mandate to government agencies** to contribute to the development and implementation of the action plan and the analysis of EU climate policy.
- **Clarify responsibilities and provide more tools to municipalities and regions** so that they can contribute further to climate targets, for example through regulations on transport and urban planning or through climate agreements with central government.
- **Strengthen existing cooperation** with the business community and broaden the dialogue to include other key stakeholders such as civil society, trade unions, the education sector and academia.

2. Work to ensure that the EU's 55% package is implemented by 2030, as agreed, and take a proactive role in developing an ambitious European climate framework for 2040

The EU's climate policy is central to global climate change and is compatible with ambitions for increased security and strengthened competitiveness. In order for the EU to achieve its 2030 targets and to provide stable and predictable conditions for Swedish stakeholders who have already invested in the transition, Sweden should actively oppose proposals that aim to weaken rules that have already been agreed. Ahead of the upcoming climate framework for 2040, we recommend that the government, both during the current and next terms of office, push for the following:

- **Strengthen the EU's emissions trading system so that it provides incentives to key players.** Maintain a steep reduction in the total number of emission allowances and phase out free allocation. Develop governance to promote investment in the capture of both fossil and biogenic carbon and strive to include more emission sources in the system.
- **Phase out fossil fuels in a cost-effective manner.** Work towards a rapid phase-out of emission allowances within the ETS 2 emissions trading system, whilst maintaining national responsibility for enabling the phase-out.
- **Develop a framework that strengthens carbon sinks.** Work towards a target for the land-use sector (LULUCF) that takes into account increased climate-related risks, as well as support for increased uptake through EU-wide financing.
- **Work to ensure that the limited amount of international carbon credits (Article 6) that may be used to achieve the 2040 target is not increased.** Also ensure that the credits have high environmental integrity and are sustainable in the long term.
- **Strengthen climate integration across all EU policy areas.** Work to ensure that the climate transition becomes an integral part of future EU legislation on energy, transport, agriculture and the long-term budget.

3. Develop the Swedish climate policy framework for 2040

The EU's climate targets for 2040 require Sweden to accelerate the pace of the transition and to develop its climate policy framework. As soon as the European legislative package has been finalised, a parliamentary inquiry should be tasked with the following:

- **Review the national interim target for 2040** so that it better aligns with EU climate legislation.
- **Evaluate and develop the climate policy framework** based on the experiences of the past decade and drawing inspiration from other countries' climate frameworks.
- **Develop a strategy for Sweden's international climate policy** with the aim of better integrating climate negotiations, climate diplomacy, trade, investment and aid policy.

4. Integrate the climate transition into the comprehensive modernisation of total defence

The ongoing strengthening of Sweden's total defence will involve investments of several hundred billion Swedish kronor by 2030. How this is implemented will affect greenhouse gas emissions and the climate transition in general. In order for both the strengthening of total defence and the climate transition to lead to a more resilient society, potential synergies must be exploited, for example in the pursuit of greater energy security. Any conflicting objectives must be addressed in order to avoid long-term lock-in to fossil fuel systems. The Government should therefore:

- **Give the relevant authorities clear mandates** to integrate the strengthening of total defence with the climate transition, so that synergies are exploited and conflicting objectives are identified, minimised and monitored.
- **Use public procurement strategically** as a means of integrating climate goals into total defence initiatives.
- **Use NATO's governance system and standardisation work** to incorporate climate goals into the transition of total defence.

All sectors need to contribute to achieving climate goals

There is great potential to reduce emissions in Sweden whilst enhancing welfare and competitiveness. We consider the following six recommendations to be the most important for all relevant sectors to be able to strengthen their contributions to climate goals.

5. Introduce a comprehensive policy package for transport and machinery

The climate transition in transport and machinery is key to achieving climate goals in both the short and long term. These sectors account for the largest share of emissions and offer the greatest potential for rapid reduction. A comprehensive package of policy measures must include the following:

- **A combination of an increased carbon tax and higher blending requirements**, which together create a highly cost-effective mix of policy instruments for achieving the climate targets by 2030. The measures should lead to clear reductions in emissions from 2027 and ensure that both short- and long-term targets are met, for example through predictable price trends, the phasing out of exemptions from carbon taxation and gradually increased blending levels.

- **An electrification package** that includes enhanced and more targeted support, a review of vehicle taxation to encourage the faster renewal of the vehicle fleet, and a strong Swedish stance on maintaining and developing the EU's carbon dioxide standards for light and heavy-duty vehicles. This should be complemented by continued improvements to the conditions for expanding the charging infrastructure across Sweden.
- **Measures for a transport-efficient society.** Reform infrastructure planning in line with climate targets and strengthen the railways. Implement the proposal for a transport-neutral travel tax deduction and make public transport more affordable. Provide municipalities with the tools to reduce emissions in cities - for example, through environmental zones, reformed parking regulations and congestion charges.

6. Create stable and long-term conditions for industrial transition

Industries depend on stable rules to commit to long-term investment decisions that reduce emissions. A continued ambitious EU Emissions Trading System should be complemented by measures that create the conditions for investment in fossil-free technology, including through:

- **Effective, predictable and legally secure permit processes** that shorten lead times and reduce uncertainty for investments in fossil-free technology.
- **An active and predictable innovation and industrial policy** that promotes pilot and demonstration facilities, supports the commercial upscaling of technologies with high climate benefits and strengthens the global competitiveness of industry. This can be achieved through developed risk-sharing arrangements between the state, companies and municipalities, for example through green credit guarantees and investment support.
- **A comprehensive strategy for skills provision to support the climate transition,** with increased opportunities for further education, retraining and labour immigration, as well as regionally tailored initiatives in areas where there is high demand for skills.
- **Incentives for circular flows and renewable materials,** for example through policy instruments that increase demand for recycled materials, reward resource efficiency and facilitate industrial symbiosis.

7. Anchoring and broadening the policy for the fossil-free energy sector of the future

Fossil-free electrification is a key area for achieving climate goals. In the work ahead, we propose a broader approach:

- **Conduct a comprehensive analysis** of cost-effective pathways for the fossil-free electricity system of the future, taking into account all fossil-free energy sources, electricity grids, storage, flexibility and market regulations.
- **Work towards a broad and long-term energy agreement** in the Swedish Parliament based on the analysis of the electricity system of the future.
- **Improve the conditions for wind power** to increase electricity generation in the short and medium term. Determine compensation for local residents and reform the municipal veto on onshore wind power. Bring together the Swedish Armed Forces and relevant stakeholders to find solutions for wind power, and implement the proposals for simplified permit processes.
- **Improve the conditions for expanding electricity grid capacity** by, for example, adapting regulations to enable rapid and proactive investment and by continuing to work on effective permit processes.
- **Develop and strengthen governance that promotes fossil-free heating** in order to curb the rising emissions from the incineration of fossil waste.

- **Give greater priority to energy efficiency** by supplementing the proposed energy efficiency target with quantitative indicators, concrete reforms and incentives for reduced and smarter energy use.

8. Decide on policy instruments to increase net carbon uptake in forests and land

In order to maintain high net carbon uptake in the land-use sector (LULUCF) and improve the chances of meeting Sweden's EU commitment, policy instruments need to be developed. In early 2025, a parliamentary inquiry presented several politically supported proposals, including compensation for landowners for longer rotation periods in forests, the rewetting of wetlands, and knowledge-building and advisory services. Policy needs to be developed along two main tracks:

- **Decide on a package of policy instruments to increase net greenhouse gas uptake.** Build on the proposals from the parliamentary inquiry and create financial incentives for landowners to take climate action.
- **Develop statistics on land use.** Continued development of methods and statistics contributes to a more robust basis for decision-making and improves the conditions for designing and monitoring policy instruments in the land-use sector.

9. Design a bioeconomy strategy for Sweden with a comprehensive approach to the role of forests

Sweden has access to large quantities of biomass from forests and land, which is of central importance for climate change mitigation. As the transition progresses, demand for biogenic carbon is increasing across several sectors for fossil-free fuels, materials and chemicals. Like several other countries and the EU, the Government should therefore develop a bioeconomy strategy for Sweden. The strategy should:

- **Provide guidance on the efficient and sustainable use of biomass**, with a focus on high-value applications, such as in durable products and as a substitute for fossil materials where no other alternatives are available. The strategy should also include the capture, use and storage of carbon dioxide.
- **Take into account key perspectives** such as the forest's absorption of carbon dioxide and consideration of increased climate-related risks, biodiversity, landowners' responsibilities and rights, industrial and regional development, security of supply and the social functions of the forest.

10. Develop climate policy for agriculture

In last year's report, the Climate Policy Council stated that policies should be developed to strengthen agriculture's contribution to climate change mitigation. Our recommendations from last year remain valid and can be summarised in the following three points:

- **Develop a vision and strategy for climate transition in agriculture** that clarifies, among other things, how increased food production can be achieved within the framework of climate targets.
- **Develop European and national policy instruments** that provide incentives for cost-effective emissions reductions in agriculture.
- **Strengthen the conditions for the climate transition in agriculture** through increased advisory services, enhanced analytical capacity within government agencies, and the development of methods for quantifying the effects of climate measures.

Part I

The state of the climate, climate targets, target achievement and policy in 2025

1 The state of the climate

- **The state of the climate is very serious.** It will be very difficult, in practice almost impossible, to limit global warming to 1.5 degrees. Every tenth of a degree that is successfully prevented is important, as climate change is associated with significant costs and risks.
- **The world's collective climate policy is insufficient.** Emissions continue to rise globally. The new commitments submitted ahead of the 2025 climate summit in Brazil are not sufficient to meet the Paris Agreement's targets.
- **Some positive trends are emerging.** Investment in renewable electricity generation is rising sharply and, in certain regions, including the EU, greenhouse gas emissions are falling.

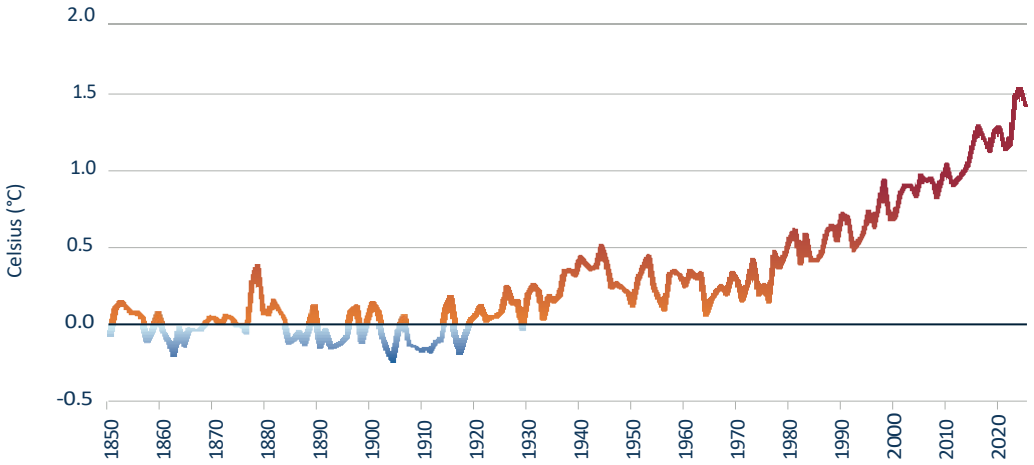
The last three years have been the warmest on record, and the average global temperature over this three-year period has exceeded 1.5 degrees above pre-industrial levels,[1] which is the temperature target that the parties to the Paris Agreement strive to meet. This is a consequence of emissions remaining very high and increasing further over the past decade since the Paris Agreement was signed. In recent years, new research has shown that the effects of climate change are worse than previously thought, which further underscores the seriousness of the issue.[2,3]

Climate research highlights the gravity of the situation

The latest research reviews show that, in practice - even in the longer term - it is impossible to keep global warming below 1.5 degrees unless very forceful measures are taken that result in exceptionally lower net emissions in the near future.[4] Even keeping global warming below the 2-degree target places significant demands on rapid and substantial reductions in emissions. Every tenth of a degree of warming can that be prevented matters, and the pace of the transition needs to increase significantly in order to mitigate the effects of climate change.

It is possible to overshoot the Paris Agreement's temperature target and then return to a lower temperature level through the removal of greenhouse gases. However, such a strategy risks both irreversible changes to the Earth's ecosystems, which could further exacerbate global warming, and passing on significant uncertainties and costs to future generations. Such a strategy also further increases the need for capacity and resources for greenhouse gas removal to enable large-scale negative emissions, which presents major challenges.

Figure 1. Global temperature trends 1850-2025



Note: The line shows the deviation in the annual global average temperature from the mean value during the period 1850-1900. A value of 0 means that the global average temperature has been the same as the average temperature during 1850-1900, and a value of 1.5 means that the global average temperature has been 1.5 degrees higher.

Source: Climate Research Unit[5]

Extreme weather events have affected people around the world over the past year. In many cases, attribution studies have demonstrated a strong link to climate change.[a] The World Weather Attribution research network has shown that climate change has contributed to the intensification or increased likelihood of heatwaves in Southern Europe, South Sudan, India, Pakistan and Argentina, as well as to the higher intensity of the extreme rainfall that has affected Botswana, Sri Lanka, Indonesia, Pakistan and the United States. Also, the drought in Iran and the extensive fires that have affected Southern Europe, the Los Angeles area and South Korea has been hit harder because of climate change.[6] A study indicated over 16,000 deaths in European cities between June and August 2025 as a result of climate-related heatwaves.[7]

The economic cost of climate change is significant. Studies show that both transition costs and climate risks affect the global economy in the short and long term. The scenarios clearly indicate that global GDP losses will be greater if we do not undertake a transition. At the same time, the analyses show that an early and orderly transition is the most cost-effective path.[8] By taking action early, the greatest physical risks and the more dramatic economic consequences that arise when measures are postponed and must be implemented hastily later on can be avoided. In Europe, economic losses caused by extreme weather and climate change are estimated at €162 billion for the period 2021-2023. These costs have risen significantly in recent years.[9,10] In addition to direct physical and economic losses caused by climate change, critical risks are also identified for, for example, public finances, financial stability and value chains.[11]

a Research into whether modern lifestyles have led to specific weather events becoming more or less common, or whether they have become warmer, colder, drier or wetter.

In Sweden, the average temperature is rising almost twice as fast as the global average, and the effects of climate change are clear:

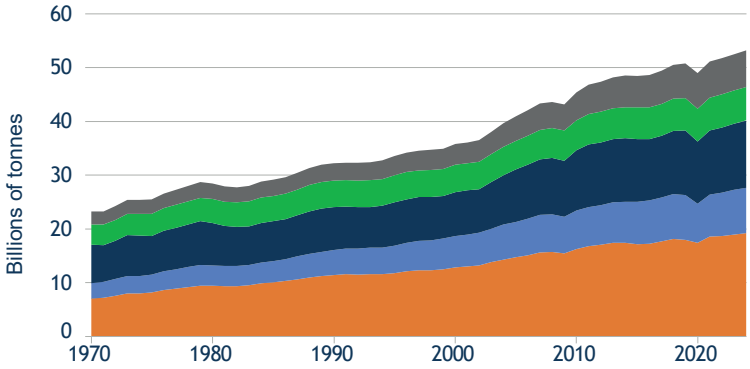
- heatwaves have become more intense
- the risk of flooding, which can, for example, cause significant damage to property and infrastructure, has increased
- the risk of drought is increasing, leading to greater uncertainty for Swedish farmers and forest owners
- rising sea levels risk, rendering vulnerable areas along Sweden's coast uninhabitable.[12]

In the summer of 2025, Sweden was hit by an intense heatwave that lasted several weeks. It placed a heavy strain on the healthcare system and led to the loss of lives. The heatwave also contributed to widespread drought, a large number of forest fires and heat stress in animals. An attribution study indicates that the heatwave was at least ten times more likely to occur as a result of climate change.[13] There is, however, no comprehensive overview of the costs of climate change and its impacts on Sweden. In 2026, the Swedish Expert Council on Climate Adaptation will produce a national climate and vulnerability analysis concerning current and future climate risks.

The successes and setbacks of global policy

When it comes to measures to reduce emissions, there has been both good and bad news in global climate policy over the past year. Global emissions from fossil fuels are estimated to have increased by 1.1 per cent in 2025.[14] The world has not yet reached the peak in global emissions that many analysts believe is imminent, not least due to the changing energy mix in China.[15] In 2025, however, the rate of increase slowed in major emitting countries such as China and India, whilst the rate of emissions increased in the United States. Figure 2 shows how the world's total greenhouse gas emissions have developed since 1970.

Figure 2. Total global greenhouse gas emissions by sector, 1970-2024



TRENDS 1970–2024 (Change in per cent and billion tonnes)		
1. ELECTRICITY AND HEATING	+172%	+12.1 billion tonnes
2. TRANSPORT	+194%	+5.6 billion tonnes
3. INDUSTRY	+76%	+5.4 billion tonnes
4. AGRICULTURE	+65%	+2.4 billion tonnes
5. OTHER	+186%	+4.4 billion tonnes
TOTAL	**+129%**	**+30 billion tonnes**

Source: European Commission's Joint Research Centre[16]

The Paris Agreement celebrated its tenth anniversary in 2025, and during the 30th Conference of the Parties to the UNFCCC (COP30) in Brazil, countries around the world submitted their new nationally determined contributions (NDCs), the third generation of such commitments. The United States has now withdrawn from the UNFCCC and the Paris Agreement once again. Only two-thirds of the Agreement's parties (around 120) had submitted their climate commitments before the conclusion of COP30. However, several major economies have adopted new emission reduction plans up to 2035, including the EU and China. A review of the countries' aggregated climate commitments shows that the measures are far from sufficient to meet the temperature targets agreed by the world in the Paris Agreement.[17] During COP30, the parties also failed to agree on a global roadmap for phasing out fossil fuels, but the presiding country, Brazil, assumed the responsibility to pursue such a proposal voluntarily in 2026, together with the EU and other parties.

There have also been some positive trends during this past year. Record levels of investment in renewable electricity generation are being seen worldwide, and in the EU, solar power surpassed coal power in electricity generation for the first time.[18] In China, emissions from electricity generation and transport have fallen due to the record-breaking expansion of renewable energy and energy storage, but coal use has not yet declined to the same extent.[15] There are also a number of nuclear power projects in the planning and construction stages around the world. In the global vehicle market, an increasing number of car manufacturers are switching from producing cars with internal combustion engines to electric vehicles.[19] At the same time, the expansion and maintenance of fossil energy continues, not least in the United States.

When it comes to the development of climate policy instruments and the pricing of greenhouse gas emissions, more countries are following the example set by Sweden and the EU. Today, 28 per cent of global emissions are covered by some form of carbon pricing, compared with 5 per cent in 2005.[20] Globally, 80 emissions trading systems or carbon taxes have been introduced, and new systems are planned in major economies such as Brazil, India and Turkey. Broad policy mixes have emerged in many countries to complement greenhouse gas emissions pricing.[21-23]

By 2025, the world had become a more uncertain place, with shifts in the rules-based international order, increased political polarisation, rising levels of disinformation and threats to democracy. At the same time, global temperatures continue to rise, and the last three years have been the warmest ever recorded globally. The direct cost of extreme weather has risen sharply in Europe, and climate change is also exacerbating other threats to societal security.

The uncertain global situation is no excuse for weakening climate policy - quite the opposite. Under current circumstances, it is important to recall why countries around the world have enacted climate legislation and set climate targets: to prevent costs and damage, and to provide long-term rules for business, municipalities , households and other stakeholders. If the world fails to halt global warming, the ambitions for a safer and more sustainable world will become harder to achieve. Reduced dependence on fossil fuels strengthens both security and prosperity. The wars in Ukraine and the Middle East underscore the need to phase out our dependence on imported fossil fuels.

The coming years leading up to 2030 will be critical in shaping the world that the next generation will inherit, and clear leadership on climate action is more important than ever.

2 Sweden's climate targets

- **Sweden's climate action are based on long-term climate targets.** By 2045 at the latest, Sweden, and by 2050 at the latest, the EU, must achieve net-zero greenhouse gas emissions.
- **There are Swedish and European interim targets for emissions trends for 2030 and 2040.** Sweden has commitments and national interim targets for the sectors not covered by the EU's existing Emissions Trading System (ETS 1).
- **The climate targets have changed since our last report.** The Cross-Party Committee on Environmental Objectives has submitted a proposal for an updated national interim target for 2030 for the sectors covered by the Effort Sharing Regulation (ESR), and the EU institutions have decided on a new European climate target for 2040.
- **The Paris Agreement depends on its parties fulfilling their commitments.** Furthermore, if Sweden fails to meet its climate targets, there is a risk of sanctions from the European Court of Justice.

To address the serious state of the climate, there are climate targets at global, European and national levels that Sweden needs to adhere to. In this chapter, we describe the Paris Agreement, which forms the basis for the EU's and Sweden's climate action (section 2.1). We then describe the EU's climate targets (section 2.2), as well as the national climate targets that Sweden has adopted to help achieve the Paris Agreement's goals (section 2.3). We conclude the chapter by discussing the significance of the climate targets and the risks involved if they are not met (section 2.4).

2.1 The Paris Agreement

In 2015, the world's nations adopted the Paris Agreement. The agreement aims to limit the rise in global temperatures, increase our ability to adapt to the effects of climate change, manage the loss and damage caused by it, and redirect financial flows. The overall temperature target stated in the agreement is to keep the increase in the global average temperature well below 2 degrees above pre-industrial levels and to make efforts to limit the temperature increase to 1.5 degrees above pre-industrial levels.[24] In July 2025, the International Court of Justice in The Hague clarified that it is the lower temperature target (1.5 degrees) to which the parties are obliged to limit global warming.[25]

The Paris Agreement does not regulate in detail how the temperature target should be translated into national or regional targets. It is up to each country to determine its own level of ambition, but each country's climate commitments must be as ambitious as possible, given each country's capacity. Every five years, all countries that have signed up to the Paris Agreement must submit a Nationally Determined Contribution (NDC) to the UN. Each new plan must reflect the country's highest possible level of ambition. The aim is for countries to gradually upgrade their climate plans, leading to progress over time. Sweden is implementing the Paris Agreement as part of the EU with a joint European-level climate plan (NDC).

2.2 The EU's climate goals

The EU aims to be a leader in climate action and to raise the global level of ambition.[26] To demonstrate global leadership, the EU adopted a climate policy framework in 2021, comprising a climate law, climate targets and a scientific advisory board on climate change - the same as in Sweden (see section 2.3). The climate targets enshrined in the European Climate Law include a long-term target for 2050 and interim targets for 2030 and 2040. The framework and targets form the basis for the EU's climate plan (NDC) under the Paris Agreement. As an EU Member State, Sweden is collectively responsible, together with the other Member States and the EU institutions, for achieving the EU's climate targets.

2.2.1 The EU's long-term climate goals

- The EU's long-term climate goal is net-zero greenhouse gas emissions by 2050, followed thereafter by negative emissions.

The EU's climate neutrality target is to be achieved collectively. The EU institutions and Member States must take joint action to achieve the target. Individual Member States' contributions to the target may vary.

2.2.2 The EU's interim target for 2030

The European Climate Law also includes an interim target for 2030, the aim of which is to put the EU on track towards climate neutrality.

- The EU's climate target for 2030 is to reduce net greenhouse gas emissions by at least 55 per cent compared to 1990.

The overall target is divided into three main legal acts:

- emissions covered by the EU's existing Emissions Trading System (ETS 1)
- emissions covered by the Effort Sharing Regulation (ESR)
- emissions and uptake from the land-use sector covered by the LULUCF Regulation.

ETS 1 regulates emissions from activities that currently account for around 40 per cent of the EU's total greenhouse gas emissions: large industrial installations, electricity and heat production, shipping and aviation within the EU. The emissions trading system sets a cap on the maximum level of emissions permitted for all these activities across the EU. This emissions cap is reduced annually, falling to 62 per cent and by 2030 compared to 2005.

EU Member States have primary responsibility for reducing emissions covered by the Effort Sharing Regulation (ESR). The ESR covers emissions not included in the ETS 1, including emissions from road transport, heating, and agriculture-related emissions of methane and nitrous oxide.

Each Member State has been allocated emission budgets under the ESR for the period 2021 to 2030. The Member States' aggregate emissions under the ESR must be 40 per cent lower in 2030 than in 2005. From 2028, a new emissions trading system (ETS 2) for road transport, buildings and other sectors (primarily small-scale industry) will also be introduced, covering a large proportion of the fossil fuels included in the ETS.

EU Member States will also need to achieve 310 million tonnes of net removals by 2030 in the land-use sector (LULUCF), which represents an increase of 42 million tonnes of net removals compared with the 2016-2018 reference period. Member States' commitments under the LULUCF Regulation are allocated based on the average net removals during the period 2016 to 2018 and their share of the EU's total land area under cultivation. Only 225 of the 310 million tonnes of carbon dioxide equivalents that need to be sequestered in the LULUCF sector may be counted towards the EU's 2030 climate target. This means that, in practice, the EU must reduce net emissions by 57 per cent by 2030, leaving a margin of two percentage points to reach the 55 per cent target.

2.2.3 The EU's interim target for 2040

The EU's legislative bodies have also provisionally agreed on a Union-wide interim target for 2040, which they are expected to formally adopt in 2026.

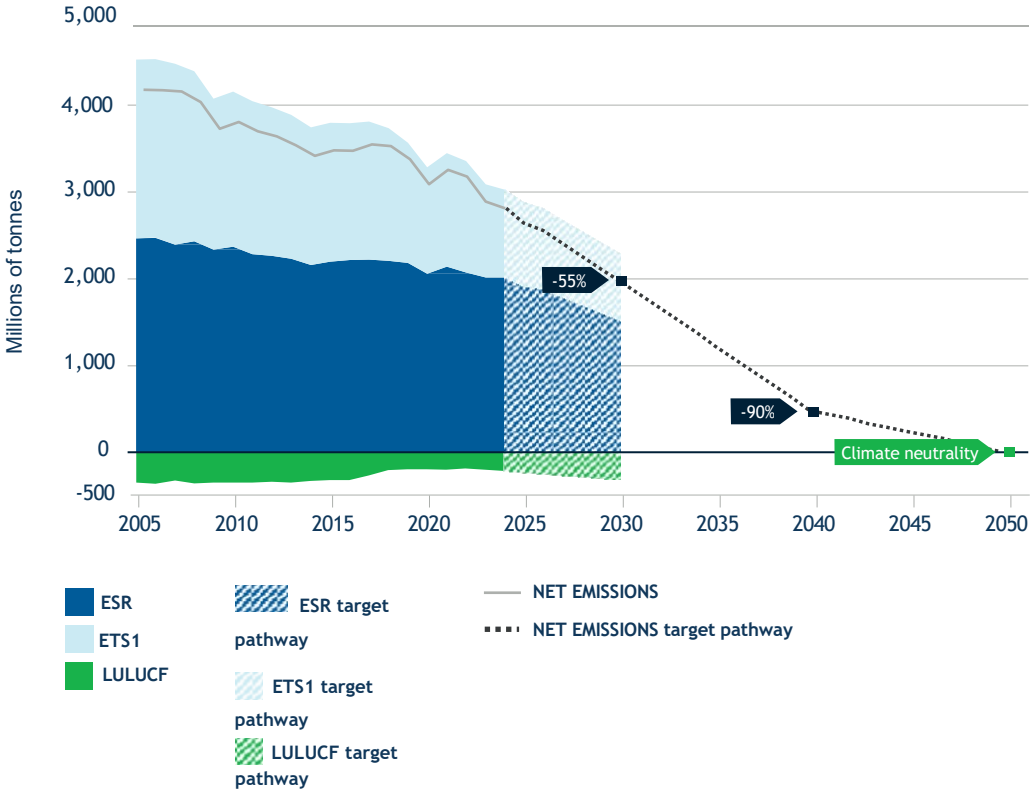
- The EU's agreement on climate targets for 2040 is to reduce net emissions by 90 per cent compared to 1990. A maximum of 5 per cent may be achieved through high-quality emissions reductions in other countries under Article 6 of the Paris Agreement.

The agreement also includes increased flexibility between emission sectors. Furthermore, new forms of permanent greenhouse gas removals will be integrated into the EU's climate targets for 2040, such as bioenergy with carbon capture and storage (BECCS), direct air carbon capture and storage (DACCS) and biochar.

The Commission is expected to propose a climate framework in autumn 2026 to achieve the climate target by 2040. In this framework, it will set out how much each sector should contribute to reducing net emissions in line with the new target. According to the Commission's scenarios for achieving the climate target, many sectors need to reach near-net-zero greenhouse gas emissions by 2040, and several of them must also achieve negative emissions. In section 6.3, we discuss key aspects of the forthcoming climate framework.

Figure 3 below shows how the EU's net emissions need to be reduced by 2030, 2040 and 2050 to meet the EU's climate targets.

Figure 3. The EU's historical emission trends and climate targets for 2030, 2040 and 2050



2.3 Sweden's climate targets and EU commitments

Sweden's climate policy framework, which was adopted by a broad majority in the Riksdag in 2017, sets out how Sweden contributes to global climate action on a national level. Like the EU's framework, it consists of a climate act, climate targets and a climate policy council. In addition to national climate targets, Sweden also has binding commitments under EU legislation aimed at achieving the EU's common climate targets. As stated above, these in turn constitute the EU's contribution to the targets of the global Paris Agreement. Sweden's long-term climate targets cover Sweden's territorial greenhouse gas emissions and form the basis for the Government's climate policy work under Section 3 of the Climate Act (2017:720).

- By 2045 at the latest, Sweden aims to achieve net-zero greenhouse gas emissions; followed thereafter by negative emission. A maximum of 15 per cent of the emissions reductions required to achieve net-zero emissions may be credited through supplementary measures.

This target means that most fossil fuel emissions will, in principle, need to be phased out by 2045 at the latest. Certain remaining emissions, particularly methane and nitrous oxide from agriculture, must be offset by supplementary measures.[27] Supplementary measures are also needed to achieve negative emissions after 2045. The climate policy framework identifies the following supplementary measures:

- Bioenergy with carbon capture and storage (BECCS)
- verified emissions reductions achieved outside Sweden's borders through international cooperation
- increased carbon sequestration in the land-use sector (LULUCF).

There are also other potential supplementary measures that could be used to achieve the long-term climate target, but for which accounting rules have not yet been decided. These include, for example, direct air carbon capture and storage (DACCS) and biochar. In October 2025, the Cross-Party Committee on Environmental Objectives proposed that accounting rules should also be developed for these measures.[28]

2.3.1 Sweden's interim targets for 2030 and 2040

Sweden has adopted national interim targets for 2030 and 2040 through the climate policy framework. The purpose of the interim targets is to contribute to efficiency, long-term thinking and transparency, as well as to drive the climate transition in order to achieve the long-term climate goal.[29]

EXISTING INTERIM TARGETS FOR 2030 AND 2040

- Emissions covered by the Effort Sharing Regulation (ESR) must be reduced by at least 63 per cent by 2030, compared with 1990. No more than 8 per cent of the emissions reductions may be achieved through supplementary measures.
- Emissions from domestic transport, excluding domestic aviation, must be reduced by 70 per cent by 2030, compared with 2010.
- Emissions covered by the Effort Sharing Regulation (ESR) must be reduced by at least 75 per cent by 2040, compared with 1990. No more than 2 per cent of the emissions reductions may be achieved through supplementary measures.

The existing interim targets were adopted by the Riksdag in 2017, before the current regulatory framework for the ESR and LULUCF was in place. When the EU's climate legislation was revised, the Government commissioned the parliamentary committee, the Cross-Party Committee on Environmental Objectives, to review the national interim targets for 2030. The Cross-Party Committee on Environmental Objectives submitted its interim report on 30 October 2025.[30] The report proposes a new national interim target for 2030 for the ESR sector, which is supported by all parliamentary parties. No changes are proposed for the national target for domestic transport.

PROPOSAL FOR A NEW INTERIM TARGET FOR 2030

- Emissions in Sweden in the ESR sector must be at least 60 per cent lower than 2005 levels by 2030 at the latest. No more than 10 percentage points of the emissions reductions may be achieved through supplementary measures. Emissions in the ESR sector should follow a trajectory involving a linear reduction from 2015 levels to a 60 per cent reduction in emissions by 2030 compared with 2005 levels.

The Cross-Party Committee on Environmental Objectives's aim was for the new objective to be clear, for the level of ambition to be maintained in comparison with the previous interim target, for the national interim target to be more closely aligned with EU legislation, and for the objective to serve as a interim target towards the 2045 target.

The Climate Policy Council considers it a sign of strength that all parties in the Riksdag have agreed on the proposal for a new interim target. The changes are not that significant. One effect of the proposal is that the base year is adjusted from 1990 to 2005 and that a clearer emissions trajectory is introduced up to 2030, to be monitored in the Government's climate report. We assess that the Cross-Party Committee on Environmental Objectives's proposal maintains the level of ambition compared with the current interim target, and that the target emission level remains essentially unchanged.[b] The Cross-Party Committee on Environmental Objectives proposes that a slightly larger proportion of supplementary measures may be used to achieve the interim target.[c]

The Cross-Party Committee on Environmental Objectives's proposal also clarifies the direction for supplementary measures, both through proposed accounting rules and through additional measures that can be counted towards the targets. In addition to the supplementary measures that can be credited towards achieving Sweden's 2045 targets, the Cross-Party Committee on Environmental Objectives proposes further initiatives that should be eligible for crediting towards the 2030 target.

b The current interim target means that emissions, including supplementary measures, may not exceed approximately 17.1 million tonnes by 2030. The Cross-Party Committee on Environmental Objectives's proposal means that emissions may amount to a maximum of 17.3 million tonnes. However, changes to the EU Emissions Trading System (ETS 1) would likely have meant that the current interim target would have allowed for higher emissions than the Cross-Party Committee on Environmental Objectives's proposal.

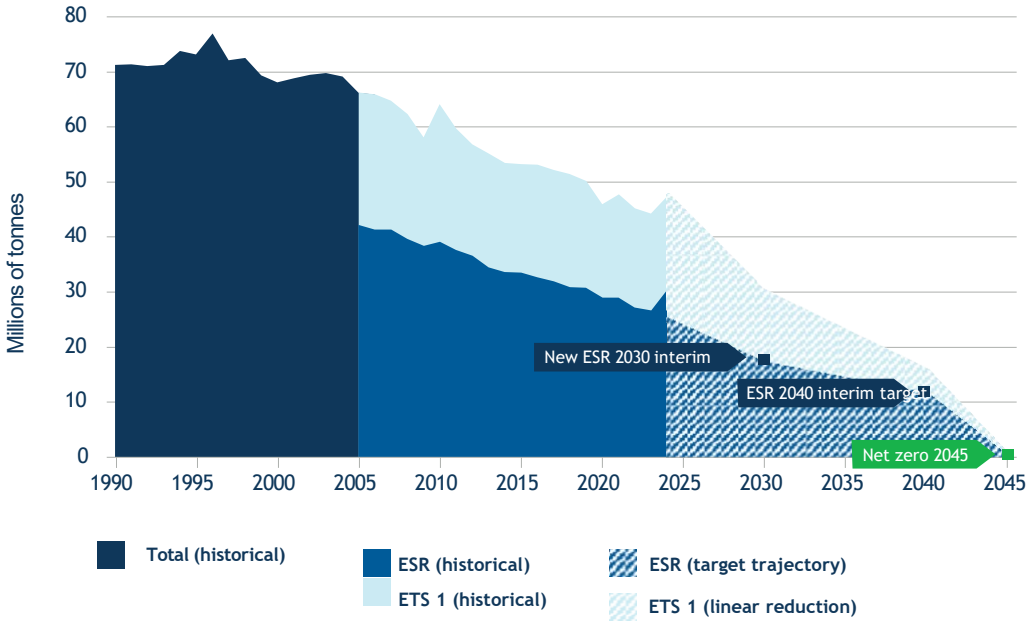
c Under the current interim target, a maximum of 3.7 million tonnes of supplementary measures may be counted towards the 2030 interim target. According to the Cross-Party Committee on Environmental Objectives's proposal for a new interim target, a maximum of 4.3 million tonnes may be counted towards the 2030 target.

These measures fall within the scope of EU climate legislation and are proposed as new supplementary measures within the framework of verified emissions reductions in other countries, provided that they are not used to meet other climate commitments under national or European legislation:

- transfer of emission allowances within the ESR and
- cancellation of allowances within the EU ETS (which contributes additionally to the EU's climate targets).

For the Riksdag to have time to adopt the new target, the Government must submit a bill to the Riksdag by April at the latest. Since all parties in the Riksdag support the proposal, the Climate Policy Council has decided to evaluate the policy against the Cross-Party Committee on Environmental Objectives's proposal. In Figure 4, we have summarised the climate targets within Sweden's climate policy framework.

Figure 4. Sweden's long-term climate targets for 2045 and the interim targets for 2030 and 2040 within the ESR



Note: The figure at shows net greenhouse gas emissions up to 2045 and includes supplementary measures.

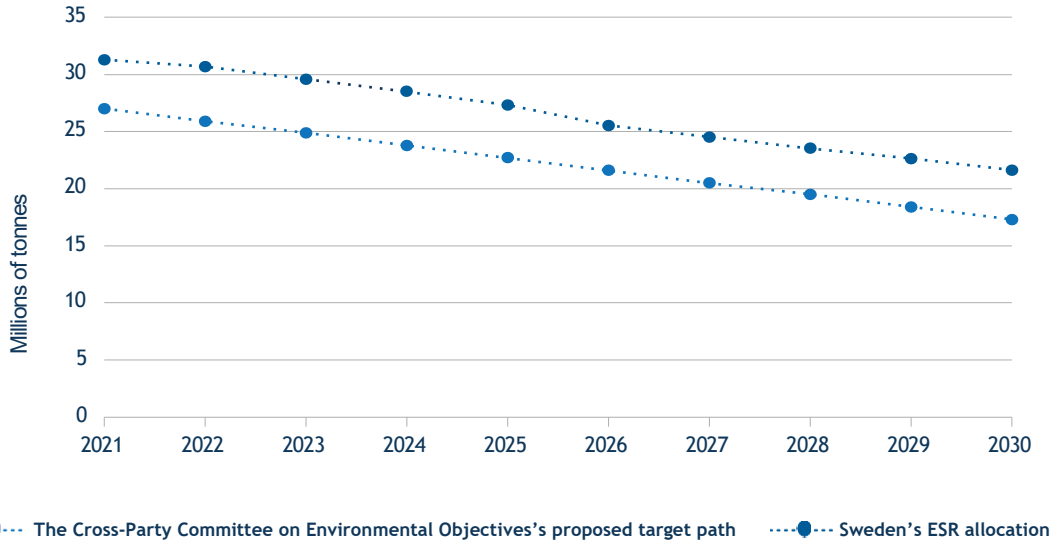
2.3.2 Sweden's EU commitments for 2030

As an EU Member State, Sweden has commitments regarding greenhouse gas emissions and removals covered by the ESR and LULUCF Regulations respectively.

- Under the Effort Sharing Regulation (ESR), Sweden must reduce its emissions by 50 per cent compared with 2005.

Emissions within the ESR should be reduced in accordance with an emissions budget allocated to each Member State for the entire period from 2021 to 2030. Sweden's total accumulated emissions budget amounts to approximately 270 million tonnes of carbon dioxide equivalents. The Cross-Party Committee on Environmental Objectives's proposed trajectory for the national interim target within the ESR (section 2.3.2) amounts to 222 million tonnes for the same period; see the comparison in Figure 5 below. The national interim target is therefore more ambitious than Sweden's EU commitment if supplementary measures are not utilised. However, the EU commitment and the national interim target essentially set equivalent requirements for national emissions reductions in the ESR sector, provided that Sweden makes full use of supplementary measures and does not utilise flexibilities to meet its ESR commitment.

Figure 5. Comparison between the Cross-Party Committee on Environmental Objectives's proposed target path for a new interim target and Sweden's EU commitment for the ESR sector in 2030



Source: Climate Report 2025[31] and the Cross-Party Committee on Environmental Objectives's interim report[32]

- In the land-use sector (LULUCF), Sweden's commitment means that annual net removals from forests and land must be approximately 4 million tonnes higher in 2030 than the average for the 2016-2018 reference period.

Under the LULUCF Regulation, Sweden has commitments up to 2030 that are divided into different periods: 2021-2025 and 2026-2030. For the period 2021-2025, the total emissions for the various land use accounting categories in LULUCF must not exceed removals, in accordance with the so-called 'no-debit' rule. For Sweden, this means in practice that significant carbon sequestration is required during the period 2021-2025. For 2030, there is a specific target requiring net sequestration to increase by approximately 4 million tonnes. For 2026-2029, Sweden needs to meet a linear national sequestration budget leading up to the 2030 target. The size of the removal budget is calculated using a target trajectory starting in 2022 (based on the average for 2021-2023) and extended linearly to the 2030 target. The budget is set by the European Commission through an implementing act based on 2025 statistics. The exact level of removals required of Sweden by 2030 may be subject to adjustment. If methodological changes are implemented that affect the statistics for removals during the base years - that is, the period to which the various commitments relate - this will also affect the level of removals Sweden needs to achieve.

The EU's regulatory framework for the ETS and LULUCF allows for the use of a number of flexibilities to meet the commitments. This means that Member States can save and borrow emission allowances over time in the period up to 2030, i.e. shift the allowance to emit between different years. It is also possible to transfer emission allowances between the ETS and LULUCF, as well as to buy and sell emission allowances between Member States through bilateral agreements. Similarly, certain Member States, including Sweden, can transfer a limited amount of emission allowances between the EU Emissions Trading System (ETS 1) and the ESR. A more detailed description of the flexibilities in the EU regulations can be found in our 2024 report.

2.4 The importance of meeting climate targets

The serious climate crisis can only be addressed if the world's nations set - and achieve - ambitious climate targets. We believe that the EU and Sweden are well placed, both economically and structurally, to meet the climate targets that have been set. Achieving these targets within the EU depends on the 27 Member States fulfilling their commitments under EU legislation. If, for example, Sweden fails to meet its targets, the chances of the EU-level targets being achieved are reduced. This, in turn, risks undermining the Paris Agreement and could have negative knock-on effects.

Swedish and European climate targets are enshrined in Sweden's and the EU's climate legislation. The EU's enforcement mechanisms are stronger than those under Swedish law. If a Member State fails to comply with EU legislation, the European Commission may initiate infringement proceedings, which may result in sanctions from the Court of Justice of the European Union. If the European Commission assesses that Member States are not making sufficient progress in the period up to 2030, it may also request supplementary plans for Member States' commitments under the ESR and LULUCF Regulations. Access to certain EU funds, including the EU Recovery Fund, is conditional on Member States implementing measures to meet climate targets. In section 5.1, we discuss the potential costs should Sweden fail to meet its commitment under the ESR Regulation. A principle in EU law for determining the level of sanctions is that the sanction should be higher than the cost of complying with EU legislation. No Member State has yet been involved in discussions regarding penalty payments under the ESR and LULUCF, as the accounting against the targets has not yet taken place; however, the cost principle is enshrined, for example, in the regulations governing the EU Emissions Trading System[33] and in the EU Deforestation Regulation.

In regard to sanctions under Swedish law, there are no explicit provisions in the Swedish Climate Act. The Act is primarily a policy instrument that requires the Government to draw up action plans and report to the Riksdag, and it contains no direct legal consequences in the event of deviations from targets. However, it is in principle possible to bring legal action against the state, for example by arguing that a failure to take action violates fundamental rights or international obligations. Similar legal cases have occurred in other countries, where courts have examined the liability of states for failing to meet their climate targets, for example the Urgenda case in the Netherlands and climate lawsuits in Germany, Switzerland and France.[34] In some cases, these have resulted in court rulings requiring the state in question to strengthen its climate measures.

Legal consequences for failing to meet targets are important for motivating governments to take action to achieve climate targets and contribute to the objectives of the Paris Agreement. However, we believe it is more important to focus on why climate policy targets have been set - to limit climate change and thereby prevent harm to current and future generations - rather than the economic sanctions for failing to meet climate targets. For many Swedish companies that have invested in the climate transition, climate targets and competitiveness go hand in hand.

3 Target achievement

- **The gap to Sweden's long-term climate target of net-zero emissions by 2045 remains significant but has narrowed slightly during this term of office.** The Government's latest scenario indicates that cumulative emissions by 2045 are expected to be higher than those projected at the start of the term of office.
- **The gap to the climate targets for the ESR sector for 2030 and 2040 has widened during this term of office.** The increase is due to weakened climate policy instruments in the transport sector, where the use of fossil fuels has increased, and the rate of electrification has slowed.
- **Net removals in the land-use sector (LULUCF) have increased significantly during the period 2022-2024.** The increased removals improve the prospects of meeting Sweden's EU commitment by 2030 but continued high net removals will be required in the coming years as well.
- **The Government should formulate a policy that takes into account the possibility that emissions may be higher than the scenarios indicate.** The Government's scenarios contain significant uncertainties, meaning that emissions may be higher and the gap to the climate targets wider than the scenarios indicate.

In this chapter, we assess how the projected emissions trends under current policy decisions relate to the climate targets. We begin the chapter with an overall assessment of the achievement of climate policy targets (section 3.1). We then examine in greater depth the achievement of each national climate target and EU commitment (sections 3.2-3.5). As this is our final report for the current term of office, we also assess how target achievement has changed over the entire term.

The conclusions in this chapter are based on the Government's own scenarios for expected emissions trends, our review and assessment of these scenarios, and our overall assessments of policy instruments and the impact of global factors on emissions trends. Our review of the scenarios can be found in Annex I and also includes descriptions of how the scenarios were developed, key assumptions, uncertainties and their effects.

3.1 Overall assessment of climate policy target achievement

THE CLIMATE POLICY COUNCIL'S ASSESSMENT

- Under current policy, Sweden appears unlikely to meet either its **national climate targets for 2030 and 2040** or **the EU commitment for the ESR sector by 2030**. The gaps to these targets have widened during this term of office.
- The gap to **the long-term net-zero target for 2045** has narrowed slightly during this term of office but remains significant. Near-term increases in emissions mean that the expected cumulative emissions for the period up t0 2045 haven risen.
- The latest statistics for **the land-use sector (LULUCF)** indicate a sharp increase in net removals during 2022–2024, which has improved the prospects of meeting Sweden's LULUCF commitment by 2030, although this will require high net removals in the coming years as well.

Every year, in conjunction with the Budget Bill, the Government presents a climate report setting out scenarios for expected emissions trends based on agreed policies. In the climate report from September 2025, the Government notes that none of Sweden's climate targets or commitments under EU climate legislation are expected to be met under current policy; see Table 1 for a summary of the Government's assessment of the gaps to the climate targets.

According to the Government's latest scenario, emissions at the end of the term of office (2026) are also expected to be at roughly the same level as at the start of the term (2022). Although emissions have fallen in several sectors, the Government's policies have caused the use of fossil fuels, and consequently also emissions from transport and machinery, to increase, such that total emissions are expected to remain unchanged by the end of the term of office.

Table 1. Summary of the Government's assessment of the emissions gap to the respective climate targets and EU commitments in tonnes of carbon dioxide equivalents

National climate target	**Target year**	**Emissions gap according to the Government's assessment (for the individual target year)**
National interim target for the ESR sector	2030	5.6 million tonnes
National target for domestic transport (excluding domestic aviation)	2030	5.9 million tonnes
National target for the ESR sector	2040	3 million tonnes
Long-term target of net-zero emissions for all territorial emissions	2045	19.6 million tonnes
Commitment under EU climate legislation	**Target period**	**Emissions gap according to the Government's assessment (for the entire period 2021-2030)**
EU commitment under the ESR	2021-2030	4.3 million tonnes
EU commitment for the LULUCF sector	2021-2025	63-71 million tonnes
	2026-2029	38-59 million tonnes
	2030	15-21 million tonnes

Note: The emissions gap refers to the difference between expected emissions according to the Government's latest scenario and the level of emissions compatible with the relevant climate target. The emission gaps cannot be added together to give a total emission gap, as they relate to different sectors and years. The gaps include the Government's assessment of the effects of the 2026 Budget Bill and
the supplementary measures and flexibilities within EU climate legislation that the Government considers the adopted policy to achieve.

Source: Climate Report 2025[31]

Our main conclusion regarding the Government's scenario based on agreed policies (the table above) is that it is based on a sound methodology and, for the most part, reasonable assumptions (see also Appendix I). However, we assess that emissions in several sectors are likely to be higher than the Government's scenarios indicate, and that the gap to the climate targets is therefore likely to widen. This is due to the uncertainty surrounding several key assumptions regarding emissions trends, events and new information that have emerged since the scenarios were presented in September 2025, and possible and announced policy changes that have not yet been decided and are therefore not captured in the scenario. The differences between our assessment and the Government's assessment of emissions trends and target achievement are due to the following main factors:

- **Uncertain assumptions.** Assumptions about future developments are, by their very nature, uncertain. In the Government's scenarios, there are a number of assumptions regarding areas with a significant impact on emissions that are particularly uncertain. These include assumptions regarding the necessary conditions for the transition, the pace of technological change in the industrial transition, the electrification of the vehicle fleet and fuel use in the transport sector, the rate of growth and felling in the forest, and the volume and mix of agricultural production. Overall, we assess that these uncertain assumptions mean that emissions risk being higher than in the Government's scenarios.
- **A slower pace of electrification.** Future emissions from transport and machinery are likely to be higher than indicated in the Government's scenario. This is indicated by announced policy changes at EU level, the delayed introduction of ETS 2, proposals for weaker emission standards for new vehicles, and new statistics and forecasts showing a slower pace of electrification in the transport sector. Consequently, the gap to the national climate targets and Sweden's EU commitment under the ESR will also widen.
- **Increased net carbon sequestration in forests.** The latest available scenarios from the Government, shown in the table above, indicate a significant gap in relation to Sweden's EU commitment for the LULUCF sector. The latest statistics, however, show a significantly higher net carbon sequestration during the period 2021-2024 than is factored into the Government's scenarios. This improves the prospects of meeting the EU commitment, but requires a continued high level of net absorption.

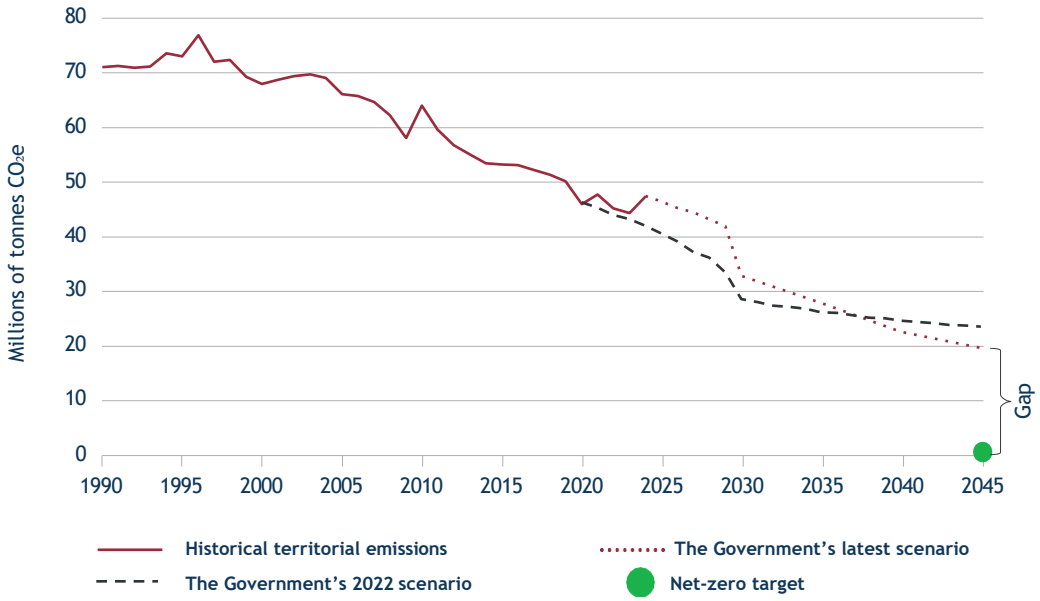
These uncertainties underscore the importance of a reasonable safety margin to account for the risk that emissions under the currently agreed policy may be higher than the scenario indicates. The Climate Policy Council called for such a safety margin in policy as early as in its 2024 and 2025 reports. We discuss in more detail how the uncertainties above affect the respective climate targets in the following sections.

3.2 Achievement of Sweden's long-term climate targets of net-zero greenhouse gas emissions by 2045

In the Government's latest scenario, the gap to achieving Sweden's long-term climate goal of net-zero greenhouse gas emissions by 2045 is estimated at 19.6 million tonnes (see Figure 6). The Government's latest scenario thus shows that current conditions and policies will only take Sweden just over halfway to net-zero emissions compared with the 2024 emissions level of 47.5 million tonnes.

According to the Government's assessment, the gap to the 2045 target has narrowed during this term of office, from 23.5 million tonnes in the Government's autumn 2022 scenario to the current 19.6 million tonnes. According to the Government, the reduction is primarily due to new investment decisions within industry, the fact that the new scenario assumes a higher rate of electrification as a result of the EU's emission standards for vehicles, and the Government's introduction of policies aimed at enabling supplementary measures.

Figure 6. The Government's scenarios of Sweden's territorial emissions up to 2045



Note: The Government's latest scenario from 2022 was drawn up by the current Government but was essentially based on the previous Government's policies. We have estimated the line for the 2022 scenario by visually interpreting Figure 4.12 in the 2022 Climate Report, as we have not had access to the data underlying the figure. The line should therefore be interpreted as an approximate representation of the actual scenario from the 2022 Climate Report.

Source: The Government's Climate Report 2022[35] and 2025[36]

Although the gap to the net-zero target has narrowed during this term of office, Sweden's cumulative emissions - that is, the total emissions released into the atmosphere - are expected to be around 40 million tonnes higher by 2045 compared with the policies adopted at the start of the term, according to the Government's latest scenario. This is roughly equivalent to one year's emissions at current levels. The increase in cumulative emissions is mainly due to higher projected consumption of fossil fuels over the two decades remaining until 2045. It is a serious matter that cumulative greenhouse gas emissions are increasing in the atmosphere, as it is total emissions over time, not emission levels for individual target years, that affect global warming.[37]

It is important to bear in mind that emission trends over such a long period of time as up to 2045 are uncertain, as there are many factors that could influence these trends in both positive and negative directions, which are difficult to predict. Uncertainties that have a major impact on territorial emissions include, among other things, how many vehicles and machinery with internal combustion engines will still be in use in 2045, whether major point sources of emissions in industry have been eliminated, how production and the production mix in agriculture will develop, and to what extent permanent carbon sinks have been scaled up.

Our conclusion regarding the long-term climate target is that there is still a significant gap. We are observing certain negative trends that could affect emissions in the longer term. The electrification of the vehicle fleet has slowed down, which risks leaving more vehicles with internal combustion engines on the road 2045, meaning that emissions will be higher than the Government's scenario indicates. The volatility and political uncertainty that have characterised this term of office also risk leading to a lack of investment in renewable electricity generation and to industry being reluctant to make the major emission-reducing investments required to reduce emissions by 2045 to the extent anticipated in the Government's scenario (see sections 5.4 and 5.5 for a detailed discussion of the transition in the industrial and energy sectors).

d We have made a 'visual' estimate of the data points for the Government's 2022 scenario, as we have not been given access to the exact data. For the Government's latest scenario, we only have data for every five years, so we have used linear interpolation between the years to derive annual figures to carry out the calculation. Consequently, the calculation of the difference in cumulative emissions between the scenarios in Figure 6 is approximate.

There are still 20 years to go until 2045, and it is still possible to achieve the target. However, this requires ambitious policies to drive progress, rapid technological development, falling costs, and changes in people's behaviour.

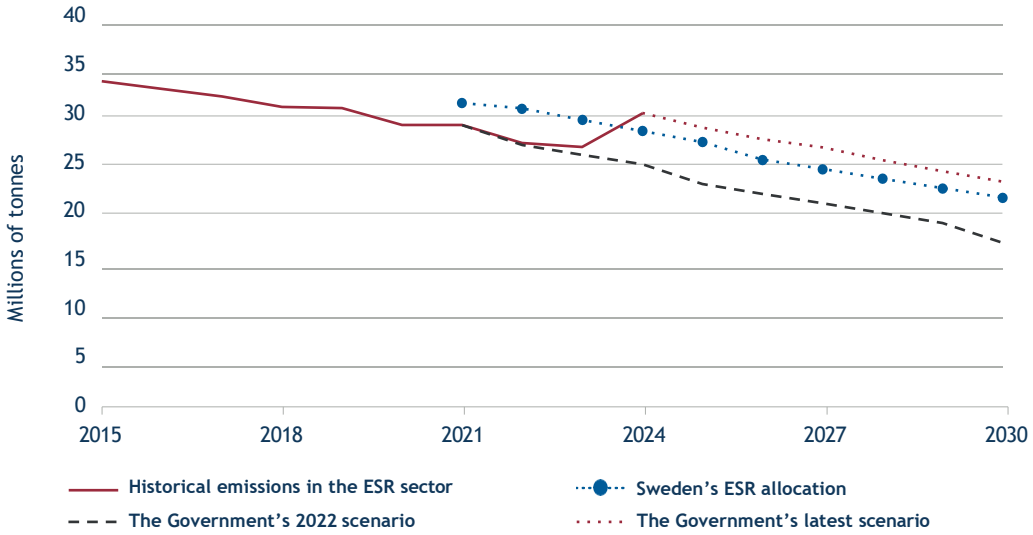
3.3 Achievement of climate targets within the ESR by 2030

In this section, the Council sets out its assessment of progress towards Sweden's national climate targets and EU commitments for 2030. These include Sweden's EU commitment for the ESR sector, the existing and new national interim targets for the ESR sector, and the national interim target for domestic transport.

3.3.1 Sweden's EU commitment for the ESR sector by 2030

Sweden's EU commitment for emissions covered by the Effort Sharing Regulation (ESR) is, in practice, an emissions budget for each individual year during the period 2021-2030 (see section 2.3.3). Figure 7 shows that Sweden's emissions during the early 2020s were relatively well below these emission targets. The Government's first emissions scenario during its term of office (autumn 2022) suggested that Sweden would meet the ESR budget with a comfortable margin. However, policy decisions implemented by the Government during this term of office, in particular the lowered reduction obligation and the reduction in tax on petrol and diesel, have led to a sharp increase in emissions, which, according to the Government's latest scenario, are expected to remain at levels higher than Sweden's target levels for the ESR commitment up to and including 2030.

Figure 7. The Government's scenario emissions for Sweden's ESR commitment by 2030



Note: The Government's latest scenario shows expected emissions based on agreed policies, including measures in the 2026 Budget Bill, and the use of ETS flexibility. The Government's 2022 scenario shows expected emissions under agreed policies in the 2022 Climate Report. The Government's 2022 scenario does not include the use of ETS flexibility, as the Government had not yet notified the European Commission of its intention to use it.

Source: The Government's Climate Report 2022[35] and 2025[36]

In its 2022 scenario, the Government estimated that Sweden would meet its EU commitment for the ESR by a margin of approximately 41 million tonnes accumulated over the period 2021 to 2030. The scenario was based on the policy decided in November 2022 and relied heavily on the reduction obligation as a policy instrument to achieve these emissions reductions.[e]

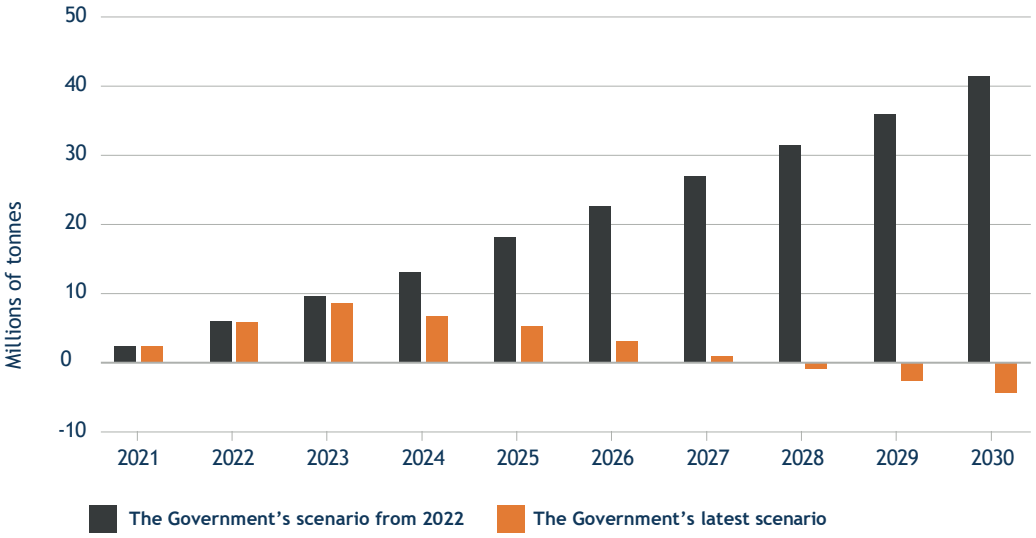
As a result of the Government's policies during this term of office, the accumulated surplus has turned into a deficit. The Government therefore considers that Sweden should make full use of the

e The Climate Policy Council warned as early as in its 2019 report against relying to such a large extent on the reduction obligation to achieve climate policy targets.

flexibility mechanisms permitted under the ESR commitment. This means, among other things, that the Government intends to transfer saved emission allowances from years when emissions under the ESR fell short of the emission allowance allocated to Sweden (2021-2023) to years when emissions are expected to exceed the allocated level (2024-2030). The Government has also announced that it intends to transfer emission allowances from the EU Emissions Trading System (ETS 1) to the ESR, which means that the number of available emission allowances across the EU will decrease and that the Swedish state will forgo auction revenues from these emission allowances.

The Government's latest scenario indicates that the deficit will arise from 2028 onwards. By 2030, the Government estimates that the cumulative deficit will amount to 4.3 million tonnes, once saved emission allowances from the start of the period and ETS flexibility have been taken into account (see Figure 8). This means that the Government estimates that Sweden will not meet its ESR commitment with the policies currently in place. Cumulative emissions during the period 2021-2030 are also estimated to be approximately 45 million tonnes higher in the Government's latest scenario compared with the 2022 scenario.

Figure 8. The Government's assessment of the cumulative surplus and deficit compared with Sweden's ESA commitment up to 2030



Note: Surpluses and deficits have been calculated by subtracting Sweden's ESR allocation from the respective scenarios shown in Figure 7. A surplus here means that Sweden is in a better position, i.e. that emissions are lower than they would have needed to be.

Source: The Government's Climate Report 2022[35] and 2025[36]

The Swedish Climate Policy Council assesses - just as the Government does - that Sweden does not appear set to meet its EU commitment for the ESR under current policy. We also assess that the Government's scenario likely underestimates the gap of 4.3 million tonnes based on the following factors:

- EU institutions have agreed to postpone ETS 2 by one year, which means that the price of fossil fuels in 2027 will be lower than it would otherwise have been, by an estimated SEK 0.8 öre per litre (see Appendix I).
- The European Commission has proposed a reduction in the EU's emission standards for passenger cars and light commercial vehicles, which risks slowing down the pace of electrification in Sweden.
- The rate of electrification for all vehicle types has been scaled back in the forecasts by the Swedish agency Transport Analysis and the industry organisation Mobility Sweden,[38] compared with the rate of electrification on which the Government's scenario is based.
- Emissions from agriculture risk being higher than the Government's scenarios indicate if Sweden is to increase its food production to raise its self-sufficiency rate.

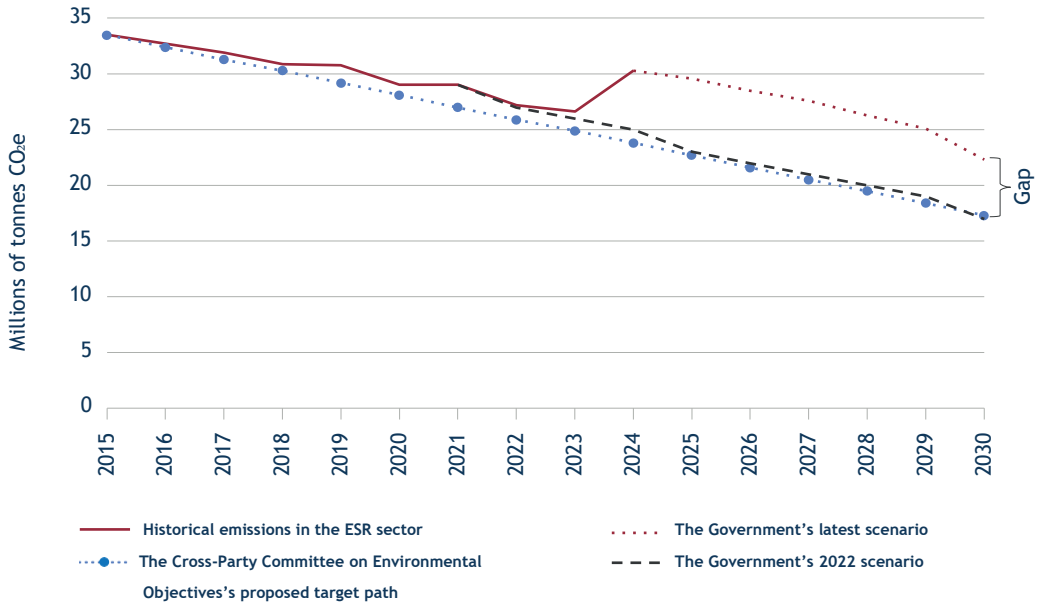
In light of these risks, we believe the Government should account for the risk that the gap could be at least twice as large. In section 5.1, we discuss how Sweden's ESR commitment can be achieved through measures in transport and machinery.

3.3.2 National interim targets for the ESR sector by 2030

For the existing national interim target for the ESR sector by 2030, the Government estimates that the emissions gap is 5.6 million tonnes. As the interim target for the ESR sector proposed by the Cross-Party Committee on Environmental Objectives essentially entails the same emission level as the existing target (see section 2.3.2), the Government's assessment of the emissions gap for a potential updated interim target should, in principle, be of a similar magnitude. The Cross-Party Committee on Environmental Objectives's proposal for a new interim target for the ESR sector also sets out a new trajectory for how emissions should develop up until 2030. In Figure 9, we have illustrated how the Government's scenario, which includes the proposals in the 2026 Budget Bill, relates to this proposed trajectory. The figure clearly shows that, from 2024 onwards, existing policy significantly exceeds the trajectory proposed by the Cross-Party Committee on Environmental Objectives.

The gap to the national interim target for the ESR sector has widened during this term of office. At the start of the term, the agreed policy meant that Sweden appeared set to meet the interim target for the ESR sector.

Figure 9. The Government's scenario for the ESR sector in relation to the target path set out in the Cross-Party Committee on Environmental Objectives's proposal for an updated interim target for 2030



Note: The target path and the Government's latest scenario include supplementary measures. The Government itself estimates that these measures are expected to achieve 1.8 million tonnes of additional reductions from 2027. As the Government has stated that it intends to utilise the so-called ETS flexibility to meet the EU commitment, we have not included this as an additional measure, as this is not permitted under the Cross-Party Committee on Environmental Objectives's proposal.

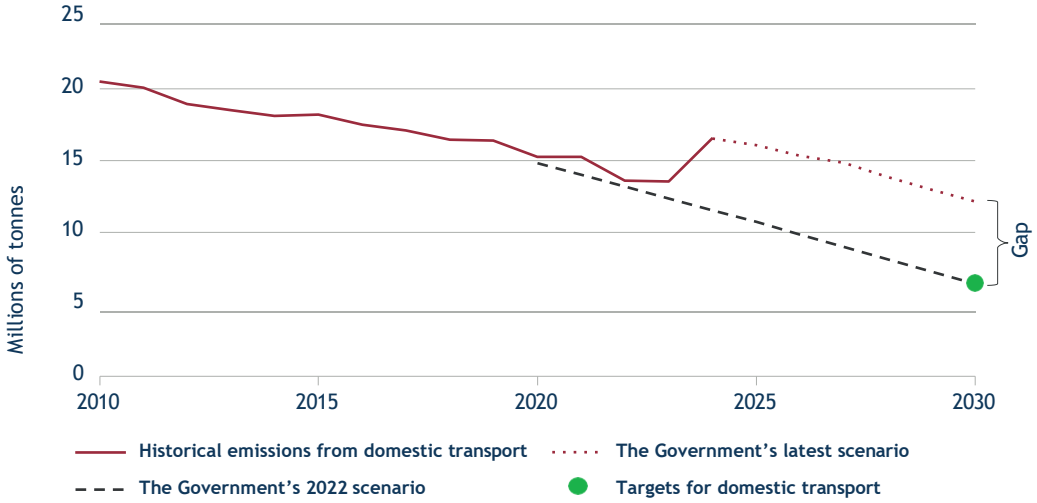
Source: The Government's Climate Report 2025[36] and the Cross-Party Committee on Environmental Objectives's interim report[32]

In light of the above analysis, we conclude that Sweden appears set to miss both the current and the proposed interim target for the ESR sector. The gap is also likely to be wider than in the Government's latest scenario, for the same reasons as apply to Sweden's EU commitment regarding ESR. In section 5.1, we discuss how Sweden's national ESR interim target can be achieved through measures in the transport and machinery sectors.

3.3.3 The interim target for domestic transport

Regarding Sweden's national interim targets for domestic transport, the Government estimates that there is an emissions gap of 5.9 million tonnes for the target year 2030. This means that, in the Government's latest scenario, emissions from the transport sector will only fall by 41 per cent between 2010 and 2030, compared with the 70 per cent reduction required to meet the target. In Figure 10, we compare the Government's latest scenario with its 2022 scenario for the transport target.

Figure 10. The Government's scenario for emissions trends in domestic transport (excluding domestic aviation) up to 2030



Note: Emissions are for domestic transport excluding domestic aviation. The Government's latest scenario does not include the effects of the proposals in the 2026 Budget Bill. The Government's 2022 scenario is taken from the Swedish Environmental Protection Agency's input to the 2022 Climate Report, and is therefore not identical to the scenario presented by the Government in the 2022 Climate Report.

Source: The Swedish Climate Policy Council, based on the Government's 2025 Climate Report,[36] the Swedish Environmental Protection Agency's background material for the 2022 Climate Report[39] and the Swedish Environmental Protection Agency's emissions statistics.

The conclusion regarding the transport target is that the emissions gap has widened during this term of office as a direct result of the lowered reduction obligation and lower taxes on petrol and diesel. Furthermore, as with the targets for the ESR sector, we assess that the gap is likely to be wider than in the Government's scenarios. We discuss in section 5.1 on what would be required to achieve the transport target.

3.4 Achievement of the national interim target for 2040

Regarding Sweden's national interim targets for the ESR sector up to 2040, the Government's latest scenario indicates an emissions gap of around 3 million tonnes, assuming full utilisation of supplementary measures. According to the Government's assessment, the gap for the interim target has widened compared with the start of the term of office; in November 2022, the Government estimated the gap to be 0.9 million tonnes.

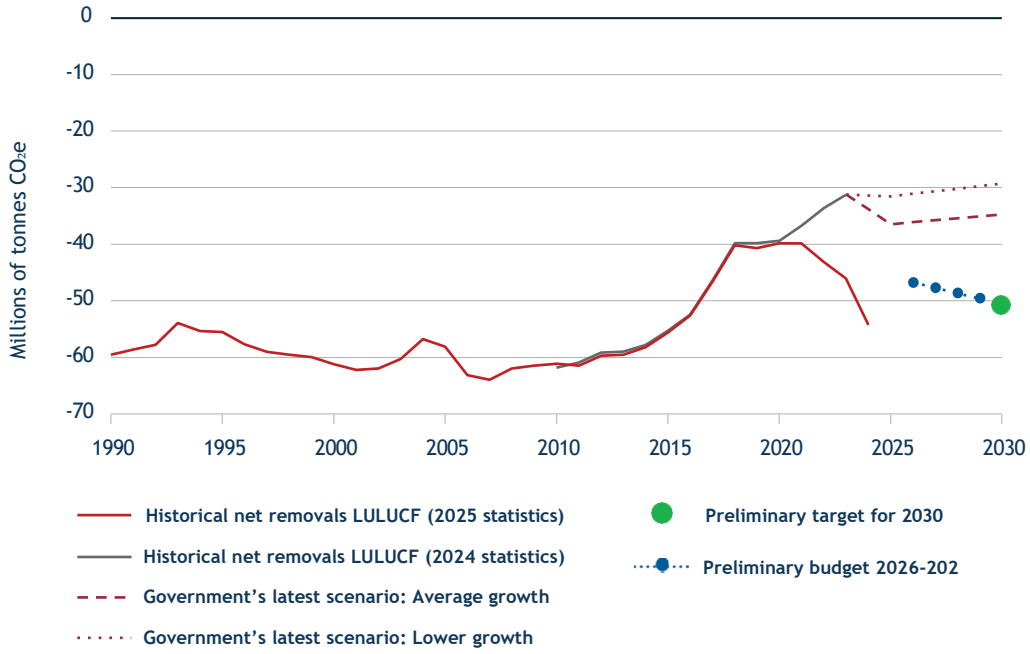
W**e assess,** in line with the Government, that the policies now adopted are insufficient to meet the national interim target for the ESR sector by 2040. The uncertainties in the assumptions affecting emissions trends are greater for 2040 than for 2030, which makes assessments of the gap uncertain. However, we believe that the gap to the climate target risks being even greater than the Government's scenario indicates. This is partly due to indications that the rate of electrification of the vehicle fleet will be slower in the second half of the 2020s than the Government anticipates. As many of the vehicles sold in the late 2020s will still be in use in 2040, emissions in 2040 will also be higher than assumed in the Government's scenario. By 2040, there is also greater uncertainty regarding the level of remaining emissions from agriculture. Our assessment is also based on the fact that the Government aims to increase domestic food supply to a greater extent than the scenario anticipates. We demonstrated in the 2025 report that this could lead to increased emissions unless a combination of changed consumption and production patterns, along with efficiency measures, is introduced.[27]

3.5 Achievement of Sweden's EU commitment for LULUCF

Assessing the gap to Sweden's EU commitment for LULUCF is more challenging than for other climate targets and commitments. Net greenhouse gas removals in the land-use sector (LULUCF) have varied significantly over the past two decades. Uptake decreased between 2011 and 2018, before levelling off between 2018 and 2021. The decrease was a result of changes in the forest, the land category with the greatest impact on net carbon uptake. Forest growth declined during the period 2018-2021, whilst harvesting and natural mortality increased. However, the trend has reversed, and the latest statistics published in December 2025 show that net carbon sequestration increased from around 40 million tonnes in 2021 to 54 million tonnes in 2024. During these years, forest growth has increased, harvesting has decreased, and methodological changes have been implemented to measure net carbon sequestration in the forest.

Figure 11 shows both the historical trend in LULUCF using the latest statistics from December 2025 (red line) and the statistics from December 2024 (grey line). The statistics have therefore changed significantly over the course of two years, which highlights the uncertainty surrounding LULUCF. The figure also shows the Government's latest scenarios from September 2025 (based on 2024 statistics) as well as Sweden's budget and interim targets for the LULUCF commitment for the years 2026-2030 (blue and green dots). Overall, the figure shows that, based on the old statistics and the Government's scenarios, it appeared difficult to meet the LULUCF commitment. With the new statistics, the situation has improved - although uncertainties remain for the future. New scenarios for LULUCF will be presented later this year.

Figure 11. Sweden's net uptake and commitment for the LULUCF sector up to 2030



Note: The figure should be interpreted such that the lower the value on the y-axis, the greater the net removals in the LULUCF sector. The statistics for net removals within LULUCF reported in 2025 differ from those reported in 2024, particularly for the years 2021-2024. We therefore report both data series. The Government's latest scenario was based on the statistics presented in 2024, which were the most recent at the time. Please note that both the preliminary budget for 2026-2029 and the preliminary target for 2030 are influenced by the levels in the historical statistics and need to be updated when new statistics are published. Consequently, the Government's latest scenarios are not fully comparable with the updated budget and the updated target.

Source: The Government's Climate Report 2025[36] and the Swedish Environmental Protection Agency's emissions statistics

Update of statistics and measurement methods for LULUCF

The fact that the statistics vary from one year to the next is partly due to natural uncertainties in the forest. These uncertainties include, among other things, how climate change affects the forest ecosystem, as well as estimates and measurements of changes in carbon balances. It is also because net removals are the result of relatively small changes (tens of millions of tonnes) in very large carbon stocks (billions of tonnes). Changes in carbon stocks therefore have a significant impact on net removals in LULUCF.

Part of the change between the 2024 and 2025 statistics is due to methodological updates, which we describe in more detail in Appendix III. These methodological changes are applied to the last four years - in statistics published in 2025, the figures for the period 2021-2024 were updated. Improved calculation methods are important for developing measures and policy instruments more accurately, but they can also introduce technical uncertainties into the statistics. As data quality improves and methods are updated, this may continue to lead to recalculations and relatively large retrospective revisions of net removals.

Sweden's LULUCF commitment for the period 2021-2025

As the Government's latest LULUCF scenario is based on the old statistics, it is difficult to assess the gap between current emissions and Sweden's commitment. For the period 2021-2025, the LULUCF sector's recorded emissions must not exceed the recorded removals during the period, in accordance with the so-called no-debit rule (see further section 2.3.3). In the Government's latest scenario, there was a significant gap to this commitment of 63-71 million tonnes.

We now conclude that the prospects of meeting Sweden's commitment under the no-debit rule have improved as a result of the new statistics, which show increased net uptake over a significant part of this period (from 2022 to 2024). Although only 2025 remains of the entire period, it is still difficult to assess whether the commitment will be met, as the 2025 statistics have not yet been published and because it is not until 2027 that the final compliance check against the commitment will take place. We discuss the conditions for achieving the no-debit commitment in more detail in Annex III.

Sweden's LULUCF commitments for the period 2026-2030

For the period 2026-2030, Sweden has an uptake budget and a final target (see section 2.3.3). In the Government's latest scenario, Sweden appeared to be missing the target by a wide margin (see the difference between the Government's two scenarios and Sweden's commitments in Figure 11). The gap for the second commitment period was then estimated at between 53 and 80 million tonnes. The Government has not yet presented an updated scenario that takes into account the increased net removals shown in the latest statistics.

Our assessment is that, for the second commitment period (2026-2030) as well, the prospects for Sweden to meet its EU LULUCF commitment have improved as a result of the new statistics. However, to meet the commitment, a high level of net removals will still be required in the coming years.

It is not possible to compare developments during the term of office with Sweden's LULUCF commitments in the same way as for other climate targets. Firstly, Sweden's current commitment for 2030 had not yet been finalised at the start of the term of office. Furthermore, the methods used to compile the statistics during the term of office have been updated to such an extent that comparisons between the Government's latest scenarios and those from 2022 must be made with caution.

Increased removals within LULUCF as a supplementary measure

In its report, the Cross-Party Committee on Environmental Objectives proposed that only increased carbon sequestration exceeding Sweden's commitments under the LULUCF Regulation should be counted as supplementary measures towards the national climate target for the ESR sector by 2030.[32] If net removals in the coming years reach a level such that Sweden meets its EU commitment for the LULUCF sector by a comfortable margin, this sector can also contribute supplementary measures towards Sweden's climate target for the ESR sector.

4 Assessment of the past year's policy

- **2025 was a significant year for climate policy.** It represented the final window of opportunity for the current government to implement major reforms to influence climate targets. It was also the year in which the EU's climate targets for 2040 and commitments under the Paris Agreement were decided.
- **The Government has not taken any decisions that bring Sweden any closer to achieving its climate targets.** Whilst the Government has indeed taken several measures in the climate field, these have had little impact.
- **Towards the end of the year, Sweden was a driving force within the EU** in pushing for greater climate ambition in the negotiations on the EU's climate targets for 2040.

In this chapter, the Swedish Climate Policy Council assesses how the Government's overall policies in 2025 have affected Sweden's prospects of achieving its climate targets. We begin the chapter by examining the general policy developments set out in the statement of Government policy, the budget bills and Sweden's actions within the EU (section 4.1). We then evaluate the Government decisions taken in 2025 that we consider to be significant for the prospects of achieving the climate targets (section 4.2). An overall evaluation of the entire term of office and how the Government implemented its climate policy action plan is presented in Part II. This chapter is therefore more concise than in the Council's previous reports.

In last year's report, the Swedish Climate Policy Council noted that 2025 would be a decisive year for the Government's climate policy. We emphasised the need for decisions that improve the prospects of achieving Sweden's climate targets, particularly in the transport and land-use sectors. We also highlighted that Sweden's role in the EU's climate work is important for supporting the Union's global climate leadership, not least by fulfilling Sweden's own national commitments for 2030.

We now note that the year has passed without the necessary decisions with significant impact having been taken, whilst the outlook for Sweden's achievement of its targets has deteriorated. Responsibility for taking these measures is thus being deferred to the next term of office.

4.1 The Government's overall policy during 2025

The climate featured only marginally in the Government's overall policy priorities in 2025. The statement of Government policy primarily emphasised efforts to combat organised crime, migration and integration, welfare reforms, and work to reduce inflation. With regard to the climate transition, the Government mainly highlighted the reorientation of energy policy, with a focus on creating the conditions for new nuclear power.[40]

4.1.1 Fiscal policy included few initiatives on climate change

The same priorities are reflected in economic policy. In 2025, the main focus was on stimulating economic recovery, and in the 2026 Budget Bill, the emphasis was even stronger on increasing household consumption with the aim of ending the recession and boosting growth. In addition to this, the budget reforms were presented under twelve headings, one of which concerned energy, climate and the environment.

We have summarised the budgetary measures identified by the Government as having climate relevance. The total amount of these is around SEK 4 billion, or 3 per cent of the total budgetary reforms amounting to SEK 127 billion.[41] However, the Budget Bill, together with previous legislative proposals, means that the Government in the longer term, potentially allocates substantial sums to bear a large proportion of the risks associated with investments in new nuclear reactors. Whilst few of the reforms in the 2026 budget directly hinder the ability to meet climate targets, several reforms are also not considered to contribute sufficiently to strengthening progress towards these targets. As regards the Government's tax changes, substantial tax cuts are being proposed that do not contribute to climate policy targets. In Section 6.2, we discuss in more detail how the Government has utilised the scope for reform and the tax instrument in more quantitative terms, viewed over the entire term of office.

4.1.2 Sweden's role in the EU

The political debate within the EU in 2025 was characterised by heightened tensions between climate ambitions and more short-term economic competitiveness. Member States have been forced to balance long-term climate targets, a desire from parts of industry for predictability in the climate transition and the development of competitiveness in the green markets of the future, against pressure from other sectors of industry and geopolitical uncertainty. This, in turn, has influenced the work on revising the European Climate Law.

In this negotiating climate, the Swedish Government has, to a large extent, highlighted issues relating to competitiveness and the conditions for industrial transition, whilst at the same time actively campaigning for a European climate target for 2040. In the negotiations on the EU's 2040 climate target, the Swedish government has adopted a fundamentally constructive position and expressed support for a target of a 90 per cent reduction in emissions, which was at the lower end of the 90-95 per cent range proposed by the EU Climate Science Advisory Board.[42] Sweden has also developed overarching positions on the EU's post-2040 climate framework but has not publicly engaged in any advocacy work during the year (see more detailed discussion of the EU's climate framework in section 6.3).

4.2 Government decisions with relevance for the climate in 2025

We have assessed the Government's climate-relevant decisions in 2025, broken down by relevant emissions sectors and areas. For each decision, we have assessed whether it contributes to or hinders the chances of achieving the climate targets. Appendix II contains a summary of all the measures that we consider having been relevant to the climate targets in 2025, together with our assessment of how they have contributed to or hindered the climate transition. In the following section, we outline the most important conclusions and decisions.

Transport and machinery

To improve the prospects of meeting the 2030 climate targets, we recommended in last year's report that the Government decide in 2025 on measures to reduce emissions in the ESR sector. We assessed that stricter reduction obligations and higher taxes on fossil fuels were the measures most likely to contribute to the greatest emissions reductions in the short term.

The Government has not taken any new decisions regarding stricter reduction targets or higher taxes on fossil fuels. However, Annex II shows that there are several decisions with climate policy implications that could reduce emissions from transport and machinery. As we have shown in Chapter 3, despite these measures, fuel consumption has increased more than the Government previously estimated and the pace of electrification has stalled. The measures described below do not offset the expected increases in emissions; instead, the gap to the 2030 climate targets has widened.

Most of the relevant decisions regarding transport and construction machinery during the year concerned electrification, such as the electric car subsidy under Sweden's Social Climate Plan, extended support for light electric trucks and continued investment in charging infrastructure. In relation to transport efficiency, the Government has received the Swedish Transport Administration's proposal for a new national transport infrastructure plan. It was also sent out for consultation, and the Government is expected to decide on the plan in spring 2026.

Decisions that contribute

- Targeted electric car subsidy as part of the Social Climate Plan to the EU
- Extension of support for electric light commercial vehicles
- Continued exemption from tax for pure and high-blend liquid biofuels
- Increased environmental compensation for rail freight transport

Decisions that counteract

- Extended reduction in tax on diesel for land-based industries
- Increased compensation for emergency airports and state subsidies for non-state-owned airports

Land-use sector (LULUCF)

In last year's report, we recommended that the Government decide in 2025 on a package of measures to increase the net uptake of greenhouse gases in forests and land. We referred to the Cross-Party Committee on Environmental Objectives's impact-assessed proposals, which had also been subject to political negotiation. Despite this basis, the Government has not taken any major decisions in 2025 that significantly increase net removals.

A number of measures have been implemented during the year, including increased support for reforestation and advice to forest owners, but the impact on carbon sequestration is limited. The 2026 Budget Bill does not include any proposals for compensation for deferred felling, which is the proposal in the Cross-Party Committee on Environmental Objectives's report deemed to have the greatest potential to increase carbon sequestration.

Decisions that contribute

- Investment in the rewetting of drained former agricultural land
- The Swedish Forest Agency is tasked with advising forest owners on measures to increase the absorption of greenhouse gases in forests

Decisions that counteract

Agriculture

In last year's report, we placed particular emphasis on agriculture and called for clearer targets, cost-effective policy instruments and measures to create the necessary conditions. The Government has implemented few measures during the year. The nitrogen initiative 'Kväveklivet' has continued, and the crop production programme 'Grogrund' has been strengthened, which may contribute to more efficient use of resources and reduced emissions per unit produced in the longer term. However, the impact of these measures on greenhouse gas emissions is expected to be very small.

At the same time, the Government's policy instruments that hinder the transition remain in place, such as the extended tax reduction on agricultural diesel. The policy still lacks a clear vision for the contribution of the agricultural sector to climate targets. There are gaps in the coherence between policy for climate, food and agricultural, and the governance does not encourage cost-effective climate measures. The Government has not yet produced the necessary groundwork for a comprehensive strategy or mix of policy instruments that clarifies how the sector is to contribute to net-zero emissions by 2045. The National Food Strategy 2.0 aims to strengthen the competitiveness of the Swedish food supply chain and increase Swedish food production. Despite its ambition, there is no clear link to Sweden's climate targets, and without such integration, both the goal of net-zero emissions by 2045 and the long-term competitiveness of agriculture risk being undermined.

Decisions that contribute

- Subsidy ordinance for 'Kväveklivet' adopted

Decisions that counteract

- Temporary reduction in VAT on food

Industry

As greenhouse gas emissions from industry are regulated jointly across the EU through the ETS 1, national policy is largely about providing industry with the long-term conditions to transition in a competitive manner. In last year's report, we therefore recommended that the Government support the industry's climate transition through improved permitting processes, strengthened public infrastructure, skills provision and expanded financing opportunities.

The Government has taken certain preparatory measures during the year. Sweden has stood firm on implementing the current rate of emissions reduction within ETS 1. The Government has also taken steps to streamline permit processes, through budgetary increases, legislative work and preparations to establish a new regulatory authority. However, in terms of financing opportunities, national support programmes have shown inconsistency during the year. We report on the development of the industry initiative Industry Leap and the state green credit guarantees in section 5.4.

Decisions that contribute

- Preparations for the establishment of a new agency for environmental impact assessment
- Increased resources for agencies responsible for permit assessment
- A STEM strategy for Sweden

Decisions that counteract

- Paused credit guarantees for green investments
- Tighter requirements for labour immigration and the abolition of 'track changes'in migration processes

Electricity and heating

In the area of energy policy, we recommended that the government carry out a comprehensive impact assessment in 2025 of various pathways for Sweden's electrification, covering all fossil-free electricity generation technologies as well as opportunities for flexibility in the electricity grids and energy storage. We also assessed that favourable conditions for new renewable electricity generation in the near term needed to be restored quickly.

Over the past year, the Government has continued along the path it had previously set out on and given high priority to further reforms designed to facilitate the construction of new nuclear reactors in the future, with the aim of having them in place by 2035. This includes, among other things, a

comprehensive and long-term government commitment to bear a large part of the risk associated with the construction and operation of any new nuclear reactors in Sweden. The Government has not carried out the broader impact assessment that we requested. Nor have the necessary decisions been taken to restore the conditions for renewable electricity generation in the short term. As we explain in section 5.5, several changes to governance and regulations have together worsened the conditions for investment in renewable energy sources.

To some extent, the year has also been characterised by a lack of decisions. In 2024, the government announced that it intended to provide compensation in 2025 to municipalities where wind farms had been established. The allocated funds have not yet been paid out, and it was not until February 2026 that the government decided on the regulations governing this compensation.[43]

Decisions that contribute

- Strengthening the electricity system initiative 'Kraftlyftet': Extended investment support for the flexibility and security of supply of the electricity system
- Reduction in electricity tax

Decisions that counteract

- High-cost protection for electricity and gas

Cross-sectoral measures

The Government has also decided on measures spanning several sectors. In early 2025, the Government tasked the Cross-Party Committee on Environmental Objectives with reviewing the climate targets for 2030. A unanimous committee presented a report in October. The Government has referred the Cross-Party Committee on Environmental Objectives's proposal but has not yet taken a decision on a bill for the new target (see section 7.1). The Government also decided to strengthen the investment aid Climate Leap, which contributes to emissions reductions across several sectors.

In regard to supplementary measures to achieve climate targets, the Government is continuing its efforts to provide operational support for BECCS and verified emissions reductions abroad. For budgetary reasons, however, support for BECCS has been reduced from SEK 36 billion to SEK 31 billion. We discuss these supplementary measures in further detail in section 5.6.

Decisions that contribute

- Strengthening of Climate Leap compared with previously estimated levels

Decisions that counteract

- High-cost protection for electricity and gas

Part II

Climate policy across terms of office

Introduction to Part II

In September 2026, a general election takes place in Sweden. Under the Climate Act (2017:765), every government must submit a climate policy action plan to the Riksdag within one year of the election. In this section of the report, we therefore look ahead to the forthcoming action plan and the policies required to achieve our climate targets. We draw lessons from the past terms of office and translate them into recommendations for the next. Part II covers sectoral analyses (Chapter 5), governance and decision-making processes (Chapter 6) and other cross-sectoral perspectives for reaching the climate targets (Chapter 7).

The Swedish Climate Policy Council wishes to emphasise that there is still the opportunity to take certain measures during the current term of office to improve the prospects of achieving climate targets, including actively influencing policy at EU level to preserve existing climate policies and shape new ones. However, the major windows of opportunity for reform have closed and the final budget bill for this term of office has been tabled. A final evaluation of the term of office can be carried out next year, but drawing lessons from recent years now strengthens the conditions for the next government to develop effective policies to achieve climate targets. By identifying what has worked and what needs to be developed, the next climate policy action plan can be built on a stronger foundation. That is why we have chosen to highlight the experiences from this term of office now.

A term of office must be managed well, given the lengthy timeline of legislative and decision-making processes, and in particular the limited window of opportunity to reduce emissions in the real economy in time to meet the 2030 climate targets. Proposals need to be drafted, analysed and adopted, so that the plan can be realised in time. We therefore urge all parliamentary parties to have well-prepared proposals in place even before the election and to build on the large body of existing analyses and policy proposals that are already available.

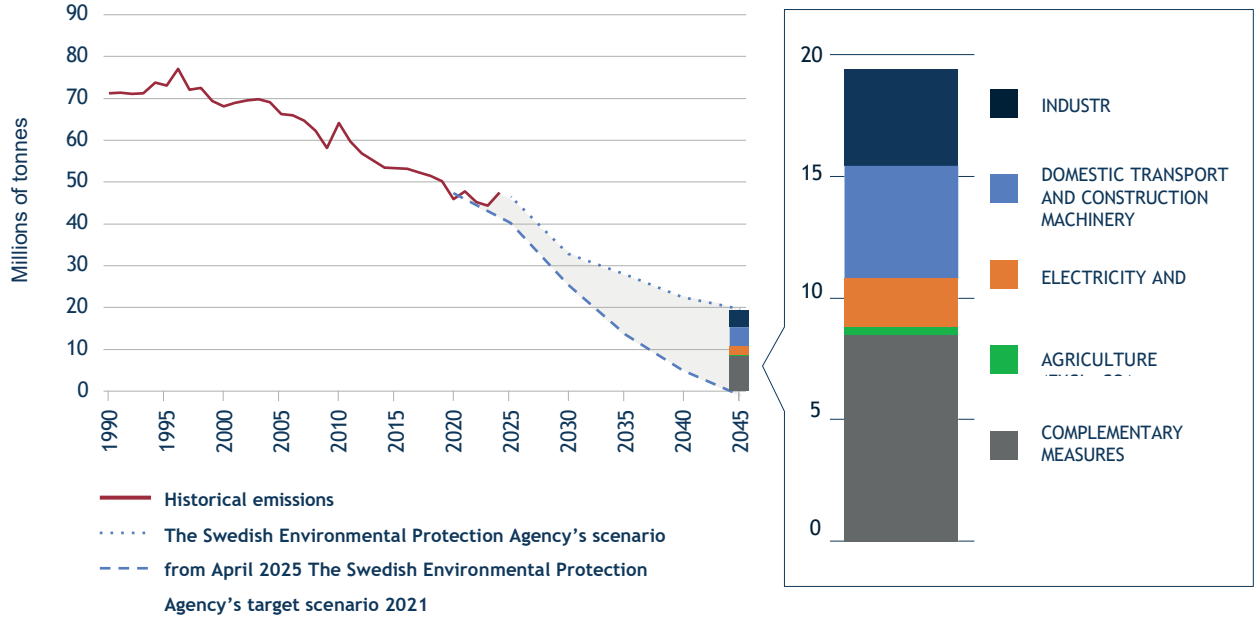
5 Sectoral contributions to the climate targets

To achieve the climate targets, the Government needs to develop socio-economically efficient policy instruments that enable households and businesses to make the transition to a low-carbon economy. In this chapter, we contribute to policy development by describing how the transition is progressing in the various sectors, assessing how the policies of this term of office have influenced the transition, and providing recommendations on how policy can be developed during the next term to achieve the targets. We review the sectors where gaps to the climate targets remain (sections 5.1-5.6).

With regard to Sweden's national climate targets and EU commitments for 2030, there is only one more electoral term left in which these targets must be met. Transport and machinery are the sectors where policy has the greatest potential to rapidly reduce emissions. The development of net carbon sequestration within the land-use sector (LULUCF) is also of great importance up to 2030 in order to meet Sweden's LULUCF commitment. We are therefore placing particular focus on these sectors.

With regard to the long-term transition to net-zero emissions by 2045, we assess - just as the Government did in its climate policy action plans from 2019[44] and 2023[45] - that all fossil fuel emissions must, in principle, cease, and that a significant number of supplementary measures must be implemented to offset remaining emissions, particularly within the agricultural sector. The extent to which the various sectors will contribute to the climate target depends on assumptions regarding technological and societal development. In Figure 12, we compare the Swedish Environmental Protection Agency's latest target scenario for 2045 - that is, a plausible scenario in which the target is achieved - with the latest scenario based on agreed policy. The bars on the right-hand side of the figure show the extent of further emissions reductions that each sector needs to contribute compared with current policy, as well as the extent of further supplementary measures that need to be implemented to achieve the climate target in the target scenario. In the following sections, we will discuss policy instruments with a direct climate impact within these sectors and enabling initiatives to close the gap to the climate targets.

Figure 12. Comparison between the ' ' target scenario for the 2045 target and the latest scenario based on agreed policies



Note: The figure shows net emissions including supplementary measures. The bar on the right shows the additional emissions reductions - beyond agreed policy - required in each sector to achieve the target scenario.

Source: The Climate Policy Council, based on the Swedish Environmental Protection Agency's input for the 2025 climate report[46] and the Swedish Environmental Protection Agency's target scenario from 2021[47]

5.1 Transport and machinery

- **The climate transition of the transport and machinery sectors has fallen behind that of our neighbouring countries.** The use of fossil-free fuels has declined, the pace of electrification has slowed, and traffic volumes have increased. The fact that Sweden has comparatively low prices for fossil fuels has reduced the pressure to transition.
- **Short-term climate targets can be achieved by strengthening existing policy instruments for transport and machinery.** We also present recommendations to enable the transport sector to achieve virtually zero emissions in the longer term.

The combustion of fossil fuels from domestic transport and machinery resulted in emissions of 16.7 and 3.6 million tonnes of carbon dioxide equivalents respectively in 2024, which corresponds to 43 per cent of Sweden's total emissions and 67 per cent of emissions covered by the Effort Sharing Regulation (ESR).[48] These fossil fuel emissions need to be reduced by 2030 in order to achieve the short-term climate targets and, in principle, cease entirely during the 2040s to achieve the long-term climate targets.

5.1.1 Climate transition in transport and machinery

There are three main measures to reduce carbon dioxide emissions from transport and machinery:

1. fossil-free fuels
2. electrification
3. transport efficiency.

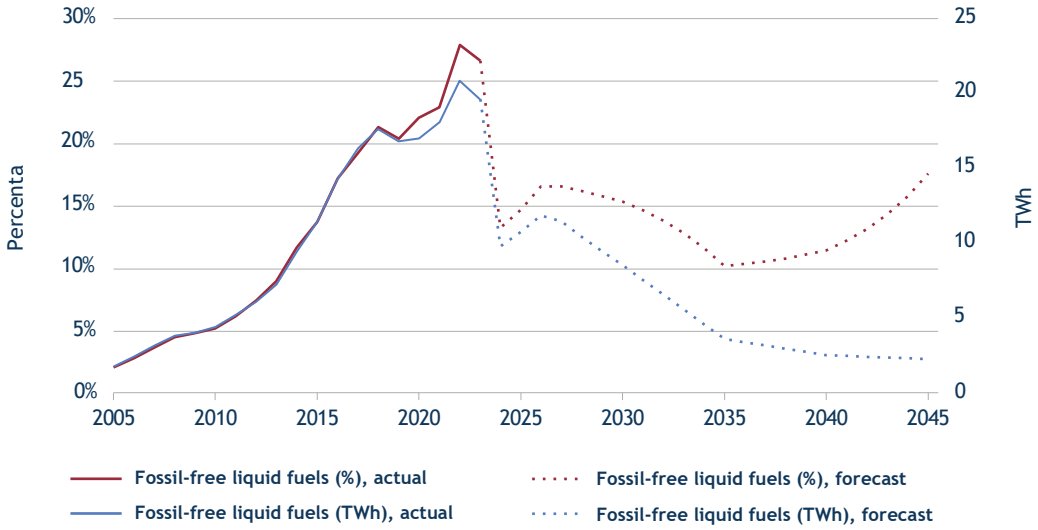
In previous reports, the Swedish Climate Policy Council, like several other agencies[49,50], has emphasised the importance of addressing all three areas, often referred to as the three pillars of the transport sector. In the following section, we outline how these three pillars of the transition have developed in recent years.

Uneven progress in the transition to fossil-free fuels

The total volume and share of fossil-free fuels (liquid and gaseous) for domestic transport increased over a long period. In 2024, the volume of fossil-free fuels fell sharply as a result of policy decisions. The Swedish Energy Agency estimates that, if no new policy decisions are taken, the blend level of fossil-free fuels is expected to remain at roughly the same level as today, see Figure 13. However, as a larger proportion of the vehicle fleet becomes electrified, the volume of fossil-free fuels is expected to fall under the current policy framework.

Electrification is expected to gain significant momentum in the 2030s. Figure 13 illustrates the potential to increase the share of fossil-free fuels, whilst the total consumption of these in transport and machinery decreases as electrification progresses. This development would limit fuel price rises and free up biomass for other transitions.

Figure 13. Fossil-free fuels in the ‘ ’ for combustion engines (share and TWh), actual figures and forecast 2005-2045

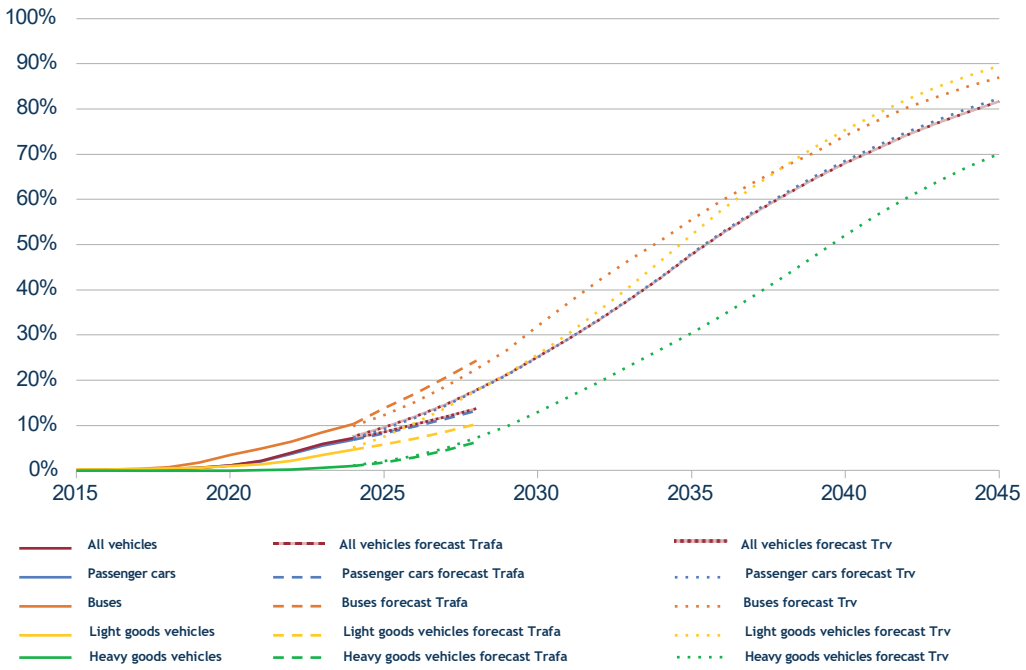


Source: Swedish Energy Agency[51]

The transition to electric vehicles has slowed down

Road vehicles are the largest source of emissions in the transport sector and are in the midst of a technological shift towards electric propulsion. The proportion of purely electric vehicles in the Swedish vehicle fleet increased from nearly 0 to around 7 per cent between 2015 and 2024 (see Figure 14). The proportion is highest among buses, at around 10 per cent, whilst it is lowest among heavy goods vehicles, at around 1 per cent. The government agency Transport Analysis and the Swedish Transport Administration produce forecasts for future developments based on agreed policy. In these forecasts, we see that developments across the different vehicle types differ, with heavier vehicles expected to transition to electric power more slowly than lighter vehicles. Machinery, and to a limited extent ships and aircraft, can also be electrified. For these too, the pace of transition is significantly slower than for light road vehicles. [52,53]

Figure 14. Proportion of pure electric vehicles in the ‘ ’ vehicle fleet by vehicle type, actual figures for 2015-2024 and forecast for 2024-2045

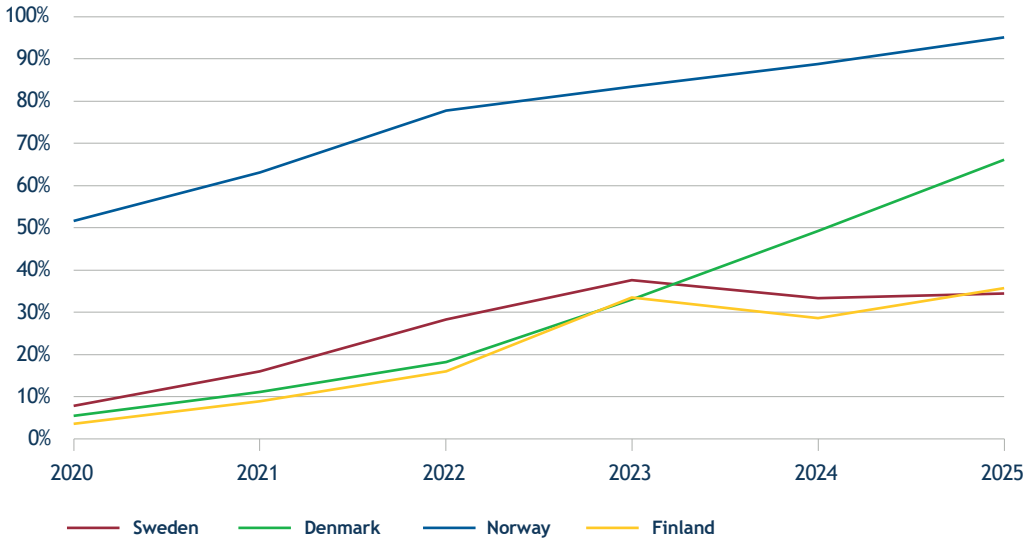


Note: The forecasts from Trafikanalys (Trafa) (historical data and short-term forecast for 2025-2028) and the Swedish Transport Administration (TRV) (forecast 2024-2045) differ slightly, partly because the Swedish Transport Administration’s forecast is based on the Transport Analysis Agency’s short-term forecast for 2024-2027, which means that the forecast starts at a slightly lower level than the historical outcome. The Swedish Transport Administration’s forecast should be interpreted as the most realistic assessment of future developments given current knowledge, policy instruments and policy.

Source: Transport Analysis[52] and the Swedish Transport Administration[53]

The agencies’ electrification forecasts are updated annually. In 2025, the rate of electrification was scaled back for all vehicle types in these forecasts. The industry organisation Mobility Sweden has also presented an updated analysis of vehicle sales in which it forecasts a lower rate of electrification than the agencies do up to 2030.[38] Today, in contrast to a few years ago, Sweden has a lower proportion of electric cars in new sales than Finland and Denmark. Norway has long been far ahead of Sweden (see Figure 15).

Figure 15. Share of battery-electric passenger cars (excluding hybrids) in new car sales during January-October 2020-2025 in Denmark, Norway, Finland and Sweden



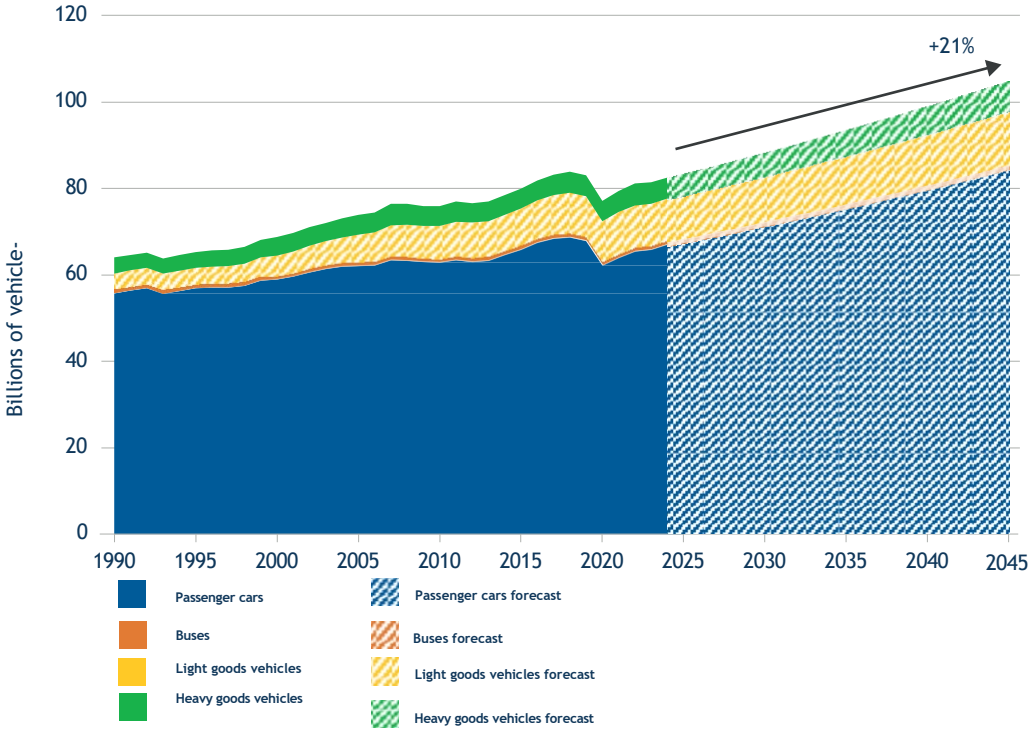
Source: Drivkraft Sverige[54]

Developments towards a less transport-efficient society

The third pillar of the transition is transport efficiency. This can be defined and measured in various ways. Several government agencies define a transport-efficient society as a reduction in traffic volume, i.e. the total number of vehicle-kilometres travelled, by energy-intensive modes of transport - such as cars, trucks and aircrafts.[55]

Road traffic volume has risen steadily by just under 30 per cent since 1990, with the exception of a temporary decline during the pandemic. Part of this increase can likely be attributed to population growth, but traffic volume has risen faster than the population. During this term of office, the trend towards increased traffic volume has continued. The Swedish Transport Administration produces forecasts for traffic volume based on agreed policy, which form the basis for the Government's infrastructure work and scenarios for climate targets. These forecasts assume that total road traffic volume will increase by an average of 0.93 per cent per year until 2045, as shown in Figure 16. This corresponds to an increase in traffic volume of approximately 6 per cent by 2030 and around 21 per cent by 2045, compared with today.

Figure 16. Traffic volume on the road by vehicle type, actual figures 1990-2024 and forecast 2024-2045



Note: The data series from Transport Analysis (historical outcomes) and the Swedish Transport Administration (forecasts) differ slightly, meaning that the forecast starts at a slightly lower level than the historical outcome. The Swedish Transport Administration's forecast should be interpreted as the most realistic assessment of future developments, given current knowledge, policy instruments and political decisions.

Source: Transport Analysis[56] and the Swedish Transport Administration[53]

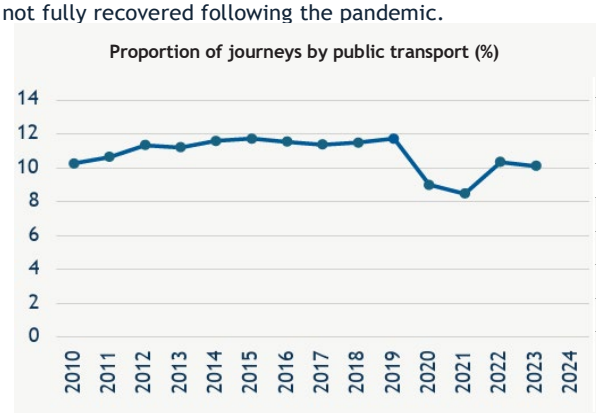
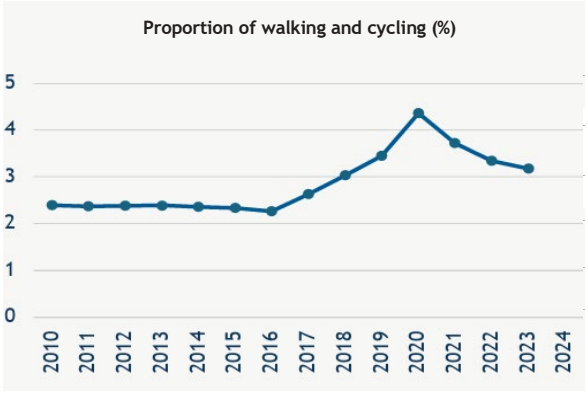
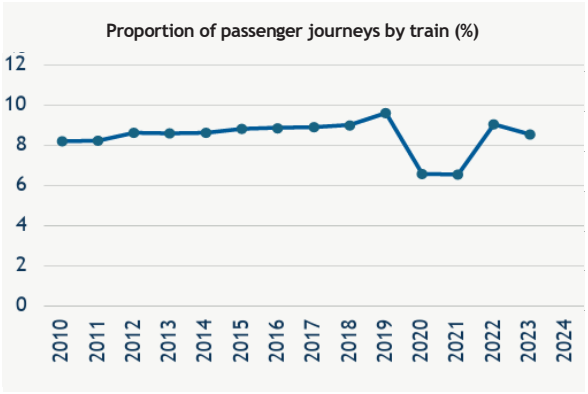
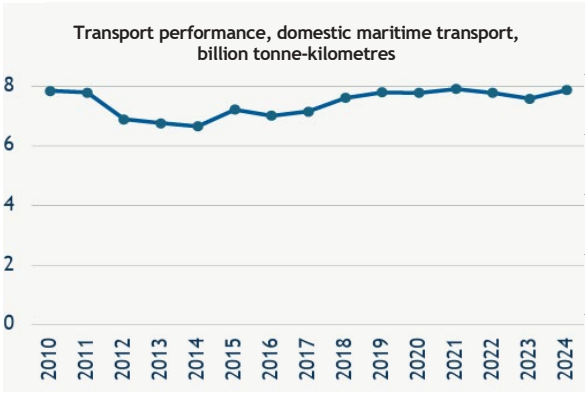
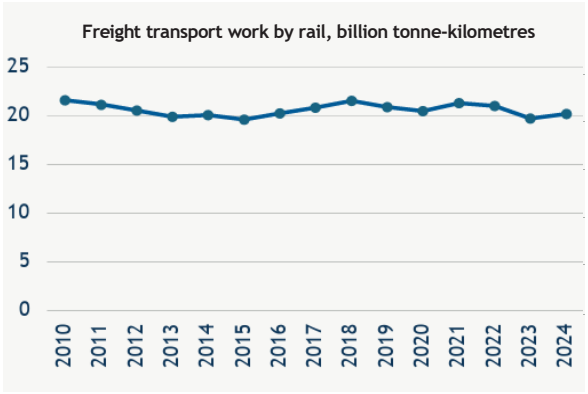
In the 2019 and 2023 climate policy action plans, the Government defines transport efficiency as a society in which accessibility can be improved without an increase in total transport performance[44,45]- that is, the relationship between the volume of goods and passengers transported and the total transport performance. Transport performance is a measure of precisely this: how much is transported by vehicles, in the form of goods and people. Since the early 2000s, transport performance has increased, but over the last decade it has remained unchanged, with the exception of a temporary decline during the pandemic.[57] The Swedish Transport Administration's forecasts, based on agreed policy, suggest that transport performance is expected to increase in the future. While Swedes are expected to reduce their car journeys per capita, this reduction is offset by the fact that more freight is expected to be transported by road, rather than via more energy-efficient transport solutions such as rail or shipping.

In addition to traffic performance and transport performance, it is also possible to assess transport efficiency using indicators of the shift from emission-intensive modes of transport to more energy-efficient ones. The Panorama web platform contains a number of indicators relating specifically to such a shift.[f] Panorama's indicators, as shown in Table 2, reveal that the modal shift in passenger transport towards public transport, rail, cycling and walking declined during the COVID-19 pandemic, and that the trend has not recovered since then. For freight transport, the modal shift remains at roughly the same levels as over the past 16 years.

The overall picture is therefore that, in recent years, Sweden has been moving towards a less transport-efficient society - regardless of which definition we use.

f Read more about Panorama's transition scenario in Appendix IV. The statistics on transport and traffic performance are primarily sourced from Trafikanalys, whilst, for example, the indicator for more efficient passenger transport shows the number of inhabitants per vehicle and is based on data from 'Fordon på väg' and Statistics Sweden's population statistics. Further information is available at panorama-sweden.com.

Table 2. Examples of transport indicators from the Panorama web platform

<table>
<tr><td colspan="2">INDICATORS OF SHIFT IN PASSENGER TRANSPORT</td></tr>
<tr><td>The transition ‘Increased share of public transport’ shows that the proportion of journeys made by public transport has not fully recovered following the pandemic.
 
</td><td>The transition ‘Increased share of walking and cycling’ shows that the share has decreased since the pandemic.
 
</td></tr>
<tr><td>The ‘Shift to Rail’ report shows that the proportion of passenger transport by train has not fully recovered from the decline during the pandemic.
 
</td><td>PANORAMA</td></tr>
<tr><td colspan="2">INDICATORS OF MODAL SHIFT IN FREIGHT TRANSPORT</td></tr>
<tr><td>The transition ‘Shift of freight to maritime transport’ shows some fluctuation over the years, with a slight increase in the last year.
 
</td><td>The transition ‘Shift of freight to rail’ shows that the volume fluctuates over the years.
 
</td></tr>
</table>

Source: panorama-sverige.se

5.1.2 Climate transition policies for transport and machinery during this term of office

THE CLIMATE POLICY COUNCIL'S ASSESSMENT

Climate policy instruments for transport and machinery have been weakened. This has contributed to slower electrification, increased traffic volumes and higher use of fossil fuels.

The negative trends we have identified - increased use of fossil fuels, a slower pace of electrification and reduced transport efficiency - can be attributed to the policies pursued during this term of office.

Fuel policy during this term of office has led to increased emissions

The volume and proportion of fossil-free fuels have fallen sharply during this term of office. This is a result of the Government's decision to lower the reduction obligation and the carbon dioxide and energy taxes on fuel. The Government's aim in reducing the reduction obligation and fuel taxes has been to bring down fuel prices. In addition to fuel suppliers blending in a smaller proportion of fossil-free fuels, low fuel prices have also contributed to an increase in the number of vehicle-kilometres travelled (traffic volume). The reduction obligation and the lowering of fuel taxes are the measures that have had the greatest impact on the increases in emissions shown in Chapter 3.

A positive development for the transition to fossil-free fuels has been that Sweden has continued to be granted tax exemptions from the EU for high-blend liquid biofuels, such as ethanol and fully fossil-free vegetable oils (HVO100). At the start of its term of office, the Government also decided that Sweden should participate fully in the new Emissions Trading System (ETS 2) from the outset. The emissions impact of ETS 2 will be limited in the short term, particularly as the system has been postponed from 2027 to 2028,[26] but in the longer term it may have a greater significance for the transition to fossil-free fuels in transport and machinery.

The cost-benefit analysis for electric vehicles has deteriorated as a result of political decisions

During this term of office, the transition to electric vehicles has stalled. This is largely due to the low prices of fossil fuels, which have made the cost-benefit analysis for switching to electric vehicles less attractive. The Government's termination of the broad electric car bonus has also led to fewer electric cars being sold, particularly in the leasing market.[58]

However, other policy changes have helped to stimulate electrification. The Government has introduced and extended climate incentives for other types of vehicles. It has also developed a new targeted electric car incentive that will come into effect in 2026. The Government also temporarily introduced a scrappage incentive for older cars, which has, however, had little effect. Budget proposals have also included enhanced support for charging infrastructure, and certain regulatory changes have been implemented, such as those facilitating the ability of housing associations to install charging infrastructure.

Within the EU, climate requirements for vehicle manufacturers have been made stricter. Early in the electoral term, EU institutions decided that the internal combustion engine for light-duty vehicles (passenger cars and light commercial vehicles) and city buses would be phased out of new sales by 2035. In December 2025, however, the European Commission proposed that the requirement for light vehicles be lowered to a 90 per cent reduction in emissions by 2035, compared with 2021. Instead, requirements for the use of fossil-free steel and synthetic e-fuels are proposed.[59] Overall, the proposed change therefore represents only a marginal reduction in ambition in terms of tonnes of carbon dioxide equivalents. However, the proposal creates uncertainty for the transport sector. Emission standards for heavy-duty transport in the EU were tightened at the start of the term of office to ensure that emissions are gradually reduced in new sales, by 45 per cent by 2030 and by 90 per cent by 2040, compared with emissions in 2019-2020.

Given the slowdown in the pace of electrification, we conclude that the positive initiatives for the electrification of the vehicle fleet do not offset the weakening of climate policy instruments that has taken place during this term of office.

Weak policy development in transport efficiency during the term of office

For several years, the Swedish Climate Policy Council, in line with several other evaluations,[60,61,62] has pointed out that the policy instruments for moving towards a more transport-efficient society have been weak. This picture persists even at the end of this term of office. In some cases, existing policy instruments have even been weakened. Sweden's Urban Environment Agreements - under which the state co-funds projects aimed at promoting public transport, cycling and sustainable freight solutions - were abolished early during this term of office. The Government also withdrew, at an early stage, a previous parliamentary decision on a mode-neutral travel tax deduction that was due to come into force on 1 January 2023.

In September 2025, the Swedish Transport Administration presented its proposal for the National Transport Infrastructure Plan 2026-2037, with a stronger focus than before on maintenance and development. The National Transport Infrastructure Plan is a key policy document for influencing how society is planned. There are certain shortcomings regarding governance in the plan. While the Swedish Transport Administration's forecast does operate under the assumption that the climate targets will be met, it also assumes that this will be achieved with the help of other policy instruments than transport infrastructure planning. The latest draft investment plan takes a few steps in the right direction, for example by giving greater weight to climate impacts in socio-economic calculations and by the Swedish Transport Administration having, to some extent, reconsidered previously made decisions. However, several consultation bodies point out that there are persistent shortcomings in the planning process [63-65]. Although there are initiatives for both the maintenance and expansion of the rail network, the plan places a strong emphasis on road maintenance. The aim is to clear the backlog in road maintenance over the ten-year planning period, whilst the target for eliminating the rail maintenance backlog is not until 2050.[66]

The Government allocated funds from 2023 to 2025 to encourage the shift of freight transport to rail and shipping (a subsidy referred to as the broadened eco-bonus). Although the Government highlights the climate benefits of this support in its climate policy action plan,[45] it has decided, without further justification, to withdraw the support from 2026 onwards.

The Government has not taken any decision regarding a distance-based charging system for heavy goods vehicles, as announced in the 2023 climate policy action plan. This proposal aims both to improve the efficiency of freight transport and to promote electric vehicles.

Air travel is one of the modes of transport with the highest climate impact. For shorter journeys, such as domestic flights, there are in most cases well-established and more resource-efficient alternatives. Despite this, the Government has taken several decisions during its term of office to specifically favour air travel, including the abolition of the air travel tax and a doubling of operating grants to regional airports. In the 2026 appropriation directions, the Government instructed sixty government agencies to report specifically on how they ensure 'mode-neutral business travel' based solely on need and efficiency, and not the environmental impact. This is an indirect way of favouring air travel and conflicts with the requirement for government agencies to give particular priority to the environmental impact of business travel, in line with the rules governing agencies' environmental work.[67]

In some cases, the Government has taken measures to promote transport efficiency. The Government has continued its work to allow longer and heavier goods vehicles on the roads, to transport goods more efficiently. It has also taken certain steps to promote the four-step principle in transport infrastructure planning. The four-step principle means that the public sector should prioritise measures that reduce transport demand (step 1) and the optimisation of existing infrastructure (stage 2). On behalf of the Government, the Swedish Transport Administration has drawn up a clearer catalogue of measures and guidance on how the four-stage principle can play a more decisive role both in the Swedish Transport Administration's instructions and in the county plans, such as how state infrastructure funds are allocated at regional level.

5.1.3 Policy package for transport and machinery during the next term of office

During the next term of office, the trend needs to be reversed for the so-called three pillars of the transition in transport and machinery. The Swedish Climate Policy Council recommends that the Government should implement a comprehensive package of policy instruments to reduce emissions from transport and machinery. There are many proposals, backed by impact assessments, to build upon. In the following section, we will discuss the policy instrument options set out in Table 3.

Table 3. Policy instrument options to reduce emissions from transport and machinery

Transition path	Policy instrument options
Fuel policy	Combining carbon pricing with blending requirements for fossil-free fuels
	Compensatory policy to mitigate price effects on businesses and households
	Make long-term decisions on phasing out fossil fuels in Sweden and across the EU
Electrification	Reform vehicle taxation to encourage electric vehicles
	Monitor and develop targeted support for electric cars
	Continue to develop introductory support where electrification has not progressed as far
	Take measures to stimulate demand for fossil-free transport
	Remove barriers and continue to support the expansion of charging infrastructure
	Regulatory changes to encourage electric trucks
	Reduce tax on public charging
	Maintain and further develop the EU's climate requirements for vehicles
Transport efficiency	Reform infrastructure planning so that it is based on climate targets
	Implement the proposal for a mode-neutral travel tax deduction
	Reduce the benefit taxation of public transport passes
	Introduce differentiated road tolls and congestion taxes
	Provide municipalities with more tools to work towards sustainable urban transport

A rethink of fuel policy to meet climate targets

To reduce emissions in the short term and phase out fossil fuels in the longer term, fuel policy needs to be overhauled during the next term of office.

Combine carbon pricing with blending requirements for fossil-free fuels

There are two main types of policy instruments for increasing the proportion of fossil-free fuels in the existing vehicle fleet: pricing and blending requirements. Pricing can be achieved either through taxes (carbon and energy taxes), which determine the price of emissions without regulating the volume of emissions, or through emissions trading schemes, which determine the maximum permitted emissions and where the market determines the price of emissions. Blending requirements can also be designed in various ways, either through requirements for the blending of a certain proportion of fossil-free fuels or through requirements for emissions reductions from the fuel sold (such as the Swedish reduction obligation).

Pricing and mandatory reduction schemes have different strengths and weaknesses. Pricing is generally considered to be more cost-effective than mandatory reduction schemes, as it provides incentives to reduce emissions where the costs are lowest. A tax or emissions trading scheme also generates revenue for the state. Mandatory reduction targets, on the other hand, have the advantage of delivering rapid and certain emissions reductions and often result in a lower price at the pump than carbon pricing.[68] A stable reduction obligation can also create incentives for investment in the production of fossil-free fuels for all modes of transport, and we nevertheless consider that it has the potential to be relatively cost-effective (see more detailed reasoning in the next section). Since the reduction obligation was introduced, Sweden has combined pricing and blending requirements, thereby balancing the strengths and weaknesses of these policy instruments. The Swedish Environmental Protection Agency considers that this combination constitutes a cost-effective mix of policy instruments for achieving Sweden's climate targets.[69]

We agree that a combination of pricing and blending requirements can balance their strengths and weaknesses. We assess that this policy mix need to be strengthened compared with current levels and that trade-offs will then need to be made between the cost-effectiveness of pricing and tax revenue, and the lower price at the pump resulting from the reduction obligation for a given emission reduction. In parallel, the reduction in diesel tax for land-based industries should be phased out (see our recommendation in last year's report[27]). The Government has appointed the Policy Instruments Inquiry[70] to develop proposals for policy instruments relating to intervention and pricing. The inquiry, which is due to present its proposals in May 2026, has the stated aim of identifying a mix of policy instruments that ensures that the climate targets are met. Decisions should be taken early in the next term of office, and any tax changes should be introduced no later than in conjunction with the 2027 Budget Bill, given that Sweden has an emissions budget within the ESR sector to adhere to (see Chapter 2).

In-depth analysis - proportion of fossil-free fuels required to meet the 2030 targets

Regardless of how carbon pricing and mandatory reduction targets are combined, we believe that the proportion of fossil-free fuels needs to increase during the next term of office if Sweden is to meet its climate targets by 2030. The proportion required varies depending on Sweden's various climate targets and its EU commitment to 2030 and depends on what other measures are taken within the ESR sector, including the extent of any supplementary measures. To illustrate the potential demand for fossil-free fuels, we have calculated in Table 3 what would be required to meet the targets solely through an increased reduction obligation, and the impact this would have on fuel prices (see Appendix II for a more detailed description of our calculations). Our calculations are based on the range of climate targets we have outlined in Chapter 3, which is based on the Government's assessment and our own more cautious assessment the gap to climate targets. Our calculations also assume that no other measures will be introduced in the ESR sector.

The table shows that no major changes to the reduction obligation are required to meet Sweden's EU commitment under the ESR. However, significant changes to the reduction obligation are required to meet the national climate targets, provided that no other measures within the ESR sector or supplementary measures are taken. Furthermore, we note that, with these adjustments and assumptions, fuel prices would need to increase by just under SEK 2 to meet the EU commitment under the ESR, by around SEK 4 to meet the national interim target, and by up to SEK 6 to meet the transport target. This should be viewed in the light of the fact that, prior to the outbreak of the war in Iran, Sweden had historically low fuel prices that were several SEK lower than in our neighbouring countries and the EU (see the next section).

In previous reports, we have warned the Government against relying too heavily on the reduction obligation to achieve the 2030 climate targets.[71] We believe that the 2030 climate targets should be achieved through a combination of measures and policy instruments, as discussed in the following section. With such a combination, the reduction obligation and the price effect do not need to be as high as in the calculation examples in Table 4. The reason we have based our calculations on the reduction obligation here is partly because it is relatively straightforward to perform such calculations, and partly because we believe it provides an illustrative overview of how the 2030 climate targets could be achieved using an existing policy instrument.

Table 4. Estimated level of the emission reduction obligation required to meet the 2030 targets if no other measures are taken

Climate targets	Gap to climate targets	Emissions reduction obligation (2028-2030)	Price increase (SEK/l)
Sweden's EU commitment under the ESR (Cumulative ESR emissions)	More conservative estimate: 8.6 million tonnes	24%	1.6 - 1.8
	Government's estimate: 4.3 million tonnes	17%	0.9-1.1
National interim target for ESR (ESR emissions 2030) - with the current level of supplementary measures	More conservative estimate: 8 million tonnes	50%	4.0 - 4.5
	Government's estimate: 6 million tonnes	40%	3.1 - 3.5
National interim target for ESR (ESR emissions 2030) - if supplementary measures are fully utilised	More conservative estimate: 5 million tonnes	35%	2.6 - 2.9
	Government's estimate: 3 million tonnes	25%	1.7 - 1.9
National target for domestic transport (Transport emissions 2030)	More conservative estimate: 8 million tonnes	65%	5.4 - 6.0
	Government's estimate: 6 million tonnes	50%	4.0 - 4.5

Note: The calculations have been made using the Swedish Energy Agency's preliminary model for estimating the effects of changes to the reduction obligation. The calculations are approximate and do not capture all the effects of an increased reduction obligation, such as the impact of rising fuel prices on the rate of electrification. The reduction obligation is assumed to be the same for petrol and diesel. The reduction obligation includes electricity credits as in the current scheme. Fossil-free fuels that are blended in are assumed to cost SEK 7 more per litre than petrol and diesel. The price effect has been calculated compared with a scenario featuring the current reduction obligation of 10 per cent. For Sweden's EU commitments under the ESR and the Cross-Party Committee on Environmental Objectives's proposed national 2030 targets, it is assumed that the same number of flexibilities and supplementary measures will be utilised as in the Government's latest scenario, with the addition that the ETS flexibility of 0.87 million tonnes per year will also be utilised in the period 2025 to 2030.

Source: The Swedish Climate Policy Council based on the 2025 Climate Report[36] and the Swedish Energy Agency's preliminary calculation model for the impact of the reduction obligation on climate targets.

The socio-economic cost of blending can also be estimated. We estimate the cost of blending fossil-free fuels at approximately 3,600 SEK per tonne of carbon dioxide equivalents, based on an additional cost of 7 SEK per litre for blended fossil-free fuel compared with fossil petrol and diesel. This is higher than current prices within ETS 1 and higher than the projected prices under both ETS 1 and 2.[72] At the same time, it is lower than estimates for other possible measures to reduce emissions from the transport sector by 2030. For example, the Swedish Transport Administration estimates that electrification or more fuel-efficient vehicles have a marginal socio-economic cost of SEK 2,000-4,500 per tonne and a reduction in transport activity due to higher fuel prices of SEK 5,500 per tonne.[73] The Swedish National Audit Office also notes that the reduction obligation can contribute to emissions reductions at a reasonable cost and that the marginal social cost of subsidising low-emission cars could be around SEK 6,000 per tonne.[74]

FACT BOX. FINANCIAL RISKS IF SWEDEN FAILS TO MEET ITS EU COMMITMENT UNDER THE ESR

Member States' commitments under the EU's ESR and LULUCF regulations are designed with the EU's overall climate targets in mind. If Sweden fails to meet its EU ESR commitment, it risks both undermining the EU's ability to achieve its climate target and facing sanctions from the Court of Justice of the European Union (see further section 2.4).

The Irish Fiscal Advisory Council and Climate Change Advisory Council have jointly produced estimates of how sanctions for EU commitments might be structured against EU Member States.[75] Based on the Irish assumptions regarding penalty levels for non-compliance, we have calculated how large the sanctions for Sweden might be if the gap to the ESR commitment is not closed. The calculations multiply excess emissions (millions of tonnes of carbon dioxide equivalents) by an estimated price per tonne. The price estimate in the Irish report varies significantly depending on different assumptions regarding the starting point for the penalty charge. Annex III contains a more detailed account of how we have carried out the calculations.

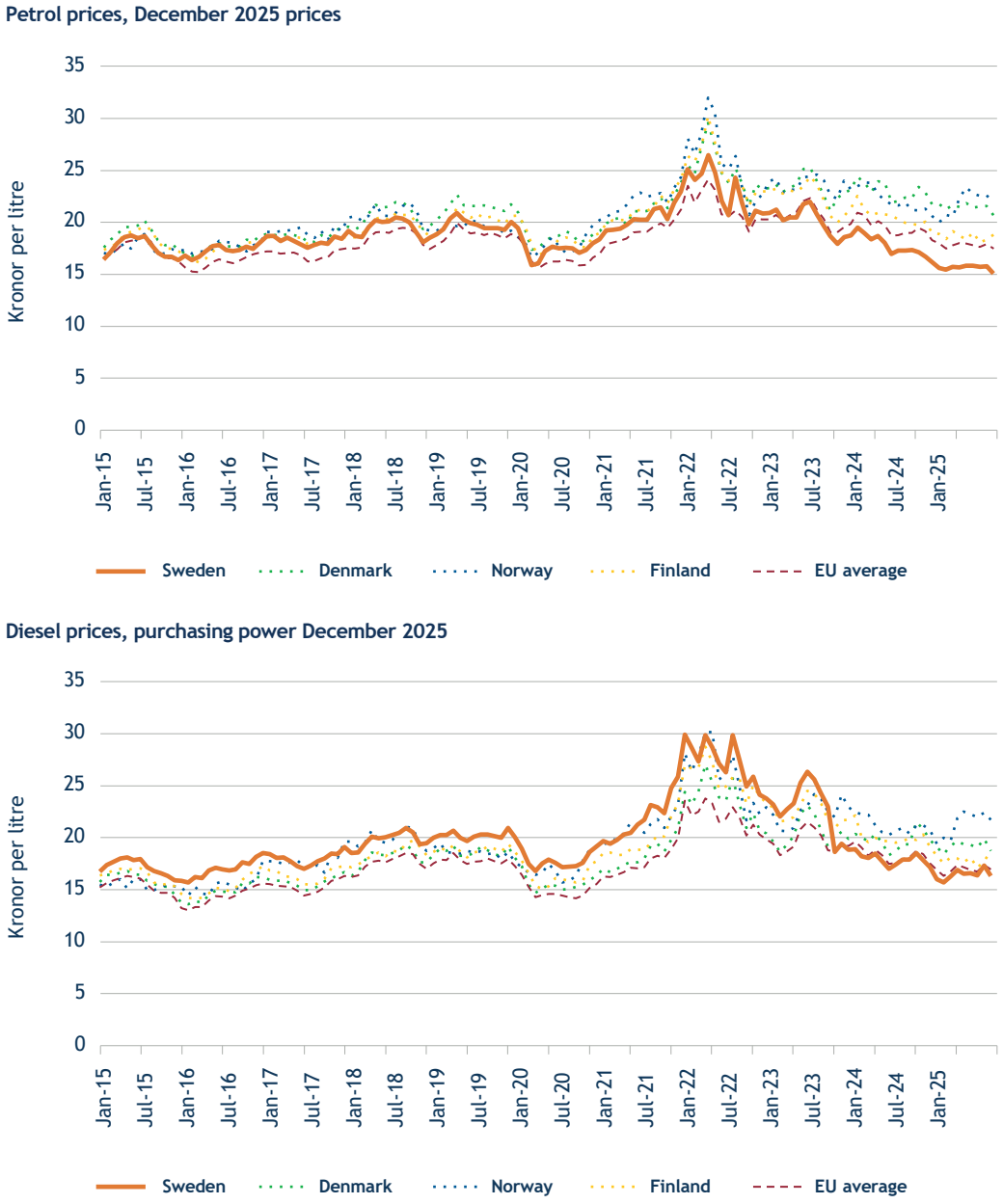
We estimate that the fines for any overspending of Sweden's EU commitment for the ESF could amount to between SEK 8 and 40 billion. This is based on the price estimates described and our assessment that the shortfall is twice as large as the Government estimates. Based on the Government's estimate that the gap is 4.3 million tonnes, the estimated fine would be half that amount, at SEK 4-20 billion. It is likely that the penalty for exceeding the ESR commitment will fall within the higher range, as it is a fundamental principle of EU legislation that it should be cheaper to implement measures to achieve a target than to pay a penalty.

We therefore consider it important for both the EU's climate efforts and Sweden's public finances that the Government designs policy instruments that ensure the EU commitment is met by a comfortable margin. The Government should take into account the uncertainties within the ESR sector, such as fuel consumption, the pace of electrification and food production (see Appendix I for our review of the Government's scenario).

Compensatory policies to mitigate price effects on businesses and households

An increase in the reduction obligation or a carbon tax on fossil fuels will lead to higher prices for petrol and diesel. In recent years, Sweden has had comparatively low fuel prices, both compared with the price peaks of 2022 and 2023 and compared with our neighbouring countries and the rest of the EU; see Figure 17. In addition to low fuel prices hindering the transition to reduced emissions in Sweden, they also risk influencing how our neighbouring countries act. The fact that Sweden has low fuel prices risks undermining the climate policies of neighbouring countries, both through spillover effects - that is, by helping to shape public opinion in neighbouring countries due to lower fuel prices, and because vehicles are driven to Sweden to refuel, which is recorded as emissions in Sweden.

Figure 17. Petrol and diesel electricity prices in Sweden, Norway, Denmark, Finland and the EU, 2015-2025



Note: Prices have been converted to monthly averages and to SEK using the exchange rate at the time. Prices have then been adjusted for inflation using the CPI, with December 2025 as the base.

Source: European Commission[76] and Statistics Norway[77]

To meet climate targets, the price of fossil fuels needs to rise from the low levels we have seen. If policymakers judge that redistributive measures are needed to gain public acceptance, such compensation should be targeted and should not undermine the emissions-reduction effects of the climate policy instrument.

One approach is to compensate only those households that are hardest hit. In Canada, for example, there are general payments of support to vulnerable groups in society. Germany and Austria have used revenue from national pricing to fund climate measures that mitigate the price impact. The EU's Social Climate Fund is another example of how revenue from climate policy instruments can be used to support the transition among vulnerable groups.

Long-term policies phasing out fossil fuels

In the longer term, fossil fuels need to be phased out in a socio-economically efficient manner. The transport sector can, in principle, achieve net-zero emissions sooner than other sectors.[49] The Government should take decisions based on the proposals of the policy instruments inquiry early in the next term of office in order to create the long-term conditions for stakeholders in society to adapt to this phase-out.

EU policy on transport fuels will be crucial to enabling the phasing out of fossil fuels. ETS 2 sets a common European cap on emissions from road transport, heating and certain other sectors. However, there have already been relaxations in the agreed legislation, and the decision to introduce ETS 2 has been postponed by a year. Sweden should be a driving force within the EU to maintain and strengthen the ambition of ETS 2 (see section 6.3). The EU's Energy Taxation Directive, which sets minimum levels for the taxation of fossil fuels, can also help to improve the conditions for a European phase-out of fossil fuels. For example, by enabling more permanent tax reductions for fossil-free fuels.

An ambitious electrification package for transport and machinery

The Government and the government agencies' scenarios are based on a high rate of electrification for road transport. The fact that the transition has slowed down and risks stalling, according to, among others, Mobility Sweden's latest forecast,[38] is worrying. We therefore believe that the Government should implement an ambitious electrification package that reverses the trend. In this section, we discuss possible components of such a package. These policy options should be combined with pricing and blending requirements for fossil-free fuels (section 5.2.2), which also encourage electrification.

A climate reform of vehicle taxation

Since the early 2000s, vehicle tax has been calculated based on a vehicle's carbon dioxide emissions. Since 2018, certain light vehicles have also been subject to a penalty tax, which means that vehicles with high carbon dioxide emissions are subject to an increased tax for three years. The rules for reducing the benefit value of environmentally friendly cars are also designed to accelerate the introduction of electric vehicles. We see significant potential for tightening vehicle tax, particularly as technological developments in the passenger car sector are advancing rapidly. For Norway, the most important measure for decarbonising the vehicle fleet has been precisely the introduction of strongly differentiated vehicle taxes.[78] The Government can tighten vehicle tax in the following ways:

- **Further differentiation of general vehicle taxation based on climate impact.** This would increase incentives for electrification across the entire vehicle fleet and thus also have a significant impact on the second-hand market.
- **A tightening of the penalty tax.** This affects fewer vehicles but only those customer groups who can afford to buy a brand-new vehicle with a combustion engine.

In an analysis of these two tax instruments, the Government should examine both the cost-effectiveness of the tax measures and their distributional implications. We believe that the tax instruments should provide clear incentives for zero-emission vehicles, and should not offer advantages to plug-in hybrids, which will continue to burn liquid fuels for several decades to come. In the long term, it may become possible to tax vehicles not only based on their tailpipe emissions, but also to include their lifecycle emissions and energy efficiency. The Swedish Energy Agency's new proposal for labelling vehicles based on lifecycle emissions and energy efficiency could serve as a starting point for such differentiated vehicle taxation.[79]

Monitor and develop targeted support for electric cars

Although several car models are beginning to reach price parity - meaning that electric vehicles cost the same as internal combustion engine cars when new - the upfront cost of purchasing an electric vehicle may still be a barrier. This is particularly evident in the second-hand market

for people with lower incomes. We therefore welcome the approach taken in the Government's new electric car grant, which is aimed at low-income earners in rural areas who need a car, and which includes both leasing options and the second-hand market. We note, however, that several consultation bodies warn that the scheme has too narrow a target group and thus risks missing many households that could potentially upgrade to an electric car.[80]

It is important that the scheme is reviewed following its introduction to ensure that the support promotes the transition of the vehicle fleet in a socio-economically efficient manner - taking particular account of distributional effects - and is not too narrowly designed. We also believe that the existing scrappage incentive should be reviewed to see if it can be made more effective and better complement the new electric car incentive.

Continue to develop introduction support where electrification has not progressed as far

Electrification has not progressed as far for trucks, long-distance buses and machinery as it has for passenger cars and city buses.[81] Price parity is a long way off for several of these electric-powered heavier vehicles and machinery. We assess that it is positive that the Government has introduced market introduction support for these, and that such support is important from a long-term cost-effectiveness perspective. Getting market introduction underway, even from a low level, is important because implementing major changes very rapidly is often costly. It also means that we can learn about appropriate system designs as the process unfolds. The Government should regularly review the level of support to ensure cost-effective support with strong incentives for electrification that foster a long-term perspective. Another important aspect is that there is predictable and efficient administration of the support. Predictability is key from a cost-effectiveness perspective, as it reduces the costs incurred by various market players in managing an uncertain future.

Market introduction support for fossil-free vessels should also be introduced in line with the Swedish Energy Agency's proposal.[82] Electric vessels for shorter distances are already in use. Converting existing vessels to electric propulsion is also more feasible for shipping than for road vehicles, as vessels have a long service life. Other technologies, such as sail-assisted propulsion, are also being developed. Support for market introduction should therefore be designed broadly. In the aviation sector, the Swedish Energy Agency assesses that electric and hydrogen-powered aircraft have long-term potential but that the maturity of these technologies is very low. We agree that, above all, support for fossil-free aviation fuels and research and innovation is needed for the aviation sector.[83]

Take measures to stimulate demand for fossil-free transport solutions

It is important that there are companies willing to bear the additional cost of electric transport until price parity is achieved. In addition to market introduction support, it is possible to create incentives for purchasers of fossil-free transport and machinery. Mobility Sweden and Swedish haulage companies, for example, have proposed a tax reduction for those who commission fossil-free transport services. It is also possible for Swedish government agencies, municipalities and regions to stipulate requirements for fossil-free vehicles and machinery in their procurement processes, and thereby also to fund them. The City of Oslo is a pioneer in this area through its high standards for fossil-free transport in its contracts.[84] Stimulating demand for fossil-free transport is particularly justified when fossil fuel prices are very low. As the total cost of ownership for electric heavy-duty vehicles improves, the need for demand-based policy instruments also decreases.

Remove barriers and continue to support the expansion of charging infrastructure

Charging infrastructure is a fundamental prerequisite for the electrification of road transport and machinery. There are several existing support schemes for the expansion of charging infrastructure, including tax relief for green technology, the Climate Leap scheme and regional electrification pilot projects. Over several terms of office, the Government has prioritised measures for the expansion of charging infrastructure. Based on existing analyses[85] we assess that the following areas will be particularly important during the next term of office to further improve the conditions for the expansion of charging infrastructure:

- Charging infrastructure for heavy-duty transport requiring high power. This presents a coordination challenge, where commercial operators risk delaying investments until demand becomes clear, whilst demand is held back by a lack of charging infrastructure. In this context, it may be particularly justified for the Government to increase its support for haulage companies whilst the market share of heavy-duty electric vehicles remains very low.
- Address challenges regarding the ability to install charging infrastructure, for example in apartment blocks, at workplaces and in ports.
- Access to grid capacity. Here, the Government needs to effectively ensure that it is possible to increase the capacity of the charging infrastructure

Reduced tax on electricity used for charging

A key principle for creating incentives for electric vehicles is to make the running costs cheaper than those of fossil-fuel vehicles. If fossil fuel prices remain low due to low taxation, it may be justified to reduce the costs of electric vehicles. For home charging of electric vehicles, costs are generally low. However, the costs of fast charging on long journeys are higher. Transport companies are calling for a reduction in tax on charging for heavy goods vehicles.[86] Given the low prices of fossil fuels, the Council considers that it may be justified to investigate the conditions for a tax shift, whereby higher pricing of fossil fuels could finance a reduction in tax on public charging. The Council considers that such a tax review should include all transport and machinery. If the Government proceeds with such a tax shift, it is important that the tax on electricity is differentiated solely for the transport sector, so as not to reduce the pressure for energy efficiency improvements in other parts of the economy.

Regulatory changes to promote electric trucks

The transition to electric power presents both obstacles and opportunities. Due to their batteries, electric trucks are generally heavier than conventional ones. We therefore believe that regulatory changes may be needed to address any complications, so as not to disadvantage the heavier electric vehicles - whilst it is important that such regulatory changes also take into account other objectives such as air quality, road safety, road wear and noise. Such regulatory changes could include a review of driving licence requirements for light electric trucks, the maximum permitted weight for heavier trucks, and exemptions for electric trucks to transport goods at night in urban areas.

Maintain the EU's emission standards

The EU's vehicle requirements are important for establishing a common phase-out strategy for the internal combustion engine across the entire single market. The requirements are strict, but the European Commission has, as we have previously mentioned, proposed a certain relaxation of the requirement for light vehicles to be completely zero-emission in new sales by 2035 at the latest. We believe it is important for Sweden to take the lead in maintaining the ambition of the regulations and avoiding exemptions that risk making both the transition and investment decisions for vehicle manufacturers more uncertain.

Reverse the trend and build a more transport-efficient society

A more efficient transport system improves the prospects of achieving climate targets without having to rely heavily on electrification and fossil-free fuels. We believe that policy aimed at a transport-efficient society should focus on achieving accessibility whilst reducing the number of kilometres travelled by passenger and freight transport. Several measures that increase transport efficiency, such as an expanded and well-functioning public transport system and more efficient freight transport, also have other benefits such as increased cost-effectiveness, better air quality and more attractive communities. In the following section, we present possible proposals that could help to make Sweden's transport system more efficient.

Reform infrastructure planning so that it is based on climate targets

We believe that, during the next term of office, the Government should implement more significant changes that can lead to infrastructure planning which more strongly supports a transport-efficient society, so that climate targets can be achieved in a more sustainable manner. Such proposals have previously been put forward by the Climate Law Inquiry.[60] An important step would be to amend the regulations so that the Swedish Transport Administration is permitted and encouraged to contribute state co-funding to stage 1 and stage 2 measures in accordance with the four-stage principle, at regional and local level. These measures are normally both more cost-effective and energy-efficient but are, in practice, disadvantaged in relation to Stage 3 and Stage 4 measures (refurbishments and new investments) which are eligible for state co-financing.

One practical way to strengthen governance to achieve climate targets is to prioritise addressing the shortcomings in the national rail network. Increased resources for railway maintenance, improved capacity on heavily used routes and efficiency improvements are being called for by a wide range of stakeholders.[87] Increased investment in the Swedish railways promotes a greater shift away from road transport for freight and passenger travel, and also relieves pressure on the road network.

Urban planning to reduce car traffic in cities

It is particularly in larger urban areas that there is an opportunity to reduce dependence on car traffic, increase the use of more sustainable modes of transport and, at the same time, create more attractive cities. Whilst the Swedish Transport Administration bases its planning on a constant increase in car traffic, examples from Swedish municipalities show that this trend can be influenced. In Lund, for example, motor vehicle traffic on the municipal road network has fallen by 35 per cent since 2011, whilst cycling and public transport have increased.[88] There are also numerous international examples of initiatives aimed at more sustainable urban transport.[89]

The municipalities play a key role in urban development. The Government can increase municipalities' ability to regulate how parking spaces are used, for example through charging points and car-sharing schemes. There are also opportunities to further facilitate local congestion charges or environmental zones, which could increase demand for electric trucks, for example.

Make public transport more affordable

During the current term of office, there has been a strong focus on reducing fuel prices in Sweden. At the same time, public transport fares in major cities have risen significantly more than the price of petrol and diesel.[90] The Government's tax cuts on fossil fuels benefit also do not benefit public transport in Sweden, which is already essentially fossil-free. Relatively high prices for public transport compared to fuel reduce the incentives to switch to public transport and also have a regressive distributional effect, as lower-income households are more dependent on public transport.

There are various ways to increase incentives for switching to public transport. One clear recommendation is to implement the proposal for a reformed travel tax deduction put forward by the Travel Tax Deduction Committee as early as 2019.[91] The current travel tax deduction favours car users in major cities, whereas the reform proposal would have benefited everyone regardless of mode of transport, thereby increasing the incentives to commute by public transport compared with the current regulations.

Another measure we have discussed in previous reports[27, 37] is to provide state subsidies for public transport passes. Such a subsidy may costly but could be targeted at different income groups. Another option is to reduce the benefit tax on public transport passes. This would make it more advantageous for employers to offer public transport passes as a benefit to their employees. The Government referred such a proposal ahead of the 2026 Budget Bill,[92] but it was not implemented.

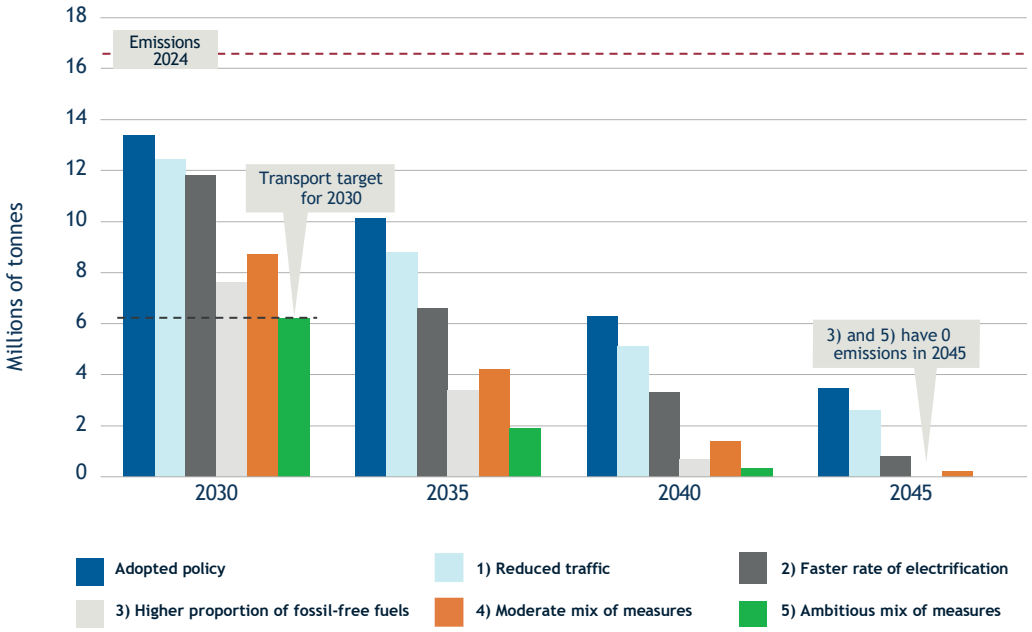
Emissions can be reduced through a combination of reduced traffic, electrification and fossil-free fuels

The policy options discussed in the previous section can reduce emissions and help achieve climate targets. The extent of the reduction in emissions depends on the precise design of the policy instruments and which pillars of the transition are prioritised. Using simplified calculations and assumptions, we have developed five scenarios for emissions from the transport sector based on different combinations of the three pillars of the transition. The purpose of the scenarios is to contribute to an understanding of how the different pillars affect emissions over different time horizons, not to present a preferred path forward for reducing emissions. The scenarios are briefly described here:

1. **Reduced traffic:** In this scenario, traffic volume decreases by 2 percentage points every five years compared with the 2024 level, rather than increasing by just under 1 percentage point per year as per agency forecasts.
2. **Faster rate of electrification:** Here, electrification is accelerated over the coming years, and 33 per cent of the vehicle fleet will be pure electric vehicles by 2030 (compared with 25 per cent under the agreed policy). By 2045, 95 per cent of the vehicle fleet will be pure electric vehicles (compared with 82 per cent under the agreed policy).
3. **Higher proportion of fossil-free fuels:** The proportion of fossil-free fuels blended into the fuel mix will rise to 52 per cent by 2030 and 100 per cent by 2045 (compared with 15 per cent and 18 per cent respectively under the current policy framework for 2030 and 2045). Although the proportion of fossil-free fuels increases in this scenario, the absolute amount of fossil-free fuels blended in will decrease from approximately 29 TWh in 2030 to approximately 13 TWh in 2045, which can be compared with the approximately 21 TWh blended in 2022.
4. **Moderate mix of measures:** This scenario combines the three scenarios above, but each pillar of the transition is utilised to a lesser extent than in scenarios 1-3. Traffic volume is kept constant at 2024 levels. The proportion of pure electric vehicles in the vehicle fleet increases to 30 per cent by 2030 and to 89 per cent by 2045. The proportion of fossil-free fuels increases to 37 per cent by 2030 (which means the same amount of fossil-free fuels in TWh as in 2022) and 90 per cent by 2045.
5. **An ambitious mix of measures:** This scenario pushes the various pillars of the transition further than Scenario 4, meaning that the transport target is met by 2030 and emissions reach zero as early as 2040. Traffic volume decreases as in Scenario *1. Reduced traffic*. The rate of electrification is as in *2. Faster rate of electrification*. The share of fossil-free fuels is as in *3. Higher proportion of fossil-free fuels*.

g See also the note to Figure 18 and the presentation of assumptions in Appendix III for further details.

Figure 18. The Climate Policy Council's simplified emissions scenarios based on the transport sector's three pillars of transition



Note: Emissions in scenarios 1-5 for the years 2030, 2035, 2040 and 2045 have been calculated as the emissions in 2024 as they would have been if all transport work had been carried out using fossil fuels x (1 - % pure electric vehicles - % plug-in hybrids x 1/3) x (1 - % fossil-free fuels). The calculations are based on several simplifying assumptions, including that road traffic accounts for all emissions in the transport sector, that the energy efficiency of vehicles with internal combustion engines is constant, that the proportion of traffic performance carried out by plug-in hybrids using electricity is assumed to be 1/3, and that all modes of transport and vehicle types have the same emissions per kilometre. The results should therefore be viewed as illustrative examples, not as precise calculations. For further details on the assumptions underlying the calculations, see Appendix III.

Source: Calculations by the Swedish Climate Policy Council based on the 2025 Climate Report[36]

The figure illustrates that, in the short term - up to 2030 - the blending of fossil-free fuels has the greatest potential to deliver significant emissions reductions. The blending level can be adjusted rapidly and could, at least in theory, eliminate emissions from the transport sector within a few years. The other factors have more limited potential in the short term. Transport demand is governed by the structure of the transport system, which requires major investment and many years to implement significant changes. The proportion of electric vehicles in the vehicle fleet changes slowly, as only a small proportion of all vehicles are replaced each year.

In the longer term, however, electrification may make the greatest contribution. This is evident in Scenario *2. A faster rate of electrification,* indirectly in Scenario *3: Higher proportion of fossil-free fuels,* and in Scenario *4: Mix of measures.* There, the higher rate of electrification, which is expected to be achieved around 2040, means that emissions almost reach zero despite the fact that the amount (TWh) of fossil-free fuels used is lower in 2040 and 2045 than was used in 2022. This is because the vehicle fleet will then consist of relatively few vehicles with internal combustion engines. Reduced traffic volume has a similar effect, as it reduces the amount of fossil-free fuels required to achieve zero emissions.

Our conclusion is that it is likely to be most cost-effective to reduce emissions from the transport sector through a combination of the three pillars of the transition, where reduced traffic volume, an accelerated rate of electrification and a higher proportion of fossil-free fuels work together to reduce emissions. It is not certain, however, that the specific scenarios combining these three pillars (scenarios 4 and 5 in the figure above) are the most cost-effective. We also consider that there are good opportunities, based on political priorities, to select the policy instruments that the Government deems most feasible for achieving these three types of measures.

Recommendation for transport and machinery

Overall, we are calling for a comprehensive package of policy measures to promote electrification, transport efficiency and fossil-free fuels. These measures have the potential to work in synergy to ensure that climate targets are met in a socio-economically efficient manner. We submit the following recommendation to the Government.

THE CLIMATE POLICY COUNCIL'S RECOMMENDATION

Introduce a comprehensive package of policy instruments for emissions from the transport sector and machinery, comprising:

- **A combination of increased carbon tax and higher blending requirements**, which together create a highly cost-effective mix of policy instruments to achieve the climate targets by 2030. The measures should deliver clear emissions reductions from 2027 and ensure target achievement in both the short and long term, for example through predictable price trends, the phasing out of exemptions from carbon dioxide taxation, and gradually increased blending levels.
- **An electrification package** that includes a developed and more targeted support scheme, a review of vehicle taxation to promote faster renewal of the vehicle fleet, and a strong Swedish position to maintain and develop the EU's emission standards for light and heavy vehicles. This should be complemented by improved conditions for expanding charging infrastructure across the country.
- **Measures for a transport-efficient society**. Reform infrastructure planning based on climate targets and strengthen the railway. Implement the proposal for a mode-neutral travel tax deduction and make public transport more affordable. Provide municipalities with tools to reduce emissions in cities – for example, through environmental zones, reformed parking regulations and congestion charges.

5.2 The land-use sector (LULUCF) and the bioeconomy

- **Net removals in the land-use sector have increased in recent years** thanks to increased growth and reduced logging in forests, as well as an updated method for measuring net removals.
- **The Government has taken few decisions to increase net carbon sequestration** in the land-use sector, despite proposals from the Cross-Party Committee on Environmental Objectives that have undergone impact assessments and gained political support. During the next term of office, the Government needs to take a comprehensive approach to the land-use sector and decide on a package of policy instruments that can contribute to high net carbon sequestration.
- **The Government has taken several decisions that affect the bioeconomy** and both increase and decrease the use of biomass. In the next term of office, the Government needs to prioritise the development of a bioeconomy strategy to steer the use of biomass towards high-value and long-lasting products where electrification cannot replace fossil raw materials.

Net greenhouse gas removals in the land-use sector (LULUCF) amounted to 54 million tonnes in 2024. This was more than Sweden's fossil greenhouse gas emissions in the same year. It is important that net removals are maintained or increased in the future, both so that Sweden can meet its EU commitments under LULUCF and so that the land-use sector can contribute through supplementary measures. How biomass is used is important for Sweden's climate transition and economy. Sweden's bioeconomy[h] accounts for a significant share of gross domestic product, and the Swedish forestry industry accounts for a significant share of Sweden's exports.[93] In this section, we therefore also discuss how harvested raw materials and forest residues can be used in the climate transition.

5.2.1 The contribution of land use and the bioeconomy to climate transition

The land-use sector comprises several land categories which together constitute the total carbon sink.[i] Forest land is the largest category and accounts for the main net uptake, which is why we devote the bulk of this chapter to forests, whilst agricultural land, wetlands, settlements and other land are primarily sources of net emissions, with organic soils and drained peatlands in particular contributing to significant emissions.

The way in which the various land categories are used, developed and affected by natural processes influences net carbon sequestration. These land categories also produce biomass - that is, forest raw materials, agricultural products and so on - which can be utilised in the climate transition. What is produced and how it is produced affects the yield from the land, but also the impact on net removals and other values such as biodiversity, as well as social and cultural values. This gives rise to conflicting objectives, where a focus on one perspective can have a negative impact on other perspectives.

Growth and removals in the forest have a major impact on net uptake in the land-use sector

As Sweden has such a large proportion of forest land, this is also the land category that has the single greatest impact on the total net uptake in LULUCF. Forests sequester carbon as they grow through the photosynthesis of trees (and other plants). This sequestration is recorded as carbon dioxide removals. When trees are felled or die, emissions are recorded.

Following a prolonged period of reduced net uptake, the latest statistics show that net uptake in forests increased during 2022-2024. This is explained by higher growth, lower felling and natural mortality, as well as an updated method for measuring net uptake in forests.

h By 'bioeconomy', we mean - as does the Bioeconomy Inquiry (2023:84) - all sectors and systems that rely on biological resources (animals, plants, microorganisms and biomass derived from them, including organic waste), their functions and principles.

i The land categories are forest land, arable land, grassland, built-up land, wetlands (including peat production land), other land and harvested wood products. Net emissions and net removals of greenhouse gases from land use (LULUCF)

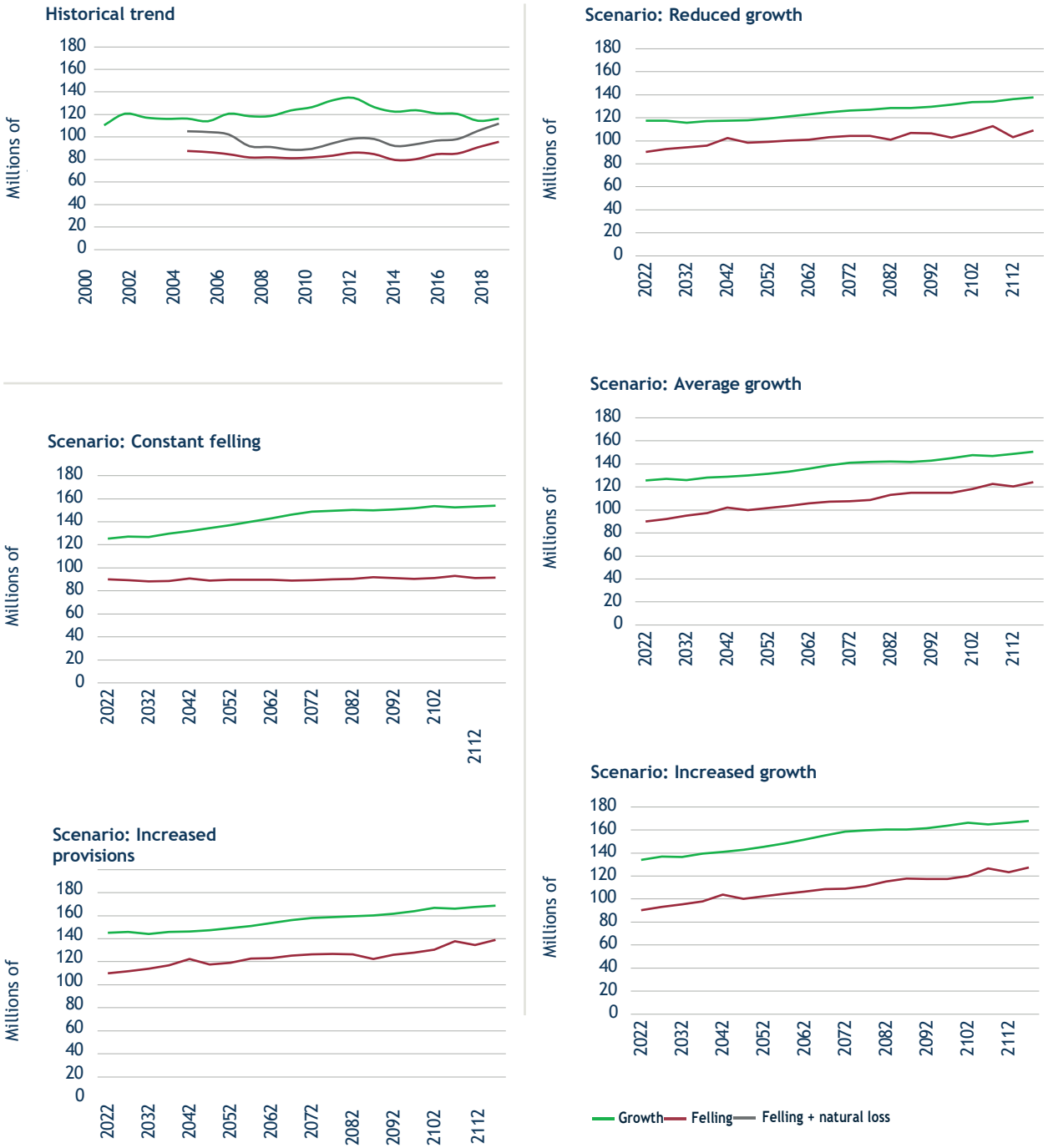
Growth, harvesting and natural mortality together describe how the amount of living biomass in the forest changes over time, and thus how net uptake develops according to the following relationship: *growth - harvesting - natural mortality = net uptake in living biomass.*

- **Growth:** the increase in the volume of a forest's tree stock over a given period, usually expressed as annual volume growth. Net growth refers to growth minus total removals.
- **Harvesting:** the felling of living trees and the removal of the timber. This can be done, for example, through thinning, where certain trees are removed so that the remaining ones can grow better, or through final felling, where most of the trees in a stand are felled.
- **Natural mortality:** a term used to describe trees that die for reasons other than felling or other direct human influence. This may be due to the trees dying of old age or competition with other trees, but in many cases there is a link to climate and weather events such as damage caused by wind, fire, fungi or insects.
- **Total loss:** comprises felling and natural loss.

The Swedish University of Agricultural Sciences (SLU) has produced a report containing historical data and five future scenarios, based on the indicators described above, for the Government's climate report (see Figure 19). The historical data show that growth in Swedish forests since the turn of the millennium has averaged around 120 million cubic metres (m^3) per year but fell by approximately 20 m^3 between 2012 and 2019. Harvesting during the same period stood at just over 80 million m^3 and rose to 96 million m^3 in 2019, whilst natural loss has been higher than previously. This has led to a reduction in net uptake. However, new statistics show that growth has increased and felling has decreased in recent years, leading to a sharp increase in net carbon uptake from the forest (see section 3.5).

The five future scenarios simulate possible future growth and harvesting in Swedish forests up to the year 2117. The scenarios show that the range of possible outcomes - and thus the uncertainty - regarding future net carbon sequestration is considerable. The Government presented two of the scenarios, Lower Growth and Medium Growth, in the climate report. There is a difference of 20 m^3 (approximately 20 per cent) between the higher and lower growth scenarios for annual growth in 2045. In the scenario with constant harvesting, the harvest will be approximately 10 million m^3 lower in 2045 compared with the other scenarios. These differences will increase in the longer term.

Figure 19. Growth, felling and natural loss, historical trends 2000-2019 and five future scenarios for growth and felling 2022-2117



Note: The scenarios are based on the Heureka model, which is founded on empirical data from sources including the Swedish National Forest Inventory. The scenarios Increased growth[j], Average growth[k] and Reduced growth[l] aim to demonstrate the effect of various future natural variations in growth on net uptake. The Constant harvesting[m] scenario aims to capture the effect on net sequestration of unchanged harvesting, and the Increased set-asides[n] scenario aims to capture the effect on net sequestration of increasing the area of protected forest. See SLU's background report for further details. Data on natural mortality comes from a different source - the National Forest Inventory's statistics - which means that the levels differ slightly from the other data. The x-axis has different scales, with historical statistics ranging from 2000 to 2019 and forecasts from 2022 to 2117.

Source: SLU[94,95]

j 0.25 per cent higher annual relative growth, which corresponds to the growth recorded during the period 2009-2013.

k Heureka's standard growth functions without adjustment.

l 0.25 per cent lower annual relative growth, corresponding to growth during the period 2015-2019.

m Logging remains constant in absolute terms; otherwise, the same assumptions apply as in the Average growth scenario.

n The area of protected forest increases as all 'primary and old-growth forest' is set aside for nature conservation.

Harvested timber is used for bio-based materials and fuels

The felled trees can be used as materials and fuel to replace fossil raw materials (the so-called substitution effect) or used in long-lasting wood products where they continue to store carbon, which is recorded in the 'felled wood products' land use category. As the biomass used has already been counted as a reduction in net uptake in the land-use sector, it is not recorded as an emission when it is eventually burned or decomposes.

At present, the harvested timber is mainly used for sawlogs, pulpwood and other types of forest raw materials and residual fractions. Sawlogs, which have been the largest category since the early 1990s, are widely used in durable products (such as timber buildings). Pulpwood, which is mainly used for paper and cardboard with a shorter life cycle, accounts for an almost equally large share of the product range. In addition, firewood, bark and tree tops make up a smaller but significant proportion of the volume and are used for combustion and biofuel, instead of fossil raw materials. Furthermore, various types of residual fractions arise, such as by-products from sawmills and the pulp industry, which are used for energy purposes.[96]

Swedish forestry is based on the principle of freedom with responsibility

The forestry sector differs from many other sectors in that policy is largely based on the principle of freedom with responsibility, whereby the landowner has considerable scope to make decisions regarding the use and management of the land. In combination with the sectoral responsibility, which means that the forestry sector itself is responsible for integrating and contributing to climate and environmental objectives. Furthermore, the public responsibilities affecting the forest are spread across various agencies such as the Swedish Forest Agency, the Swedish Environmental Protection Agency, the county administrative boards, and others, which may present further challenges in coordinating and integrating climate policy and forestry policy objectives.

At the same time, the trade-offs in forestry are complex. Decisions regarding felling and forest management affect not only the economy and the supply of raw materials, but also the risk of damage to standing timber, short- and long-term growth, and a range of other values (such as biodiversity, recreation and cultural heritage values). Measures that can contribute to increased carbon sequestration and/or climate adaptation may involve both synergies and conflicts of interest with other objectives and perspectives.

5.2.2 Lack of effective measures during the term of office in the land-use sector and the bioeconomy

In this section, we first evaluate the Government's policy regarding net removals in the land-use sector (LULUCF) and then the use of biomass.

Policy on net removals in the land-use sector during this term of office

THE CLIMATE POLICY COUNCIL'S ASSESSMENT

There is a general lack of **plans and policy instruments for the land-use sector (LULUCF) and agriculture's** contribution to climate targets. This hinders the ability to achieve both short- and long-term climate targets.

During this term of office, several analyses, studies and reports have identified the need for, and proposed, policy instruments with the potential to contribute to increased net carbon sequestration in the land-use sector. Data from the Swedish Environmental Protection Agency shows that comprehensive measures are required to meet the EU commitment to increased net carbon sequestration.[97] In early 2025, the Cross-Party Committee on Environmental Objectives presented a comprehensive and impact-assessed package of policy instrument proposals.[98]

Despite this, the Government has taken only a handful of decisions that could affect net carbon sequestration in forests and land, and which relate to the proposals of the Cross-Party Committee on Environmental Objectives:

- **Re-wetting.** Investment in the re-wetting of wetlands, including on disused agricultural land.
- **Advice.** Advisory services provided by the Swedish Forest Agency to forest owners to increase carbon dioxide uptake in forests.
- **Grassland support.** In 2025, the Government introduced special support for grassland, which, among other things, can maintain and increase carbon storage in arable land.

It is encouraging that the Government has decided to implement these measures, but we consider them to be insufficient and believe they will only contribute to a limited extent to increasing net carbon sequestration in the land-use sector. The investment in groundwater recharge is positive, but does not match the level of SEK 1.65 billion per year proposed by the Cross-Party Committee on Environmental Objectives. Advice is important, but at best leads to positive indirect effects in the long term. Several of the other measures proposed by the Cross-Party Committee on Environmental Objectives (see Chapter 5.2.3), however, have not been implemented. Furthermore, there is a lack of a coherent policy direction for how the land-use sector is to contribute to the 2045 climate target in the long term. The Government's own scenarios show that the measures adopted will only make a marginal contribution to net removals during the 2030s.

Within the EU's forestry and agricultural policies, Sweden has also adopted a defensive stance. The Government has focused heavily on national control over forestry, but has not pushed for common European solutions or incentives for increased net removals (see section 6.3). In its 2025 report, the Swedish Climate Policy Council highlighted possible approaches to increasing net removals from agricultural land within LULUCF in the design of the common agricultural policy for the next period.

Overall, we consider that the governance towards increased net carbon sequestration in Sweden's land-use sector is weak. Despite proposals that have undergone impact assessments, few decisions have been taken that could strengthen net carbon sequestration. There is also a lack of political consensus on the role the forest should play in the climate transition. The Cross-Party Committee on Environmental Objectives's report was a step in the right direction, but its conclusions have been translated into concrete policy to a limited extent.

Bioeconomy policy during this term of office

Policy in Sweden has long prioritised a strong bioeconomy. The Government's 2023 action plan emphasises that a growing circular bioeconomy has an important role to play in the climate transition and has a positive impact on sustainable regional and rural development, and is a key element in efforts to strengthen national self-sufficiency.[45] As early as 2019, the Riksdag informed the Government that a bioeconomy strategy should be developed that took a comprehensive approach to the benefits and conflicting objectives of biomass. Although the Bioeconomy Inquiry submitted a proposal for such a strategy in December 2023,[99] and most consultation bodies were positive towards the proposal, no decisions on a strategy have been taken during the term of office. In March 2023, the Bioeconomy Inquiry also submitted a proposal for policy instruments regarding revenue guarantees for liquid renewable fuels and intermediate products.[100] It was not until August 2024 that the Government referred the Bioeconomy Inquiry's proposal for consultation.

At the end of 2025, the European Commission adopted a comprehensive EU-wide bioeconomy strategy.[101] The strategy highlights the strategic opportunities offered by a developed bioeconomy for meeting the EU's biodiversity and climate targets, as well as for strengthening the EU's energy security. According to the Commission, a strategy is needed, among other things, to realise a largely untapped bioeconomic potential, where strategic considerations are required to prioritise the use of resources in line with policy objectives, address market failures and stimulate investment, as well as identify and overcome regulatory barriers.[102] Our neighbouring country Finland, which has similar access to biomass, has also developed a clear and forward-looking bioeconomy strategy.

However, the Government has taken other decisions that affect the use of biomass in Sweden. Below we list the most important measures:

- **Operating support for BECCS.** During its term of office, the Government has continued with plans for a support scheme that provides supplementary measures but is aimed solely at a specific use of biomass (see more detailed discussion in 5.2.3). A budgetary challenge has resulted in the support being reduced from the original SEK 36 to 31 billion.
- **The reduction obligation.** The Government first significantly reduced the reduction obligation, only to raise it slightly afterwards. This has led to a change in how biomass is used in the economy and has created uncertainty and instability for those investing in fossil-free fuel production in Sweden.
- **Tax exemptions for biofuels and biogas.** Sweden has applied for and been granted extensions to tax exemptions that promote both the production and use of biofuels and biogas in Sweden.
- **Support for biogas production.** Both through a new support scheme and through Climate Leap.
- **Analysis of increased availability of fossil-free aviation and maritime fuels.** A commission has been set up to draw up proposals for an action plan to promote access to fossil-free fuels for maritime and aviation transport.
- **Research and innovation for the bioeconomy.** The Swedish research council for environment, agricultural sciences and spatial planning (Formas) has been tasked with developing a research and innovation programme for the bioeconomy, as well as a national research school.

However, the reduced reduction obligation, fuel taxes and the continued reduction in fossil agricultural diesel have together contributed to a decline in the use of biomass as a substitute for fossil fuels, and thus to increased emissions. Although there have been positive developments, we lack a coherent strategy for how biomass should best be utilised in the climate transition. From a governance perspective, it is remarkable that the Government has not acted on the Riksdag's 2019 announcement regarding a bioeconomy strategy.

In this section, we discuss the key aspects of the policy to be developed for the land-use sector and the bioeconomy during the coming term of office.

Seek political consensus on the role of forests in the climate transition

Forests present both conflicting objectives and synergies in the climate transition. Net carbon uptake is also influenced by natural processes over the long term, which places particular demands on planning and coordination in the governance of the sector. There is therefore a need for political consensus on a long-term and shared policy direction. However, such consensus is currently lacking.

In other policy areas, a broad consensus and strategic direction have been established to ensure a long-term perspective and stability, and to manage the complex trade-offs between different objectives.

We therefore believe that the Government, the parliamentary parties and forest stakeholders should strive to build political consensus on the role of forests in the climate transition, to provide clarity and a long-term perspective for those responsible for implementing investments and measures. This is a prerequisite for the cost-effective management of forests. However, the pursuit of consensus should not stand in the way of implement urgent and necessary measures to increase net carbon sequestration in forests (see the next section).

Policy package for increased net greenhouse gas removals

During the next term of office, the Government needs to urgently decide on a package of policy instruments to increase net uptake in the land-use sector. Such decisions should be based on the Cross-Party Committee on Environmental Objectives's background material and proposals, which the Government could decide on as early as during the current term of office. Such decisions should be based on the Cross-Party Committee on Environmental Objectives's background material and proposals. Some of the proposals in the Cross-Party Committee on Environmental Objectives's report that are estimated to have a relatively significant effect on net sequestration are:

- Compensation for extended rotation periods in forestry.
- Compensation for forest fertilisation.
- Measures that increase the net uptake of harvested wood products (HWP).
- Compensation for re-watering of drained organic soil.[98]

In addition, the Cross-Party Committee on Environmental Objectives proposes measures to create the necessary conditions, such as a focus on targeted information and advisory initiatives for property owners and users regarding the measures for increased net uptake proposed by the Committee, and initiatives to strengthen the work of action coordinators.

We believe that the Cross-Party Committee on Environmental Objectives's proposals provide a good starting point for policy development. The Swedish forestry sector's principle of freedom with responsibility requires landowners to largely take the initiative on climate action themselves. Policy instruments that strengthen landowners' incentives to take action, such as those proposed by the Cross-Party Committee on Environmental Objectives, are therefore particularly important. We have also highlighted this in a previous report.[27] At the same time, the overall environmental, economic and social consequences of the proposals need to be taken into account. The proposal on forest fertilisation, for example, needs to be monitored and evaluated with regard to the negative effects of nitrogen leaching on biodiversity and the impact on forest resilience, as highlighted by the Swedish Forest Agency, amongst others.[103]

We further believe that the design of further measures must take into account the fact that Sweden's forests vary geographically in terms of both climate and forest types, which requires policy instruments to be adapted to local and regional conditions. Here, the county administrative boards' regional forest programmes, through a clear mandate up to 2030, would serve as a neutral platform for collaboration to translate national targets and policy instruments into concrete measures within forestry and land use, thereby also strengthening implementation and trust. As the forest programmes are spread across the country with connections to relevant stakeholders, collaboration between them could provide an opportunity to find locally rooted solutions within each region. However, funding must extend beyond the initial launch of the various projects if trust and commitment within the regions are to be sustained.

We believe that, early in the next term of office, the Government should prioritise deciding on a package of policy instruments to increase net carbon sequestration. This is urgent, partly so that the policy instruments can take effect and contribute to Sweden's EU commitments under LULUCF for the period 2026-2030 (see Chapters 2.3.3 and 3.5), and partly because it can take a long time for measures affecting slow natural processes to take effect. Policy should also, to an even greater extent than in other sectors, be designed to achieve climate targets with a reasonable margin of safety, given that the variations and uncertainties in annual net removals are so significant. For the same reason, a high level of net removals over a few years, as seen in the latest statistics, should not be interpreted as meaning that further measures do not need to be implemented.

Continue to develop methods and statistics for the land-use sector

Reliable statistics and future scenarios are essential for the robust evidence base needed to monitor climate targets and design effective policy instruments. Within the land-use sector, statistics are particularly uncertain. This is partly because net uptake is difficult to measure and predict as it depends on many complex natural processes that may also change with climate change (as illustrated in Figure 19 in Chapter 5.2.1), and partly because the methods for measuring net uptake are constantly evolving, which can alter the statistics.

Compared with other countries, Sweden has a good level of knowledge and statistical data, particularly regarding forests, thanks to the historical and current significance of forests for Sweden. Nevertheless, the methodology for calculating removals and emissions needs to be further developed - a point also highlighted by the Cross-Party Committee on Environmental Objectives - in order to reduce uncertainties, enable faster monitoring and facilitate the design of more effective policy instruments. This work is ongoing within the Swedish governmental agencies but should continue to be developed.

We therefore believe that the Government and relevant agencies should continue to prioritise work on developing methods, statistics and future scenarios.

Decide on policy instruments to increase net carbon sequestration in forests and land

Given Sweden's extensive land-use sector, there are significant opportunities for Sweden to contribute to substantial net carbon sequestration and to demonstrate how forests and land can effectively contribute to environmental, economic and social values. We make the following recommendation to the Government ahead of the coming term of office.

THE CLIMATE POLICY COUNCIL'S RECOMMENDATION

- **Decide on a package of policy instruments to increase net greenhouse gas removals.** Build on the proposals of the Cross-Party Committee on Environmental Objectives and create financial incentives for landowners to take climate action.
- **Develop statistics on land use.** Continued development of methodology and statistics contributes to a more robust evidence base and improves the conditions for designing and monitoring policy instruments in the land-use sector.

Develop a Swedish bioeconomy strategy

As noted in section 5.2.2, Sweden still lacks a comprehensive, national bioeconomy strategy, whilst the need to prioritise the use of biomass has grown in line with the increasing requirement for permanent carbon sinks in the climate transition. We believe that the Government should adopt a Swedish bioeconomy strategy during the next term of office.

An important principle for a bioeconomy strategy is that biomass, which is a limited resource, should be directed towards use in high-value products, preferably with a long lifespan, where the green carbon atoms cannot be replaced by fossil-free electricity. It is also important that a bioeconomy strategy takes into account all the systemic benefits associated with biomass management. The Bioeconomy Inquiry argues, among other things, that 'policy instruments that solely promote carbon capture for permanent storage (CCS), but not carbon capture for utilisation (CCU) in new materials such as fuels and chemicals' may constitute an obstacle to an effective bioeconomy that maximises climate benefits.[99] The same idea is reflected in Fossil-Free Sweden's strategy for biogenic carbon capture and must be considered within a system in which biomass and biogenic carbon atoms contribute to the climate transition in an energy- and resource-efficient manner.[104]

As discussed earlier in this section, the forestry sector must take into account a range of societal objectives. A bioeconomy strategy must therefore also address these societal objectives and consider both other environmental objectives, such as biodiversity, and strategic priorities for biomass.

A bioeconomy strategy needs to address several areas. One key aspect is the combustion of biomass in district heating systems, which annually burns 16 million tonnes of biogenic emissions from waste fractions from the forestry industry (bark, sawdust and dry wood chips). The Government's initiative on reverse auctions for BECCS aims to capture and store these biogenic emissions, thereby contributing to negative net emissions. However, the residual fractions could also be used for more advanced and long-lasting renewable products where fossil raw materials can be replaced. This enables the creation of internationally competitive value chains for advanced fuels, petrochemical components and fossil-free

molecules. District heating systems could then, to an even greater extent, be based on waste heat and heat pumps. In both cases, the underlying principle is that the system benefits of storing carbon dioxide to create permanent sinks through BECCS should be weighed against the system benefits of using captured carbon dioxide to create products that can replace the use of fossil raw materials. The same logic can be extended to other forms of permanent sinks such as biochar, BECCS, DACCS and other climate measures where biomass is used.[102]

Biogas is another example where a bioeconomy strategy could also help clarify the direction. Biogas can play an important role both as a raw material and as an energy carrier. The industry's own forecasts indicate that it may require around 10 TWh of biogas by 2030,[105] although these forecasts are uncertain. The transport sector is also expected to continue to demand significant quantities of biogas, particularly for heavy goods vehicles and parts of the shipping industry. A bioeconomy strategy should steer the use of biogas towards areas where fossil-free electrification is not an option.

A strategy can also help increase the availability of green carbon by identifying untapped potential and inefficient resource flows. Untapped potential may be found in residues from industry, forestry, agriculture and aquaculture, as well as other land uses such as park management and horticulture, and in carbon atoms in flue gases, residual gases from biomass fermentation and during biogas upgrading. Inefficient flows may be found in the combustion of potentially high-value biomass in electricity and heat production, industrial processes and transport.[99,104]

A bioeconomy strategy could also involve policy measures aimed at ensuring that green carbon is recycled in as many processes as possible, with a view to increasing its value-added potential before it reaches the composting, fermentation, digestion or incineration stages. Once low-value carbon has reached the bottom of the waste hierarchy, there are also good reasons why the carbon should not be released into the atmosphere as carbon dioxide, but instead captured and recirculated within the economy in the form of new products or permanently stored in the geosphere. To achieve a resource-efficient flow of green carbon atoms in the Swedish economy, the strategy can be based on the EU's cascade principle[106] and the waste hierarchy.[102]

Overall, we believe there are many good reasons for the Government to adopt a bioeconomy strategy. To gain a comprehensive overview of the future opportunities for utilising residual fractions from the forest industry and waste management systems, with the aim of striving for the efficient use of Sweden's natural resources, the Swedish Climate Policy Council believes that the Government should prioritise the development of a strategy with broad support among relevant stakeholders, including businesses, civil society and government agencies.

THE CLIMATE POLICY COUNCIL'S RECOMMENDATION

Develop a bioeconomy strategy for Sweden that takes a comprehensive approach to the role of forests. The strategy should:

- **Set the direction for the efficient and sustainable utilisation of biomass**, with a focus on high-value applications, for example in long-lasting products and as a substitute for fossil materials where no other alternatives exist. The strategy should also include the capture, use and storage of carbon dioxide.
- **Take into account key perspectives** such as the forest's carbon sequestration and consideration of increased climate-related risks, biodiversity, landowners' responsibilities and rights, industrial and regional development, security of supply and the social functions of the forest.

5.3 Agriculture

- **It is possible to reconcile increased food production with reduced emissions from agriculture.** Although it is not possible to achieve net-zero emissions in the same way as in other sectors, agricultural emissions can be reduced through efficiency measures and structural changes.
- **Agriculture remains a policy area where there is a lack of adequate climate action,** partly due to the absence of clear targets and sufficient incentives, as well as a lack of alignment with the production targets of the food strategy.
- **In our 2025 report, we conducted an in-depth analysis of the climate transition in agriculture.** The analyses and recommendations from that in-depth study remain valid.

In 2024, the agriculture emissions sector generated 6.3 million tonnes of emissions, accounting for 13 per cent of Sweden's total emissions. In this section, we summarise the key findings from our in-depth analysis in the 2025 report, with some additions based on developments over the past year.

5.3.1 The climate transition in agriculture

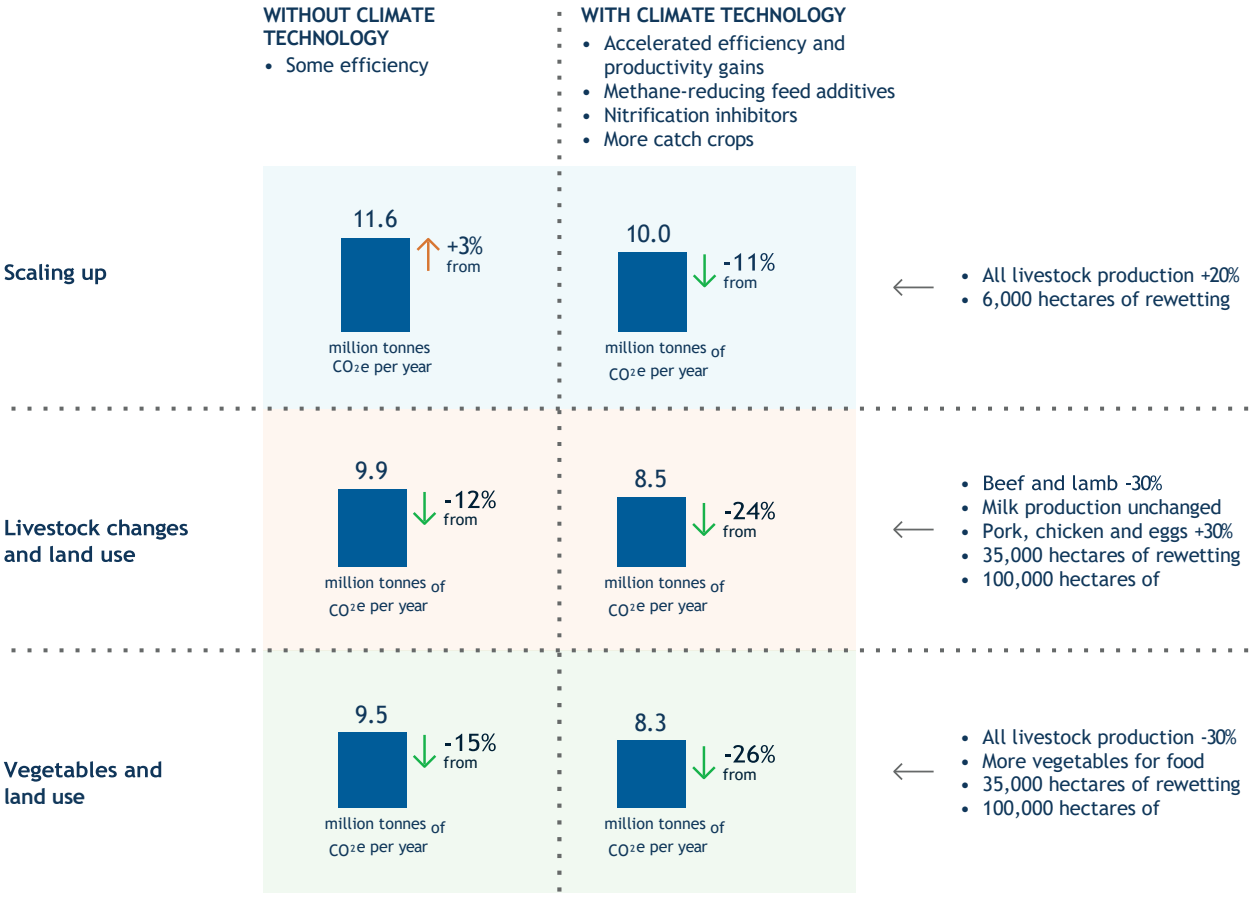
As emissions from other sectors decline, agriculture is expected to be the largest source of greenhouse gas emissions in Sweden and the EU by 2040. Agricultural emissions differ in key respects from those of other sectors. A large proportion of these emissions consists of biological emissions of methane and nitrous oxide from animal digestion, manure management and nitrogen transformation in the soil, which are more difficult to reduce than fossil emissions in other sectors.

Although it is more challenging than in many other sectors, we demonstrated in the 2025 report that it is possible to reduce emissions in agriculture through two main categories of measures:

- Efficiency improvements (climate technology), meaning reduced emissions per unit of food, can be achieved through, among other things, optimised management, animal breeding, plant breeding and new technology.
- Structural changes that have a significant impact on emissions include the volume of livestock production, the area under various crops, and the type and amount of land used.

We presented six scenarios that combined efficiency measures (with and without climate technology) with varying degrees of structural changes (in terms of what is produced). All these scenarios were based on the assumption of increased food production, in line with the Swedish food strategy.[107] As shown in Figure 20, there is potential to achieve greater emissions reductions in agriculture, particularly when efficiency measures are combined with structural changes. The scenarios' greenhouse gas emissions in 2045 range from 11.6 to 8.3 million tonnes of carbon dioxide equivalents, that is, between +3 per cent and −26 per cent compared with 2023 emissions of 11.3 million tonnes.

Figure 20. Key e assumptions in the scenarios and their impact on greenhouse gas emissions from Swedish agriculture in 2045



Note: In these scenarios, in addition to the agricultural emissions sector, we have also included fossil emissions from agricultural machinery and agricultural premises, as well as net emissions from the agricultural component of the land-use sector (LULUCF). A full account of these scenarios is provided in a background report.[108]

Source: The Swedish Climate Policy Council's 2025 report[27]

5.3.2 Few decisions during the term of office to reduce emissions from agriculture

In its 2025 report, the Swedish Climate Policy Council noted that the policies pursued to date for the climate transition in agriculture have led only to marginal reductions in emissions, and identified the following shortcomings in the policies pursued:

- The policies pursued so far by Sweden and the EU have only marginally reduced the climate impact of agriculture, and the measures currently decided upon are expected to result in continued small reductions.
- There is a lack of a clear policy vision and strategy for agriculture's contribution to the climate transition, both in terms of the sector's own emissions and its contribution to the transition of other sectors.
- There is a lack of coherence between agricultural and climate policy.
- Current agricultural policy in Sweden and the EU includes support for certain climate measures in agriculture, whilst other aspects of the policy tend to perpetuate the status quo.
- Overall, there is a lack of sufficient incentives for socio-economically effective climate measures in agriculture, as well as investment in innovative farming methods that can reduce emissions.

Annex II sets out the measures taken in the agricultural sector during 2025. The most significant measure has been the Government's presentation of the Food Strategy 2.0. We note that the adopted food strategy includes, for example, a general objective of increased food production without any discussion of how this can be achieved within the framework of climate targets. In a letter, we urged the Government to clarify how the Food Strategy's objective of increased food production is to be achieved within the framework of climate targets.[109] The Government has not yet taken any decision in this regard.

Many available and likely cost-effective climate measures lack sufficient incentives for implementation in the agricultural sector. Parts of the agricultural policy pursued tend to preserve the status quo rather than drive the transition forward. This has been the case historically and continues to be so during this term of office.

Against this background, we consider that the Government's overall decisions during this term of office have only to a limited extent strengthened the climate transition in agriculture. We maintain that the lack of targets for the sector's emissions creates uncertainty and limits governance, which has so far contributed to limited emissions reductions.

5.3.3 Policy development for the climate transition in agriculture

We continue to believe that a clearer vision and strategy are needed, along with greater alignment between the production targets of the food strategy and the climate targets. At the same time, cost-effective policy instruments need to be developed at both EU and national level to support farmers' ability to contribute to climate targets. The European Commission's proposals for revisions to the EU's Common Agricultural Policy for the period after 2027 provide EU Member States with greater opportunities to take climate action at national level (see further section 6.3).

Overall, we consider that the recommendations set out in our 2025 report remain valid. They are summarised below.

CLIMATE POLICY COUNCIL RECOMMENDATION

Develop climate policy for agriculture.

- **Develop a vision and a strategy for the climate transition in agriculture** that, among other things, clarifies how increased food production is to be achieved within the framework of climate targets.
- **Develop European and national policy instruments** that provide incentives for cost-effective emissions reductions in agriculture
- **Strengthen the conditions for the climate transition in agriculture** through increased advisory services, enhanced analytical capacity within Government agencies, and the development of methods to quantify the effects of climate measures.

5.4 Industry

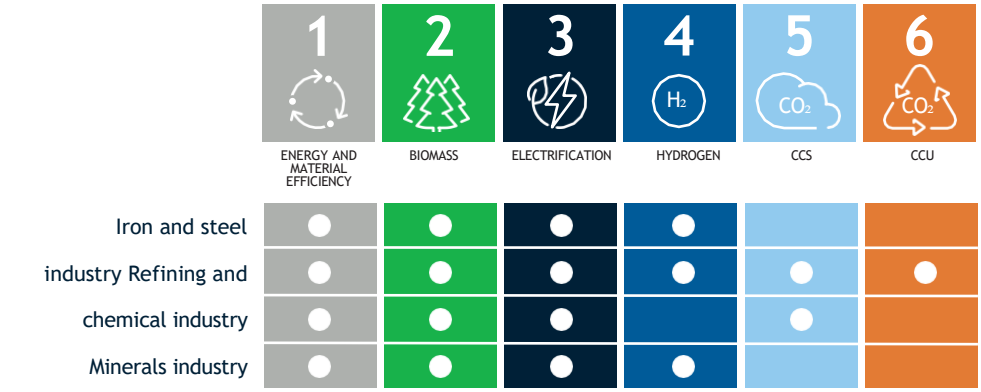
- **Swedish industry is in the middle of a climate transition.** If the plans are realised, the transition will lead to significant emissions reductions over the next two decades.
- **In certain areas, the Government has prioritised measures to create the right conditions for industrial transition,** primarily through reforming permitting processes and investing in nuclear power. However, reduced climate policy ambitions and inconsistencies in support schemes have had a negative impact on industry's willingness to invest.
- **In the next term of office, the Government needs to prioritise providing industry with long-term and stable rules of the game.** Policy should prioritise state risk-sharing with businesses and municipalities , continued work on efficient permitting processes, skills provision and increased steering towards circular flows. Later in the report, we also discuss the need for stable pricing and access to fossil-free electricity.

In 2024, Sweden's industry generated emissions of 14.1 million tonnes, which corresponded to 30 per cent of Sweden's territorial emissions. These emissions stem partly from energy use and partly from industrial processes that generate emissions in their own right. The majority of emissions come from a small number of large installations covered by the ETS 1. To achieve Sweden's long-term climate targets, most of these emissions must be eliminated within two decades.

5.4.1 The climate transition in industry

The Swedish Energy Agency conducts an annual review of the current status of the industry's climate transition.[110] Based on the current state of knowledge, the Agency assesses that there are six main pathways for the transition to a fossil-free future for major point sources of emissions within industry, with several of these pathways being relevant across multiple sectors. These involve more efficient use of energy and materials, replacing fossil energy and raw materials with biomass, electricity and hydrogen, and capturing carbon dioxide for use (CCU) or storage (CCS) (see Figure 21). From a broader perspective, the industry's climate transition also involves structural changes within industry and increased demand for fossil-free products.

Figure 21. Main pathways for the transition for the industry's most emission-intensive sectors



Source: Swedish Energy Agency[110]

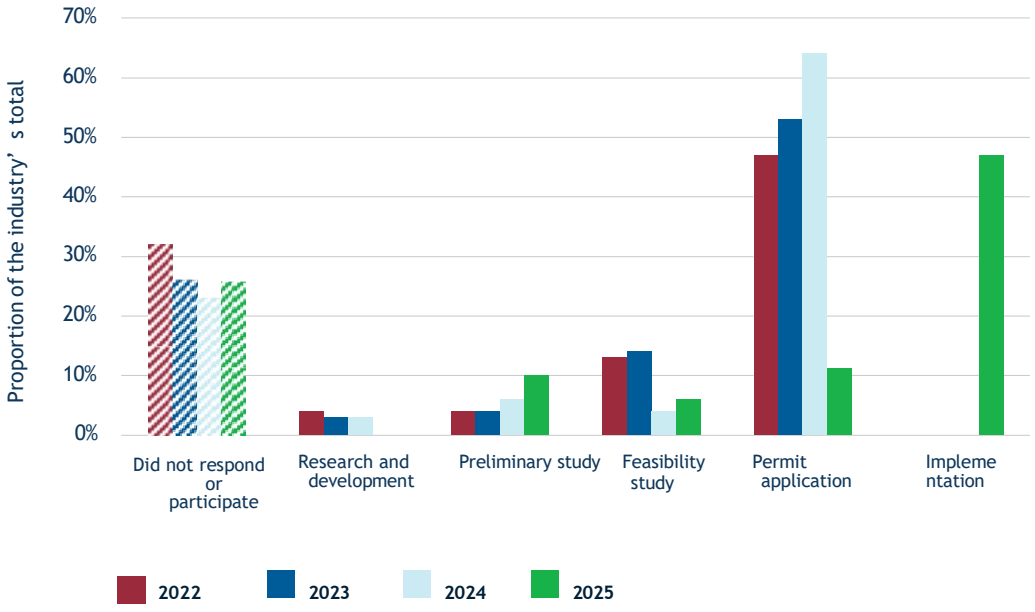
Emissions-intensive industry is in the midst of a transition

The Government's latest scenario for future emissions trends, based on agreed policies, projects that industrial emissions will fall to 5.9 million tonnes by 2045, compared with 14.1 million tonnes in 2024. This is based on the following assumptions:

- the steel industry will switch to fossil-free technology by 2030, resulting in emissions reductions of several million tonnes per year
- the iron industry will commence new production of fossil-free sponge iron by 2040
- the cement and minerals industry will commission a large CCS plant in Slite by 2030 and a smaller one by 2040
- the refining industry will commission a CCS plant by 2030
- the chemical industry implements a technology shift to reduce emissions by 2040.

These assumptions regarding the transition are uncertain and are influenced by factors such as technological developments, market conditions and politics. This is illustrated, for example, by Heidelberg's suspension of its CCS initiative for the cement plant in Slite,[111] which is unfortunate as CCS is a key technology for the cement sector to meet its targets, and the project could have helped the Swedish cement sector become an international pioneer. Despite this, several projects are still underway that could lead to significant
Emissions reductions in industry. The Swedish Environmental Protection Agency's annual survey of industrial companies with high greenhouse gas emissions shows that companies accounting for around 60 per cent of industrial emissions are either in the process of obtaining permits or implementing transition projects for their largest facilities (see Figure 22).

Figure 22. Proportion of the industry's emissions broken down by transition phase, 2022-2025



Note: The bars for each year add up to 100 per cent, i.e. the industry's total emissions. The years refer to the year in which the survey results were presented. Companies' facilities are categorised based on where the facility is in the transition process. For companies with multiple facilities or sub-operations, the entire company is categorised based on where the largest facility or replacement operation is deemed to be. The 'Implementation' category was only included for the year 2025. For 2025, we have placed the categories 'Pilot' and 'Demo' under 'Feasibility study' and 'None of the above' (2 per cent of emissions) under 'Did not respond or participate'.

Source: The Swedish Environmental Protection Agency's input to the Government's climate report for 2022, 2023, 2024 and 2025.

Favourable conditions are needed to implement the transition

Based on 23 sectors' roadmaps for fossil-free competitiveness, Fossil-Free Sweden[112] has identified four areas that pose particularly significant barriers to the transition: permit processes, electricity supply, skills provision, and long-term planning and risk-sharing. The Swedish Climate Policy Council shares this view and further assesses that there are additional enabling areas that should be prioritised. We will therefore discuss the following areas and the policies required in the following section:

- long-term and stable rules
- carbon pricing within the EU (see section 6.3)
- risk-sharing with businesses and municipalities
- efficient permitting processes
- skills provision
- access to fossil-free electricity at a competitive price (see section 5.5)
- circular flows.

5.4.2 Policy for the climate transition of industry during the term of office

THE CLIMATE POLICY COUNCIL'S ASSESSMENT

The conditions for the industry's transition have been partially strengthened, primarily through a focus on more efficient permitting processes. However, reduced policy ambition and inconsistencies in Government risk-sharing have recently increased uncertainty for the industry.

Inconsistency and increased political uncertainty

Businesses and investors need, as far as possible, long-term and stable rules to give them the confidence to make major investments in the climate transition. Industry, in particular, with major investments spanning many years, is dependent on stable planning conditions. Increased political risk and uncertainty, both nationally and within the EU, risk dampening the appetite for investment and, not least, making the transition more expensive.

At the start of the term of office, the focus of EU policy was on improving the conditions and clarifying the rules for the industry's climate transition. EU climate legislation was tightened through measures such as a faster rate of emissions reduction within the ETS 1, the introduction of the Carbon Border Adjustment Mechanism (CBAM) and legislative acts such as the Net Zero Industry Act. In Sweden, the Government's first budget proposals involved increased support for the industry's climate transition. The Government also clearly prioritised faster permitting processes and certain initiatives to address the skills shortage.

Towards the end of this term of office, however, we are seeing signs that these rules are being relaxed. This is despite the fact that in 2025 the Government launched an industrial strategy[113] intended to set the direction for industrial policy. Nationally, reduced funding and amended rules for Industry Leap, along with the suspension of green state credit guarantees and deteriorating market conditions, have contributed to uncertainty regarding political support for ongoing and future investments in the industrial transition. Within the EU, there are also discussions regarding the relaxation of both the Carbon Border Adjustment Mechanism (CBAM) and emission standards for light vehicles. This creates uncertainty regarding the long-term direction and the ambition of European climate cooperation, as has also been pointed out by the industry itself.[114] These uncertainties are further exacerbated by the volatility and political uncertainty surrounding national energy policy, as discussed in section 5.5.

Taken together, these changes mean that the political risk associated with the industry's transition has increased. This was highlighted by representatives of several industry organisations during the Swedish Climate Policy Council's dialogue meetings in December 2025. The markets have also been affected by the uncertain international situation. This risks leading to delayed or cancelled investments, examples of which we have already seen, but also to increased capital costs that hinder a cost-effective climate transition.

Inconsistency in the Government's risk-sharing scheme

Major industrial investments and changes entail financial risks. For these investments to be carried out at the pace required to meet climate targets, the risks need to be shared among different stakeholders. Businesses may need support to be able to invest in technological transitions that are both capital-intensive and uncertain, but which can deliver significant societal benefits and strengthen Sweden's long-term competitiveness. Municipalities may require various forms of support to ensure that infrastructure and public services create sufficiently favourable conditions for businesses and residents. At the same time, the state should always be prudent with public funds and meticulous in its prioritisation and monitoring.

At the start of the term of office, there were essentially three national support schemes for government risk-sharing with companies undergoing industrial transition: Industry Leap, Climate Leap and the government's green credit guarantees.

Irregularity in Industry Leap and Climate Leap

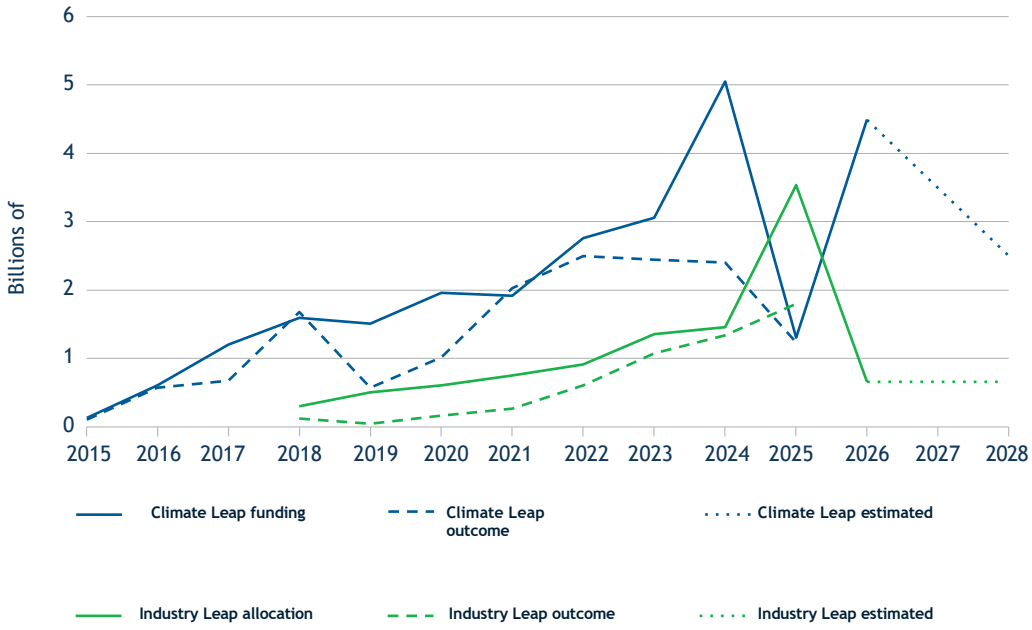
Industry Leap is a Government grant scheme designed to support the development of and investment in new technologies and solutions that are at an early stage of development and have the potential to reduce industrial emissions or contribute to negative emissions. Such projects often involve technical and commercial risks, which is why government support may be justified if the projects can deliver significant societal benefits but are at risk of not going ahead without such support.

Funding for Industry Leap has increased on average from SEK 0.7 billion per year during the previous term of office to SEK 1.7 billion during the current term (see Figure 23). The increase is partly due to higher funding in line with the historical trend, and partly because just over SEK 2.2 billion was transferred from Climate Leap to Industry Leap in a supplementary budget for the year 2025. However, the proposal for 2026 entails a sharp reduction in the allocation to just over SEK 0.6 billion and is expected to remain at this lower level in the coming years. In 2025, the Government also decided to limit the amount of support that previous recipients of Industry Leap can be granted.[115] Together, these changes have created inconsistency and uncertainty in the handling of Industry Leap during this term of office, which complicates planning and risks reducing the industry's willingness to invest.

Climate Leap is a broad government support scheme for large and small physical investments across various sectors that reduce greenhouse gas emissions, such as investments in fuel switching within industry, biochar facilities, charging infrastructure and heat pumps. Climate Leap is awarded to projects later in the development chain and to more established technologies, where the risk is often lower compared with projects supported by Industry Leap. The socio-economic rationale for such support is generally considered weaker than for projects at an early stage. Consequently, support schemes such as Climate Leap require relatively extensive systems for assessment, administration and monitoring to ensure cost-effectiveness.

Funding for Climate Leap has increased from an average of SEK 2.0 billion per year during the previous term of office to around SEK 3.5 billion during the current term of office , despite the fact that major parts of the 2025 allocation were transferred to Industry Leap, Figure 23. Although the Government has consistently allocated new and increasing funds to Climate Leap, the support has been perceived as erratic by the stakeholders involved. Climate Leap's limited authorisation framework over time has, just as during the previous term of office, meant that application rounds have been cancelled and that multi-year projects have found it more difficult to apply for funding.[116] This may explain at least part of the difference between the allocation and the actual outcome.

Figure 23. Industry Leap and Climate Leap: funding and outcomes 2015-2026



Note: The appropriations for 2026 are only proposals in the 2026 Budget Bill and may be subject to change during the year. The appropriation levels for 2027 and 2028 are estimated levels according to the 2026 Budget Bill. There is no outcome yet for 2026.

Source: Budget Bills for 2016-2026 (Expenditure Area 20) and the Spring Amending Budget for 2025.

State green credit guarantees have been suspended

The government's green credit guarantees were introduced in 2021 and enable the Swedish National Debt Office to issue state credit guarantees for loans for major industrial investments that contribute to achieving environmental and climate targets. The aim has been to reduce the financial risk associated with long-term investments in climate-related projects by having the state act as guarantor for parts of the loans. In the Government's 2023 Budget Bill, the credit limit was raised from SEK 50 billion to SEK 65 billion, so that over the following two years be further increased to SEK 80 billion. However, the 2026 Budget Bill did not propose any authorisation for the National Debt Office to issue credit guarantees, and the credit guarantees therefore ceased on 1 January 2026. The Government briefly justified the change by stating that 'government commitments should be reviewed on a regular basis'. In November, the Government commissioned the Swedish National Financial Management Authority to evaluate the credit guarantees for green investments.[117]

We believe that, without credit guarantees, it will be more difficult to secure financing for major industrial projects designed to contribute to the climate transition and Swedish competitiveness. We further believe that green credit guarantees are one of the more cost-effective ways for the state to contribute to risk-sharing in major investments with significant societal benefits, provided there is a thorough assessment of risks and climate benefits. Private investors also bear the greatest risks with the credit guarantees, and the state can charge interest or a fee corresponding to the state's expected cost of the credit guarantee. The state should therefore, over time and taken as a whole for all projects granted credit guarantees, in principle incur no net cost for the credit guarantees, as the fee for the credit guarantees should correspond to the expected credit losses.

Some measures to support municipalities

Municipalities create key conditions for both newly established and existing industry and the workforce through investment in physical infrastructure, housing, schools and other municipal services. Municipalities often need to make investment decisions before it is clear whether and when new residents and businesses will actually settle in the municipality. The costs can be substantial in relation to the size of the municipality and arise early on, whilst any increased revenue from taxes and charges are uncertain and lie further in the future. This is often challenging for municipalities, which have

a significant responsibility themselves, as described by the Government's former coordinator for industrial initiatives in northern Sweden[118] and demonstrated in a number of other reports.[119-124]

The Government has tasked the Green Acceleration Office with analysing the incentives municipalities have to attract and accommodate major corporate investments that are important for the Swedish economy, competitiveness and the climate transition. There is also a previous report from the Government's former coordinator for major industrial developments in Norrbotten and Västerbotten.[122] The Government has also continued to develop the climate contracts so that by 2025 they will cover 48 municipalities.[124] The Government allocated approximately SEK 1.5 billion in the 2025 Budget Bill for the period 2025-2028 to facilitate housing construction in northern Sweden. We consider this to be positive but believe that the municipalities need more support. To date, several municipalities, among public sector actors, have borne the major risks associated with investments in fossil-free industry.

Work has begun on streamlining the permit processes

To ensure that businesses and agencies conduct their activities in a way that safeguards human health and the environment, it is necessary to carry out prior assessments of, among other things, investments in industrial facilities, mines and quarries, as well as the expansion of energy supply and distribution. The permit assessment process must also be legally certain, sufficiently predictable and efficient so as not to hinder necessary investments and Swedish competitiveness.

The Government, other public sector bodies, [112, 125-127] the business sector [128-130] and several trade unions[130] have highlighted that the permitting processes constitute a bottleneck for investment, both within industry and in the electricity system. The processes are considered to take too long and are perceived as unpredictable in terms of both processing and outcome. The environmental organisation WWF is also generally in favour of faster permitting processes, but at the same time emphasises that this must not be at the expense of legal certainty and the protection of human health and the environment.[131]

During its term of office, the Government has prioritised efforts to streamline permitting processes and simplify regulations (see also section 5.5 for a discussion of permitting processes in the energy sector). During its term of office, the Government has appointed the following committees for this purpose:

- The Environmental Permitting Inquiry (KN 2023:02), which is investigating how the permitting process under the Swedish Environmental Code can be simplified and shortened.
- A Green Acceleration Office for industrial transition, which is to facilitate the green transition of industry by coordinating public and private actors, with a mandate to negotiate and propose solutions where slow processes and conflicting objectives constitute obstacles.

The Government has also taken several decisions aimed at streamlining the permit processes:

- Amendment permits are to be used to a greater extent, and the validity period for certain time-limited permits may be extended.
- Resources have been allocated to the Swedish Environmental Protection Agency, the courts and the county administrative boards to facilitate more efficient permit assessments.
- A new permit authority, the Environmental Permitting Authority, is proposed to be established from 1 July 2027 (proposal from the Environmental Permitting Inquiry). The Environmental Permitting Authority is to take over and consolidate environmental assessment cases currently handled by the county administrative boards' environmental assessment committees.

We welcome the fact that the Government has begun to take decisions that may contribute to more efficient permitting processes, although it is generally too early to assess the extent to which these decisions may impact the conditions for the climate transition. However, we already believe that the additional resources allocated to authorities for permit assessment work will have a positive impact, as the lack of capacity within authorities has been a contributing factor to protracted permit processes. At the same time, there are transition risks associated with the

the major organisational change entailed by the establishment of the new permitting authority, as both the Swedish Environmental Protection Agency and the Västra Götaland County Administrative Board point out in their consultation responses,[132,133] even though the authority may, in the longer term, contribute to a more consistent and efficient handling of environmental assessments.

Investments in skills development and stricter requirements for labour migration

A good supply of skills is a key prerequisite for the business sector's climate transition and competitiveness. The Government, government agencies, the business sector and civil society repeatedly highlight the importance of the supply of skills, both in terms of new recruitment and skills development, but they also believe that skills shortages risk posing an obstacle to the transition.[112,134,135]

In northern Sweden, where many of the green industrial initiatives are taking place, there is a significant demand for labour, but unemployment is already low and competition between industry and the public sector is fierce.[136] In the future, the industry is expected to have a significant need for traditional industrial roles, such as operators, fitters and engineers.[137] At the same time, many of the unemployed are far removed from the labour market and live in other parts of Sweden.

During its term of office, the Government has implemented several initiatives aimed at improving the supply of skills:

- more places on regional vocational adult education courses
- new courses and places at higher vocational colleges
- a pilot scheme for national vocational education and training focusing on areas of shortage
- a STEM[o] strategy to increase the number of people training in STEM fields
- expansion of civil engineering programmes and foundation year courses
- several government agencies have been tasked with facilitating, in various ways, mobility, matching and the attraction of talent to regions and sectors in need of skills (including the Swedish Public Employment Service, the Swedish Agency for Economic and Regional Growth and the Swedish National Agency for Higher Vocational Education).

Overall, the Government has, on the one hand, invested in vocational adult education that can have a rapid impact on bottlenecks, and, on the other hand, implemented more long-term initiatives to build interest and capacity in the STEM field. We welcome these initiatives and welcome the fact that the Government has combined measures that can have a relatively rapid impact with necessary long-term capacity building. At present, however, it is difficult to assess how significant an impact these initiatives will have in relation to the needs.

The Government has also made changes to migration policy that may affect the supply of skilled labour for the climate transition. For example, the Government has raised the wage requirement for work permits and abolished the possibility of 'track changes' in migration administrative processes. These measures risk not only making it more difficult to attract workers to the industrial transition, but also to public services such as healthcare, social care and education. Well-functioning public services are a prerequisite for the transition, not least to attract skilled workers to the sectors where the transition is taking place.

Certain initiatives to improve the conditions for circular resource flows

More circular resource flows and extended life cycles can lead to significant direct reductions in emissions, as they reduce the need for virgin raw materials and new production. However, several obstacles stand in the way. Circular resource flows are often more costly than linear ones, partly because existing business and production processes are not adapted to handle circular flows. Regulations and standards are also not adapted, and consumer behaviour patterns can hinder the transition to more circular resource flows. This justifies policy action.

o STEM stands for Science, Technology, Engineering and Mathematics.

The Government has received a report on economic instruments for a more circular economy[138] which identifies and proposes areas where in-depth analyses and economic instruments can play an important role in promoting a circular economy. The Government has also presented a bill on reformed waste legislation to increase material recycling, with the aim of reducing the volume of municipal waste, preparing more waste for reuse and ensuring that more waste is recycled.[139]

The European Commission is expected to present a Circular Economy Act in 2026. This forms part of the European circular economy strategy and aims to establish a single market for secondary raw materials, increase the availability of high-quality recycled materials and stimulate demand for these materials within the EU.

We believe that these measures are steps in the right direction and that further legislation, preferably at EU level, with clear rules and financial incentives, is needed to improve the conditions for a circular economy.

5.4.3 Industry needs better, long-term conditions to facilitate its transition.

During the next term of office, the Government needs to step up its efforts to create the conditions for the industry's transition. Below, we outline particularly important areas to focus on. We will return to recommendations on pricing in section 6.3 and access to fossil-free electricity in section 5.5.

An active and predictable innovation and industrial policy

Government innovation and industrial policy is a key factor in stimulating cost-effective innovations and investments with positive societal impacts that might otherwise not have materialised. Adequate and predictable government risk-sharing and support schemes will be essential during the next term of office. In many cases, the support covers only a limited portion of the total investment requirement, but the signal value of being granted government support can, in many cases, facilitate further private financing, thereby creating cost-effective leverage for government funds. Sweden's government support for fossil-free industries is also relatively low by international standards.[140] During the next term of office, the Government should prioritise a long-term perspective and clarity in future risk-sharing and support schemes to provide industry with a sound basis for planning and encourage investment. There are several existing schemes to support the industry's climate transition that could be developed. The Government should:

- **Reinstate the green credit guarantee scheme,** which we consider to be a cost-effective form of support. The credit guarantees should not be suspended during the evaluation period and should not be abolished without proposals for other risk-sharing schemes which the Government considers, in that case, to be better suited to complementing other policy instruments.
- **Continue to develop Industry Leap and the Climate Leap.** Develop priorities and risk assessments within investment support schemes and adjust support levels in light of both Sweden's climate targets and global developments, including related policy instruments within the EU and in comparable countries. Consider larger authorisation frameworks to facilitate the financing of major multi-year projects of significant importance for the climate transition.
- **Use public procurement** as a tool to create demand and markets for fossil-free products.

In addition, we believe that the Government should explore and develop alternative systems for risk-sharing and investment support. Such support should 1) drive the transition forward, 2) be tailored to different stakeholders - both large and small - and 3) be as cost-effective as possible. There are several proposals on how such support could be designed.[141,142] One such example could be Carbon Contracts for Differences (CCfD), which can help to reduce price uncertainty and risk within emissions trading and secure income for companies investing in green technology. Support through CCfD could, for example, be linked to the EU Emissions Trading Scheme.[143]

We believe that the Government should also strengthen its cooperation with and support for municipalities , which play a key role in the climate transition, for example by improving coordination between central government bodies, regional and municipalities , providing additional resources and capacity to municipalities and relevant agencies, and offering appropriate financing solutions, including central government co-funding, risk-sharing and credit guarantees.

Continue efforts to ensure efficient permit processes

Environmental permit processes should be as short, efficient, transparent and predictable as possible without compromising legal certainty or the purpose of prior assessment of environmentally hazardous activities, namely, to protect human health and the environment. It is important that the Government takes a holistic view of any changes to the permit processes, as the Swedish Environmental Protection Agency also emphasises in its response to the Environmental Permits Inquiry.[132] The Government and Riksdag should therefore exercise a degree of caution when reforming legislation, and also consider other targeted policy instruments to address specific challenges facing the industry's climate transition, rather than implementing general changes to the permitting processes. Experience from major new developments in recent years, as well as various pilot projects and regional initiatives, also shows that much can be done to streamline permitting processes within existing legislation. The Government and the agencies need to actively disseminate good examples and allocate the necessary resources to develop these processes.

In its ongoing work, the Government should:

- **Ensure well-designed consultation procedures** with broad participation from relevant stakeholders to build legitimacy and trust in the permitting process. Early dialogue and inclusive processes can reduce the risk of conflicts and, consequently, the number of appeals.
- **Take into account the complexity of changing the permit processes**, as highlighted in the consultation responses submitted to the government-appointed inquiries. The permit processes form part of a complex, interconnected system that affects many more stakeholders and investments than just the industry's climate transition. Changes should therefore be implemented with caution and due consideration of any potential knock-on effects.
- **Ensure an effective transition to the new environmental assessment authority** and minimise shortcomings and uncertainties during the transition phase. Do not underestimate the complexity of establishing a new administrative authority, and bear in mind that positive effects may take time to materialise.
- **Ensure that all relevant agencies have sufficient resources** to process permitting applications efficiently and accurately.

Improving the conditions for skills provision

We believe that the supply of skilled labour will continue to be a challenge for industry and that further measures will therefore be needed over the long term to ensure a continuous supply of skilled labour for the business sector and the climate transition. The Government needs to contribute both an overarching direction and specific initiatives. We believe that the Government should prioritise:

- **Develop a skills supply plan for the climate transition.** The plan should include a comprehensive analysis of expected skills needs and labour market changes, as well as challenges linked to Sweden's climate transition in general and the industrial transition in particular. This applies both to general needs at national level and to more specific regional challenges linked to major industrial developments. The analysis can form the basis for the Government's formulation of education, labour market and migration policies. The plan should include proposals to address identified needs and challenges. The Government's STEM strategy is a good start, but it should be broadened to cover all areas relevant to the climate transition.

- **Continue to develop targeted skills initiatives,** for example through adult vocational education, higher vocational education and civil engineering programmes, to meet the needs of industry.
- **Support municipalities** where significant investments are being made in the climate transition through targeted measures to attract, retain and develop skills.
- **Improve the conditions for labour migration.** Analyse the impact of changes to labour migration rules on the supply of skills. Lower or abolish the salary requirement for work permits and reintroduce the 'track change' scheme.

Increase the focus on circular resource flows

Policy needs to focus on entire value chains, both upstream, downstream and laterally from the emitting activities. Otherwise, there is a risk that policy will be based solely on how established industries and processes are to be transitioned to net-zero emissions. This overlooks opportunities for structural changes within existing industry, as well as changes further down the value chain - at the user and consumer levels - and disruptive innovations in general.

Policy needs to promote extended life cycles, reuse and remanufacturing, as well as the use of renewable and recycled materials, and work within the EU towards common regulations for renewable and recycled products and materials, particularly in sectors with significant climate and resource footprints.

Recommendation for the climate transition of industry

We believe that clarifying the scope of, and strengthening the long-term nature of, government support for the industry's climate transition should be a top priority at the start of the next term of office. This should be reflected in future budget proposals, in changes to national regulations, and in Sweden's work within the EU.

CLIMATE POLICY COUNCIL RECOMMENDATION

Create stable and long-term conditions for industrial transition through:

- **Effective, predictable and legally secure permitting processes** that shorten lead times and reduce uncertainty for investments in fossil-free technology.
- **An active and predictable innovation and industrial policy** that promotes pilot and demonstration facilities, supports the commercial upscaling of technologies with high climate benefits, and strengthens the industry's global competitiveness. This can be achieved through enhanced risk-sharing between the state, businesses and municipalities, for example via green credit guarantees and investment support.
- **A comprehensive strategy for skills provision to support the climate transition,** with increased opportunities for further training, reskilling and labour migration, as well as regionally tailored initiatives in areas where there is high demand for skills.
- **Incentives for circular resource flows and renewable materials,** for example through policy instruments that increase demand for recycled materials, reward resource efficiency and facilitate industrial symbiosis.

5.5 Electricity and heating

- **Sufficient fossil-free electricity generation at competitive prices and a well-functioning electricity system are central to the climate transition across multiple sectors.** Cost-effective increases in fossil-free electricity generation and expanded capacity in the electricity grid are therefore needed.
- **The conditions need to be improved for all forms of power generation and cost-effective solutions within the electricity system.** The Government has made major long-term investments to enable new nuclear power. However, the conditions for cost-effective investments in other forms of power generation, storage and flexibility - which can contribute in both the short and long term - have deteriorated.
- **Energy efficiency needs to be given higher priority** through concrete reforms that create incentives for reduced and smarter energy use. During this term of office, energy efficiency has been a low priority and several decisions have weakened the incentives
- **Fossil fuel emissions from district heating need to be reduced.** Policy should be developed and strengthened to tackle the rising emissions from the incineration of fossil waste.

In 2024, electricity and district heating generation accounted for emissions of 4.0 million tonnes, whilst domestic and commercial heating accounted for emissions of 0.6 million tonnes, which together represent 10 per cent of Sweden's territorial emissions. This is significantly less than in most other countries, where electricity and heating often account for a large proportion of emissions.

5.5.1 Energy transition to achieve climate targets

Fossil fuels have been almost entirely phased out in terms of electricity and heat production in Sweden. Despite this, significant emissions remain from heating and combined heat and power plants that incinerate waste, much of which is of fossil origin, particularly plastic. This presents a challenge in the ongoing climate transition, which is not primarily about electricity or heat production but lies further up the value chain and concerns fossil material flows, products and waste management.

In this section, we divide the discussion on the climate transition for electricity and heating into two parts. We begin with the electricity system, which plays a crucial role in enabling electrification in other emissions sectors. We then discuss how remaining emissions from heating can be reduced, whilst heating systems can contribute in other ways to achieving Sweden's long-term climate goals.

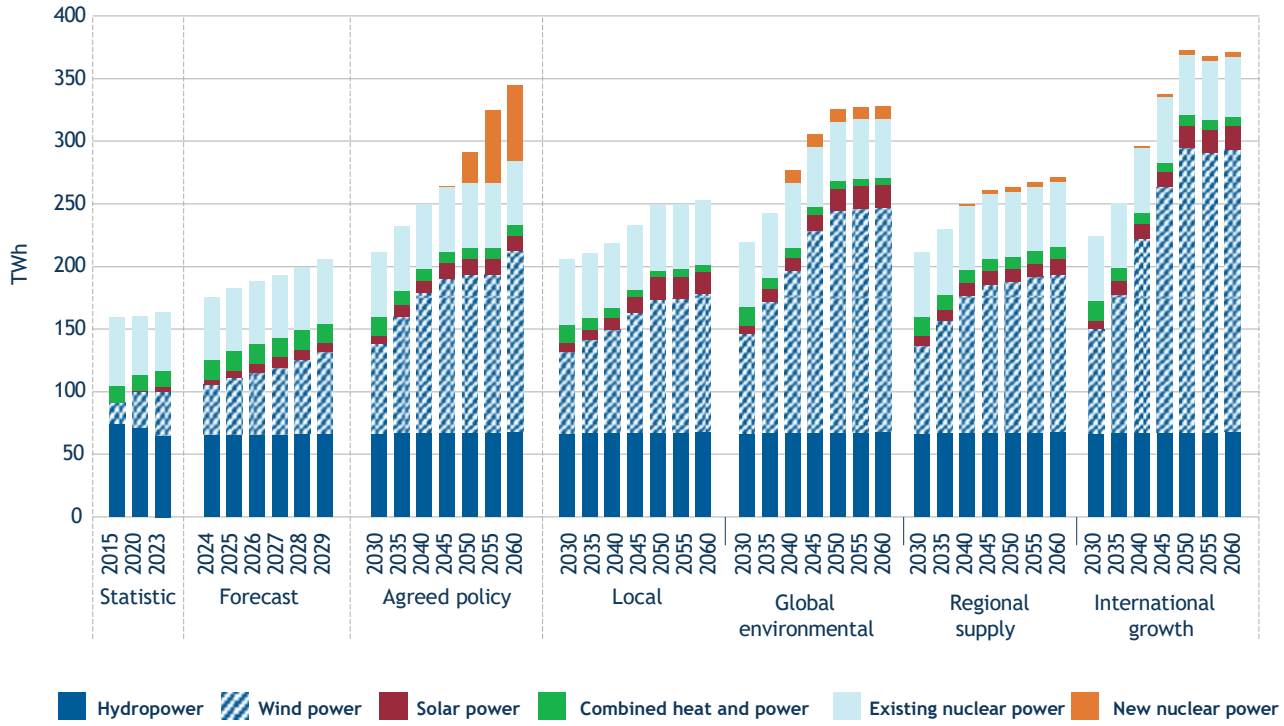
An electricity system that enables the climate transition

We share the Government's view that electrification is a key area for the climate transition. Policy must therefore create the conditions to ensure that there is sufficient fossil-free electricity at a reasonable price where and when it is needed.

Sweden's electricity consumption has remained virtually constant at around 140 TWh (gross consumption) over the past 40 years, despite an increase in population and industrial production. At the same time, electricity generation has increased, primarily through the expansion of wind power, and Sweden is now one of Europe's largest electricity exporters. In 2025, net electricity exports amounted to 33 TWh, which corresponded to almost 20 per cent of total electricity generation.[144] Electricity prices were low in 2025, particularly in northern Sweden, but southern Sweden also had lower average electricity prices compared with the rest of Europe.

In the Swedish Energy Agency's long-term scenarios, Sweden's electricity consumption will increase to between approximately 230 and 340 TWh in 2045, see Figure 24. The increase and the wide range between the scenarios are primarily driven by industrial electricity consumption. The transition of Sweden's basic industries and the establishment of new electricity-intensive industries are estimated to require large quantities of fossil-free electricity, but the long-term electricity demand is uncertain. The scenarios estimate that the production of hydrogen via electrolysis alone will require between 25-95 TWh of electricity by 2045, even though hydrogen production has not yet taken off as previously expected. Furthermore, the electrification of the transport sector is contributing, but according to the Swedish Energy Agency, it will only amount to around 25-30 TWh by 2045, on a par with today's net electricity exports.

Figure 24. Electricity generation (TWh) in Sweden: historical data, the Swedish Energy Agency's short-term forecast and long-term scenarios



Note: 'Adopted policy' refers to policy instruments adopted in Sweden and the EU up to and including the 2024 Budget Bill. The four scenarios - Local Environmental Considerations (LM), Global Environmental Perspective (GM), Regional Supply (RF) and International Growth (IT) - are exploratory scenarios that illustrate alternative pathways to a net-zero emissions energy system by 2050. The Swedish Energy Agency does not assessment of the likelihood of each scenario. The Wind Power category includes onshore and offshore wind power. The Combined Heat and Power category includes electricity generated alongside heat through the combustion of waste and biofuels and may therefore be a source of fossil fuel emissions.

Source: Swedish Energy Agency[145]

In the short term (up to around 2030), we estimate that Sweden is expected to remain a net exporter of electricity. The main obstacle, however, is local power supply in areas with major investments and new large-scale electricity consumers, as well as transmission capacity in the north-south direction. Insufficient and uncertain future access to electricity generation capacity is currently a major obstacle to investment in the climate transition, which contributes to investment in the transition being delayed or failing to materialise in certain regions.[146] During limited periods, electricity prices may also rise in southern Sweden, where electricity generation is low and transmission capacity from the north is limited. In the medium term (around 2035), electricity demand is expected to increase as new industries are established and existing operations are electrified. We agree with the Swedish Energy Agency that new nuclear power will not be able to contribute to this in time, whilst wind power could account for a significant proportion of the new capacity. This requires a favourable investment climate for renewable electricity generation.

To manage the challenges arising from an increased share of variable electricity generation, various forms of energy storage - such as batteries and thermal storage in district heating systems - as well as flexibility in the electricity system will become increasingly important. Significant investment will also be required in the electricity grids, both in the transmission grid and in regional and local grids, to cope with increased power draw and new flows in the system. Investment needs are estimated to be substantially higher than previously, and Svenska kraftnät (the authority responsible for Sweden's transmission system for electricity) is therefore planning for historically large investments over the coming decade.[147]

Resource-efficient heating systems

Sweden has long had well-developed district heating systems that rely largely on renewable energy and waste heat. The remaining fossil fuel emissions come mainly from the incineration of fossil waste.

District heating networks and combined heat and power are important assets that provide comparatively cheap heating without increasing demand on the electricity grids,[148] can utilise waste heat from, for example, industry, and have the potential to relieve the strain on the electricity grids by contributing to electricity generation during peak demand periods and acting as a buffer for electricity through thermal storage and heat pumps in the district heating networks.
Recently, however, the profitability of district heating has been challenged by higher bioenergy prices, coupled with rising capital costs, lower prices for electricity generated in combined heat and power plants, and changing customer demand. This, combined with the transition in other sectors, makes the future of district heating and combined heat and power uncertain. There remain significant opportunities for synergies and for harnessing the system benefits of district heating and combined heat and power.[149]

The major climate challenge associated with district heating is to reduce the relatively high and rising emissions from the incineration of fossil waste. This can be addressed upstream through reduced consumption that generates waste, more renewable materials, or increased waste recycling. There are, for example, successful projects in the chemical industry involving the chemical recycling of plastics.[150] However, a combination of current regulations, existing business models, economic incentives and behaviours means that the volume of fossil waste is still increasing. Emissions can also be managed by capturing carbon dioxide for storage (CCS) or use (CCU). However, it is comparatively expensive and difficult to remove these emissions through CCS, and this reinforces linear systems rather than promoting circular systems in Swedish material use.

In addition to emissions from district heating, there are also a smaller number of emissions (0.6 million tonnes) from the heating of homes and premises, which result from the combustion of fossil fuels. Further targeted measures to phase out these remaining emissions could prove effective here.

Energy efficiency is often cost-effective

Energy efficiency is a key piece of the puzzle in Sweden's climate transition, as reduced use of fossil energy directly reduces emissions, and reduced use of fossil-free energy frees up capacity and resources for other parts of the transition. Energy efficiency is also often a cost-effective, and sometimes even profitable, measure, but is often implemented at a lower extent than would be optimal due to various types of market failure[p].[151]

Sweden's final energy consumption has remained relatively stable at around 350-400 TWh since 1970 despite rising GDP and population, made possible by a long-term transition from petroleum products to electricity, district heating and biofuels in more efficient systems. Since 2010, final energy consumption has fallen from 400 TWh to 350 TWh in 2024.[152] Despite this, the Swedish Energy Agency states that Sweden is not on track to make a sufficiently large contribution to the EU's energy efficiency targets,[153] partly due to an expected increase in electrification and hydrogen use within industry. With current technology, hydrogen production is relatively inefficient and requires large amounts of fossil-free electricity, whereas the electrification of the transport sector, on the contrary, brings significant efficiency gains, as electric motors are more energy-efficient than internal combustion engines.

p Market failure refers to the situation where individuals and companies do not have socially appropriate incentives to make decisions on their own that are socio-economically efficient, such as reducing their emissions. This is discussed in more detail in Chapter 7.2 on cost-effectiveness.

5.5.2 Energy policy during the current term of office

THE CLIMATE POLICY COUNCIL'S ASSESSMENT

The conditions for investment in new nuclear power have improved, but for other fossil-free energy sources they have deteriorated. Energy efficiency has been a low priority during this term of office.

The role of nuclear power in the electricity system has been prioritised

Electrification, and in particular fossil-free electricity generation through nuclear power, has been a clear priority for the Government during the current term of office. The most significant reform has been the decision on substantial state loans for reactors, guaranteed prices for nuclear power and mechanisms to minimise risks in the event of cost overruns.[154] The Government has also implemented legislative changes enabling the expansion of nuclear power,[155,156] allocated resources to the processing of applications for new reactors[154] and appointed a nuclear energy coordinator.[157] The Government has also announced that further bills to facilitate new nuclear power will be presented in spring 2026.[158]

We welcome the fact that the Government is implementing extensive initiatives to strengthen the conditions for fossil-free electricity generation in the long term. In previous reports, we have noted, as have several other organisations,[159-161] that the state needs to help reduce or share the risks associated with capital-intensive and long-term investments in the climate transition. However, the Government's far-reaching agenda for faster and simpler processes and promises of very extensive subsidies for new nuclear power stand in contrast to the restraint the Government has shown, particularly over the past year, regarding support for the industries expected to use fossil-free electricity (see section 5.4.2). The report that formed the basis for the decisions on nuclear power subsidies, as well as the consultation responses, also point to the risk that the future costs of nuclear power could be very high for both taxpayers and electricity users. Practically all of the bodies consulted, with the exception of a few stakeholders who may be directly affected by the inquiry's proposals for state subsidies, were critical of the proposal, including the Government's expert agencies: the Swedish Energy Agency, the Swedish Energy Markets Inspectorate and Svenska kraftnät.

The Government's actions also stand in contrast to how it has addressed the conditions for other fossil-free energy sources during its term of office. A more technology-neutral strategy for the ongoing electrification process would improve the chances of its success, make policy more cost-effective, and reduce polarisation in energy policy and, consequently, political risk. Reducing political risk is important if the business sector is to have the confidence to invest, both in new electricity generation and in the industry that will use the electricity. Representatives of the energy sector, industry and workers have emphasised that they want broad parliamentary agreements on energy policy to provide long-term sustainable conditions for investment in the electricity system.[162]

The conditions for investment in other fossil-free energy sources have deteriorated

The rate of investment in new wind power has declined as a result of deteriorating investment conditions during the term of office.[163] The slower rate of expansion is due to a combination of lower electricity prices and increased uncertainty regarding future demand (particularly in northern Sweden), as well as the fact that many new applications are rejected due to the municipal veto (particularly in southern Sweden) or a refusal from the Swedish Armed Forces, and the one-sided political focus on nuclear power. The European Commission also referred Sweden to the Court of Justice of the European Union because Sweden, along with several other countries, had not implemented the requirements for faster and simpler permits for renewable energy and electricity grid infrastructure set out in the revised Renewable Energy Directive.[164] However, in February 2026, the Government submitted a bill to implement these requirements.[165]

Between 2020 and 2024, a total of 83 out of 130 (64 per cent)[166] of the wind power projects in question were halted by the municipal veto, and between January and September 2025, 26 out of 29 projects[167] were halted. We therefore welcome the fact that, in 2025, the Government submitted a proposal for consultation on how residents living near wind turbines should be compensated, and that, in early 2026, the Government tasked the Swedish Energy Agency with paying out the previously announced compensation to municipalities with wind turbines. Together, this can increase incentives and acceptance for existing and new wind power. However, the Government had already allocated funds for this in September 2024 and could therefore have taken a decision on support regulations much earlier. The compensation should, however, correspond to the property tax generated by the wind turbines.

In 2024, the Government rejected 13 out of 14 applications for environmental permits for wind power projects in the Baltic Sea, citing defence interests. The projects had a combined estimated annual electricity production of 140 TWh,[168] which is equivalent to Sweden's total electricity consumption in 2024 and could have covered a large part of future electricity demand. The rejections deviate from the approach taken by several other NATO countries around the Baltic Sea, including Poland, which shares a border with Russia. The Government has commissioned a study into a new auction-based system for offshore wind power[169] which is currently being prepared by the Government Offices. The Council considers that the direction of the proposals could, in the longer term, improve societal planning, predictability and the conditions for investment in offshore wind power.

The Government has reduced the subsidy rate for the installation of solar panels under the green technology tax relief scheme and abolished the tax relief for micro-generation of renewable electricity. We believe that, overall, this may slow down the expansion of small-scale rooftop solar production, but that it will at the same time provide more accurate price signals and thus encourage greater self-consumption or storage and less subsidised feed-in to the electricity grid during surplus hours.

Overall, the Government's energy and industrial policies, combined with market developments, have meant that today, at the end of this term of office, virtually no decisions are being taken on major investments in new fossil-free power generation in Sweden. The situation has changed rapidly and needs to be addressed during the next term of office to ensure that the necessary electrification can take place, even before any new nuclear power capacity is in place.

Significant investment in the electricity system will still be needed after this term of office.

The Government has taken several decisions to streamline the permitting processes, which in the long term may improve the conditions for investment in the electricity grid, for example by extending exemptions for biotope protection and changes to the suitability assessment for grid concessions.[170]

The Swedish Energy Markets Inspectorate has decided that all electricity network operators must apply a network tariff that includes a power charge by 1 January 2027 at the latest. The power charge is intended to incentivise electricity users to spread out their electricity consumption in order to reduce peak demand on the grid and thereby reduce the need for costly investments in grid expansion. We welcome the principle of steering towards demand flexibility to achieve cost-effective utilisation and expansion of the electricity system as a whole. We note, however, that the power charge in its current form may lead to undesirable effects and for example, increased costs for charging electric vehicles, which could hinder the electrification of the transport sector. Critics have pointed out that the power charge risks having a limited positive impact on the electricity grid, counteracting the incentive effect of the electricity price, and being difficult for electricity users to understand.[171] We therefore consider that the capacity charge should be evaluated and, where necessary, adjusted to provide the most effective and cost-efficient steering possible. There is also a risk that capacity charges do not incentivise general improvements in the efficiency of electricity use.

The Council considers that major challenges in the electricity grid regarding reliable and rapid access to grid connection and capacity, which hinder investment in the climate transition, will remain after the end of this term of office.

Certain initiatives to strengthen and safeguard district heating and combined heat and power

During its term of office, the Government has taken a number of decisions affecting district and combined heat and power. Certain tax changes have been implemented with the aim of strengthening the economic conditions for district and combined heat and power. The tax on waste incineration has been abolished, on the grounds that it had a weak environmental governance effect. In addition, the carbon tax on heat production included in ETS 1 has been abolished. We consider that this reduces climate control, but can be justified by the fact that these emissions are already subject to pricing within the European trading system.

On the regulatory front, the Government has proposed reforms to waste legislation to increase material recycling.[139] We welcome the fact that the Government is prioritising the prevention of waste generation, increasing material recycling and resource efficiency, and creating a long-term perspective and better planning conditions for stakeholders in society. The Government has also decided to provide support for BECCS that can be built at combined heat and power plants (see further section 5.6).

The Government has tasked the Swedish Energy Agency with implementing and proposing measures to strengthen and safeguard district heating and combined heat and power in Sweden.[172] It is encouraging that the Government has continued to work in various ways to strengthen the system benefits of district heating and combined heat and power. We note, however, that the Government has not yet taken a decision on a strategy proposed by the Swedish Energy Agency to establish a clearer direction for the role of district and combined heat and power in the future heating system. The power and district heating sectors still have the potential to contribute to the climate transition in various ways, but they also consume large quantities of biomass that could be used in sectors where alternatives to coal-based inputs are either unavailable or very expensive; see section 5.2 for further discussion on the need for a holistic approach to Swedish biomass.

Energy efficiency has been a low priority

The Council considers that the Government has not prioritised energy efficiency and, in some cases, has taken decisions that run counter to it. We consider the following decisions to clearly run counter to more efficient energy use:

- Reduced energy tax on electricity and temporary high-cost protection for households against high electricity prices exceeding 1.5 kr/kWh.
- Reduced energy and carbon taxes on petrol and diesel (see section 5.1 on transport and machinery for a detailed discussion).

Tax cuts on energy and the high-cost protection scheme for higher electricity prices reduce the fundamental economic incentives to improve energy efficiency, as it has become cheaper to use energy. Furthermore, the high-cost protection scheme negates the price signal - in the form of high electricity prices - which provides an incentive for energy efficiency improvements. We believe it is important that correct price signals, such as high electricity prices when demand is high and supply is low, are allowed to take effect. Otherwise, the incentives to change behaviour and make socio-economically profitable investments are reduced. If compensation is deemed necessary, it should instead be provided as targeted support to identified vulnerable groups, in such a way that the incentives for energy efficiency are maintained.

The Government has also revised the overall policy framework for energy efficiency. In November 2025, a proposal for a new energy efficiency target was presented.[173] The proposed target covers not only more efficient overall energy use - as the target was previously formulated - but also peak load smoothing, demand response and storage. We believe that such a more multidimensional objective reflects a changing energy system in which constraints relate to a greater extent to power capacity and natural resources other than primary energy resources. However, it is a weakness that the proposal does not contain quantified targets. It is positive that the Swedish Energy Agency is proposed to be tasked with developing indicators for monitoring, but there is no focus on progressively more efficient energy use

The proposal is also not based on a thorough investigation, and the impact assessment does not meet the requirements of the regulation on impact assessment in the regulatory process. Furthermore, the

objective entails reduced alignment with Sweden's commitments to the EU's energy efficiency targets, which are highly

quantified. This is despite the fact that the Government has previously emphasised the importance of aligning Sweden's climate targets with its EU commitments.

During its term of office, the Government has presented a few proposals linked to energy efficiency, such as the grant for energy efficiency improvements in detached houses and proposals linked to the implementation of the EU Energy Performance of Buildings Directive. The Council welcomes these proposals and considers that they can contribute to increased energy efficiency.

5.5.3 Establish and broaden the policy for fossil-free electrification during the next term of office

During the next term of office, the Government needs a broader strategy for the expansion of the fossil-free electricity system of the future. We also believe that a clearer strategy and measures are needed to address the remaining emissions in the electricity and heating sectors.

Conduct a comprehensive analysis and reach a long-term agreement on the fossil-free electricity system of the future

Fossil-free electrification requires substantial, long-term investment in electricity generation and the electricity grid. For these investments to be realised soon enough and at the lowest possible socio-economic cost, uncertainty regarding the rules of the game, policy instruments and the future structure of the market must be reduced. The Government should therefore ensure that decisions on the development of the electricity system are based on well-researched evidence. With regard to the overall, long-term direction, broad parliamentary consensus is also important. We believe that the Government should:

- Conduct a comprehensive analysis of cost-effective pathways to fossil-free electrification, including different power sources, how capacity payments should be made, conditions for storage, flexibility, market rules and investments in the electricity grid.
- Work towards a broad and long-term energy agreement in the Riksdag on the way forward for fossil-free electrification, based on the comprehensive analysis.
- Strive to provide technology-neutral economic and legal conditions for all fossil-free energy sources.

Improve the conditions for wind power

The Council considers that the conditions for investment in new wind power need to be improved in order to ensure an adequate and cost-effective electricity supply before nuclear power can be brought online. For policymakers, this largely involves reducing uncertainties in the permitting processes, but also ensuring that local communities benefit from the profits generated by wind power, thereby reducing local opposition.

For onshore wind power, the Government should:

- Implement the announced proposals on revenue sharing with local residents for wind power.
- Reform the municipal veto to improve the efficiency and predictability of the planning permission process in line with previously examined proposals.[174] Among other things, the proposals suggest that the municipality's decision should be made early in the process (and not be able to be invoked at a later stage), be justified, be final, and be subject to appeal.

For offshore wind power, the Government should:

- Bring together the Swedish Armed Forces and relevant stakeholders to find solutions for offshore wind power.
- Make a decision on the offshore projects currently being prepared in the Government Offices and review previous decisions concerning offshore wind power in the Baltic Sea.
- Implement the proposals put forward regarding an improved system for the planning and permitting of offshore wind power, including the designation of suitable marine areas by the Government and the simplification of the permitting process.

Design the electricity system to provide cost-effective incentives for producers, distributors and users

The electricity system needs to be designed in such a way that incentives for producers, distributors and consumers lead to socio-economically efficient behaviour and investment. The electricity system needs to provide accurate price signals that reflect the underlying conditions within the system. Sweden's four electricity areas play an important role in that price differences between the areas signal imbalances in supply and demand, which in turn signal and provide economic incentives for investments to even out these imbalances, for example through increased electricity generation in southern Sweden or transmission capacity from northern to southern Sweden. We consider that the system of multiple electricity areas should be retained.

The capacity of the electricity grid and the ability to connect to it remain a bottleneck for the transition. Continued efforts are needed to rapidly and cost-effectively remove bottlenecks, both in the transmission grids and at regional and local levels, for example in connection with key transport routes and hubs.

Develop policies towards fossil-free heating

Stronger governance is needed across the entire value chain - production, consumption, waste, incineration - to significantly reduce emissions from the incineration of fossil waste. At the same time, the system benefits of district heating and combined heat and power must be safeguarded or created through other solutions, for example in terms of cost-effective heating, utilisation of residual flows, relief for the electricity grid, emergency preparedness, and, in the long term, negative emissions. We believe that the Government should:

- Develop a comprehensive strategy for the role of district heating and combined heat and power in a future cost-effective and carbon-neutral heating system.
- Introduce requirements or economic instruments upstream in the value chain that provide incentives for reduced consumption, more renewable materials in products and/or increased waste recycling.
- Consider further targeted policy instruments to phase out remaining emissions from the heating of homes and premises.

Give higher priority to energy efficiency and flexibility

During the next term of office, policymakers need to take a fresh approach and give greater priority to energy efficiency, ideally with the broader focus proposed by the Government in the new energy efficiency target, including load balancing, demand flexibility and storage. Energy policy should be based on the principle of 'energy efficiency first'[175] by exploring cost-effective efficiency and flexibility measures before decisions are taken on new generation capacity, grid expansion or other energy infrastructure. This principle reduces the risk of overinvestment and lowers system costs by reducing energy and power demand. Policy must therefore create incentives and conditions for reduced energy consumption and not, as has been the case during the current term of office, lower the costs of fossil fuel use. If the Government continues to believe that households need to be protected against high energy prices, other forms of compensation should be devised that do not undermine the incentives for energy efficiency. We believe that the Government should base all energy policy on the principle of energy efficiency and implement the following measures:

Specify and quantify the energy efficiency target.

- Remove the high-cost protection for high electricity prices, or alternatively ensure that high-cost protection applies only to vulnerable households.
- Increase taxes on fossil energy (see section 5.1).
- Improve the conditions for cost-effective energy efficiency measures.

Recommendations for the next term of office's policy on electricity and heating

Overall, we assess that the electricity and heating system is of great importance for meeting climate targets whilst maintaining a competitive business sector. Our recommendations are summarised below.

THE CLIMATE POLICY COUNCIL'S RECOMMENDATION

Establish and broaden the policy for the future fossil-free energy sector.

- **Conduct a comprehensive analysis** of cost-effective pathways for the future fossil-free electricity system, taking into account all fossil-free power sources, the electricity grid, storage, flexibility and market rules.
- **Work towards a broad and long-term energy agreement** in the Riksdag, using the analysis of the future electricity system, made by the Swedish Energy Agency, as a basis.
- **Improve the conditions for wind power**, which can increase electricity generation in the short and medium term. Decide on compensation for local residents and reform the municipal veto on onshore wind power. Bring together the Swedish Armed Forces and relevant stakeholders to find solutions for wind power, and implement the proposals for simplified permit processes.
- **Improve the conditions for expanding electricity grid capacity** by, for example, adapting regulations to enable rapid and proactive investment and by continuing to work on efficient permitting processes.
- **Develop and strengthen policies that promote fossil-free heating** to tackle rising emissions from the incineration of fossil waste.
- **Give higher priority to energy efficiency** by supplementing the proposed energy efficiency target with quantitative indicators, concrete reforms and the creation of incentives for reduced and smarter energy use.

5.6 Supplementary measures

- **A significant number of supplementary measures will be required to achieve the climate targets.** There is considerable theoretical potential for several of the measures, but the realisable potential is likely to be lower due to costs, access to inputs and potential conflicts of interest.
- **There is a lack of policy guidance for several of the supplementary measures.** Political guidance is lacking both in terms of accounting rules and financial incentives for certain measures. It is important to clarify during the next parliamentary term how supplementary measures are to be scaled up.

When we compare the policies currently in place with the Government's latest target scenario for 2045, the biggest missing piece of the puzzle is these supplementary measures, measured in millions of tonnes of greenhouse gas emissions. Supplementary measures exist across various sectors, and some measures involve actions beyond Sweden's borders. However, the measures share several similar challenges in the absence of clear policy instruments and accounting mechanisms. In this section, we include the supplementary measures described when the climate policy framework was adopted[29] and the Cross-Party Committee on Environmental Objectives's developed proposals for supplementary measures to achieve the interim target for the ESR sector by 2030.[32] These supplementary measures consist of:

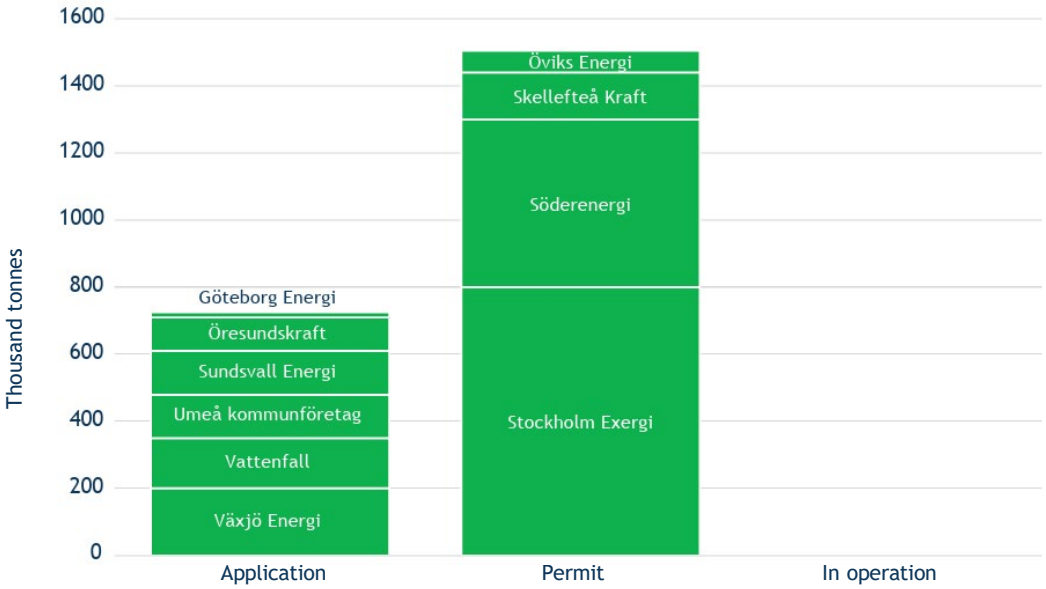
- Bioenergy with carbon capture and storage (BECCS),
- direct air carbon capture and storage (DACCS),
- biocarbon (pyrolysis of biomass to sequester more carbon in the soil),
- increased removals in the land-use sector (LULUCF) and
- verified emissions reductions abroad in the following categories:
  - international climate investments under the rules of Article 6 of the Paris Agreement,
  - purchases of emission allowances within the ESR and
  - cancellation of allowances within the ETS 1.

For the land-use sector (LULUCF), this section focuses solely on accounting, whilst a discussion of policy instruments to increase net removals is provided in Section 5.2. For the parts of this section concerning permanent removals (BECCS, DACCS and biochar), we have benefited greatly from a background report from Linköping University.[102]

5.6.1 Transition and potential for various supplementary measures

Supplementary measures have begun to be developed and are at various stages. Several companies are planning to expand **BECCS**. The most advanced projects up to 2030 are located in Stockholm and Södertälje. In Sweden, companies have been granted environmental permits for BECCS equivalent to approximately 1.5 million tonnes per year, and several further projects have applied for environmental permits (see Figure 25). In the longer term, the theoretical potential for BECCS is very high given current emissions of biogenic carbon dioxide, ranging from 10 to 30 million tonnes per year in some estimates.[176-178] However, this technical potential needs to be weighed against other aspects, not least costs and how biomass can deliver the greatest climate benefits (see further Section 5.3 on the need for a bioeconomy strategy). The realisable potential is therefore likely to be lower given these conflicting objectives, particularly in the short and medium term, as costs per tonne of carbon dioxide captured are expected to be high. The related technology DACCS can achieve permanent sequestration without biomass but is considered to be limited as it is more expensive than BECCS.[176] A potential advantage of DACCS is that the facilities can be located close to or directly adjacent to the storage site, thereby minimising the costs of transporting carbon dioxide. However, a limiting factor for both technologies is that suitable conditions for carbon storage have not yet been identified in Sweden.

Figure 25. Annual capacity for biogenic CCS and CCU projects in Sweden, by project stage



Note: The figure shows the capacity of biogenic CCS and CCU projects. Several, but not all, of the projects are combined CCS and CCU projects. Note that Växjö Energi and Söderenergi have decided to pause work on their BECCS facilities.

Source: Swedish Energy Agency[179]

Biochar is produced through the pyrolysis (decomposition in an oxygen-deprived environment) of biomass and is used to sequester carbon in soil or materials over the long term. There are a few biochar plants in Sweden today, but their production capacity is low. In 2020, the Climate Policy Crossroads Inquiry assessed that biochar has the potential, in the long term, to help store up to 1 million tonnes annually through the pyrolysis of forest residues. If sewage sludge and garden waste are also included, there is even greater potential for biochar according to certain studies.[102] However, just as with BECCS, there are challenges in terms of both costs and competition for biomass. At the same time biochar offers other benefits, such as heat production and soil improvement. As biochar falls within the land-use sector (LULUCF), an overall increase in carbon sequestration must be achieved for biochar to be counted as a supplementary measure.

According to the Cross-Party Committee on Environmental Objectives's proposal[98] **increased removals in the land-use sector (LULUCF)** have the potential to contribute to supplementary measures for net removals that exceed Sweden's EU commitment under the LULUCF Regulation. We show in Chapter 3 that net removals in forests and land have increased in recent years, but that there are significant uncertainties within the LULUCF sector going forward. In its 2024 report, the Cross-Party Committee on Environmental Objectives has shown that, for example, longer rotation periods for felling and increased rewetting of drained land have the potential to contribute both to reduced emissions and a stronger carbon sink (see section 5.2). With increasing net uptake in the land-use sector, the prospects for Sweden to meet its EU commitment under the LULUCF Regulation. With increasing net removals under LULUCF, there is also potential to contribute through further supplementary measures.

Work on Sweden's **verified emissions reductions abroad** is carried out by the Swedish Energy Agency. For Article 6 measures, Sweden is currently collaborating with seven countries and an equal number of international organisations and development banks to achieve so-called ITMOs (Internationally Transferred Mitigation Outcomes). So far, the projects are in the start-up phase and no ITMOs have been created. With current budgeted funds, the Government estimates that approximately 0.4 to 0.5 million tonnes of ITMOs could be delivered by 2030.[46] Budgeted funds will run out in 2036, after which, under current policy, it is not expected that ITMOs can be achieved by 2045. The Swedish Energy Agency is also responsible for the work of acquiring emission allowances under the Effort Sharing Regulation (ESR). No results have yet been published for this work and the European Commission, in its review of the EU Member States'

progress, and the European Commission, in its review of the EU Member States' progress, has identified an overall net deficit, meaning that there will be competition for emission allowances in Europe under the policies currently in place.[180]

To meet Sweden's ESR commitment, the Government has announced its intention to cancel emission allowances equivalent to just under 0.9 million tonnes annually from ETS 1. As the intention is to use this emission allowance to meet Sweden's EU commitment for the ESR, it will not be possible for the Government, in accordance with the Cross-Party Committee on Environmental Objectives's proposal, to also use them as supplementary measures for the national interim target for 2030. So far, no plans have been announced for the acquisition and further cancellation of emission allowances to contribute to supplementary measures for the 2030 interim target.

5.6.2 Policy on supplementary measures during the term of office

The policy on supplementary measures has evolved in various ways during the term of office. In the climate policy action plan, the Government has clarified the objectives by stating that supplementary measures should increase gradually in line with a linear target path to enable equivalent to 11.5 million tonnes of carbon dioxide equivalents per year by 2045. In terms of policy direction, this target does not correspond to the interim target proposed by the Crossroads Inquiry.[176] The Government justifies this target by arguing that it allows for greater flexibility in the future regarding supplementary measures. However, a continuing shortcoming in the policy framework is that the accounting rules for supplementary measures - that is, how these measures are to be credited against the climate targets - have not yet been decided.

For BECCS, the Government has introduced a comprehensive operating subsidy, based on the proposals of the Crossroads inquiry, amounting to over SEK 30 billion up to and including 2046. The Government has also advanced efforts to achieve verified emissions reductions in other countries, primarily by tasking the Swedish Energy Agency with developing cooperation agreements under Article 6 of the Paris Agreement, and with investigating the possibilities of purchasing emission allowances within the EU Emissions Trading System (EU ETS) from other Member States. These tasks have been allocated resources through increases in the Budget Bill.

Through the reverse auction and the Swedish Energy Agency's work under Article 6, the Government has helped to ensure that further supplementary measures are deemed achievable in the latest scenarios based on agreed policies in the climate report. Based on current budgeted funds, the Swedish Environmental Protection Agency[46] estimates that approximately 2 million tonnes of supplementary measures can be realised by 2030 and 1.4 million tonnes by 2040 and 2045, which can be compared with the target of 11.5 million tonnes in the Government's climate policy action plan.

5.6.3 Supplementary measures during the next term of office

The Swedish Climate Policy Council considers that the work on supplementary measures needs to be clarified during the next term of office. With less than five years remaining until 2030, a strategy for how supplementary measures will contribute to the Cross-Party Committee on Environmental Objectives's interim targets for 2030 should be developed as soon as possible. The Government should also clarify the approach for recording and developing supplementary measures up to 2045.

Target framework for supplementary measures

Although the Government has clarified the vision for 2045, it remains unclear how much of the emissions reductions are to be achieved through supplementary measures to meet the Cross-Party Committee on Environmental Objectives's proposed interim targets for 2030. According to the Cross-Party Committee on Environmental Objectives's proposal for interim targets for 2030, supplementary measures of up to 4.3 million tonnes may be utilised. Even if the concrete plans for BECCS up to 2030 are realised and budgeted funds lead to international climate investments generating ITMOs under Article 6 of the Paris Agreement, only around 2 million tonnes of supplementary measures will be achieved according to the agencies' assessments. The Cross-Party Committee on Environmental Objectives has also proposed a target pathway for net emissions up to 2030. If the Government is to succeed in achieving this trajectory, we assess that significantly greater emissions reductions or supplementary measures will need to be achieved, as emissions from 2024 onwards will be at a higher net level than under previously decided policies (see Chapter 3).

As time is running out before 2030, the Government should clarify as a matter of urgency whether the gap to the 2030 interim target is to be closed through sharply accelerating emissions reductions within the ESR, which would result in Sweden meeting its ESR commitment by a comfortable margin and reducing the need for supplementary measures, or through accelerated emissions reductions to meet the ESR commitment in combination with a significantly accelerated roll-out of further supplementary measures. The Government also needs to take the policy decisions required to close the gap. It is possible that the LULUCF sector will generate supplementary measures, but there are significant uncertainties in this regard (see section 5.2). We share the Cross-Party Committee on Environmental Objectives's assessment that, no later than in the next climate policy action plan, the Government should present a strategy for how it intends to build up supplementary measures in sufficient quantities to achieve the interim targets and the long-term climate target.

Decide on the accounting of supplementary measures

Supplementary measures have been available as a means of achieving the national climate targets since the climate policy framework was adopted in 2017. However, work on developing rules for accounting for supplementary measures has been delayed. Initially, this was due to a lack of regulations and guidance within the UN, but in recent years it has been due to the Government's slowness. In October 2025, the Cross-Party Committee on Environmental Objectives proposed accounting rules for LULUCF, Article 6 and BECCS. It also proposes that the Government instructs the relevant agencies to put forward proposals for accounting rules for further supplementary measures that may take place within Sweden's borders, such as biochar and DACCS.

We believe it is important for the climate policy framework that the Government takes a swift decision on how measures are to be accounted for up to 2030, based on the proposals of the Cross-Party Committee on Environmental Objectives. As the Cross-Party Committee on Environmental Objectives bases its work on what is additional to EU legislation, we also consider that the accounting rules for the period beyond 2030 need to be reviewed once the EU's climate framework for 2040 has been decided (see the recommendation on reviewing the climate policy framework in section 7.1).

Policy on permanent greenhouse gas sinks

As we have previously mentioned, there are several projects that can achieve permanent carbon sequestration through BECCS and biochar. Support is also available for these through reverse auctions (BECCS) and Climate Leap (biochar). We believe that support for the market introduction of these new technologies may be justified. In the longer term, however, we assess that a more coherent strategy is needed for how biogenic residues can best contribute to the climate transition. In scenarios at international, European and Swedish levels, BECCS is often included to a large extent, but other transitions in these scenarios also depend on green carbon atoms. We therefore wish to emphasise the importance of a coherent bioeconomy strategy that lays the foundations for future policy development at national level (see section 5.6.3).

At European level, we believe it is important that permanent sinks are given the opportunity to be accounted for and receive socio-economically effective financial incentives. Policy instruments at European level apply across the entire EU internal market and are therefore generally more cost-effective than those at Member State level. As the policy to include permanent sinks is closely linked to climate legislation for other sectors, we discuss principles for the EU's future incentives for permanent sinks in Section 6.3.

New opportunities for achieving the proposed interim target for the ESR

In its climate policy action plan, the Government has announced its intention to utilise the flexibilities permitted to meet Sweden's EU commitment under the ESR, namely, to cancel and thereby withdraw emission allowances from the ETS 1 market, and to investigate the possibilities of purchasing emission allowances from other Member States. However, the Government may not use the emission allowance used to meet the EU commitment under the ESR to also meet the national interim target in accordance with the Cross-Party Committee on Environmental Objectives's proposal.

The Swedish Climate Policy Council considers that both measures to reduce emissions in other EU countries and the cancellation of emission allowances within the ETS 1 could be cost-effective measures, depending on the price set by supply and demand for emission allowances in other EU countries, in order to achieve the new national interim target for the ESR sector by 2030, in accordance with the target framework the Cross-Party Committee on Environmental Objectives has proposed. However, utilising these measures to meet Sweden's EU commitment within the ESR contributes neither to achieving Sweden's national interim target (in the form of supplementary measures) nor to the EU achieving its climate targets, as emissions in that case are merely shifted between sectors and other EU countries. If, on the other hand, the Government does not use these measures to meet the EU commitment, but instead uses them to supplement the national interim target proposed by the Cross-Party Committee on Environmental Objectives, this will help improve both Sweden's and the EU's prospects of achieving the climate targets.

However, these supplementary measures must be weighed against the possibility of using the corresponding budgetary scope to improve Sweden's prospects of achieving short- and long-term climate targets. Given the clear advantages and disadvantages of these supplementary measures, we believe that the Government should clarify a strategy for the acquisition and cancellation of emission allowances under EU climate legislation.

Effective and sustainable emissions reductions in other countries

During the previous and current terms of office, the Government has developed its work on Article 6 measures within the framework of the Paris Agreement. In 2025, the National Audit Office carried out an evaluation of the state's acquisition of emission credits under the Paris Agreement. It makes recommendations to both the Swedish Energy Agency and the Government. It is proposed to the Government that quantitative targets for the acquisition of emission allowances be established, so that it becomes easier to plan for the acquisition of a specific volume of Article 6 credits, and that the cost-effectiveness calculations be updated. Measures for more efficient and transparent administration are proposed to the Swedish Energy Agency.

The Swedish Climate Policy Council agrees with the National Audit Office's conclusions regarding the above areas for development. To ensure the legitimacy of Article 6 measures, it is important that the Swedish Energy Agency continues to participate in projects that make a clear additional contribution to emissions reductions and that the projects also contribute to sustainable development in the country where they are implemented. The Cross-Party Committee on Environmental Objectives has proposed a cap on the proportion of ITMOs, equivalent to just over 1 million tonnes of carbon dioxide equivalents, that may be used to achieve the interim target by 2030. At the same time, there is no target for the acquisition of ITMOs. There are also no clear targets for the acquisition of ESR allowances or for the purchase of emission allowances from ETS 1. We believe that the Government should set out clearer guidelines on the extent to which the supplementary measures are to be achieved through verified climate actions in other countries.

Principles for supplementary measures in the Government's ongoing work

Overall, the Swedish Climate Policy Council considers that the Government needs to further develop its work on supplementary measures. As the Climate Policy Crossroads Inquiry proposes, this work should not be carried out at the expense of emissions reductions; rather, the starting point should be that emissions should be virtually eliminated in those sectors where this is possible, whilst other emissions should be reduced to the extent that this is feasible. In addition, supplementary measures should play a role in offsetting the remaining emissions and eventually contribute to net-negative emissions.

6 Governance and decision-making processes to achieve the climate targets

- **The Government has postponed necessary decisions.** Only around half of the measures in the Government's climate policy action plan have resulted in concrete decisions, meaning that necessary decisions are being deferred to the next Government. Decisions have been taken more swiftly in specific areas, such as nuclear power and the streamlining of permitting processes.
- **Need for an earlier and more concrete climate policy action plan.** The next action plan should be presented early in the term of office and meet the Climate Act's requirements for impact assessment, timelines and measures needed to achieve net-zero emissions by 2045. We also present proposals for other important components that should be included in the action plan.
- **The Swedish Government has generally been a driving force within the EU.** We present recommendations on how Sweden should continue to stand up for the EU's agreed climate policy up to 2030 and principles for an ambitious climate framework up to 2040 that Sweden can champion.

Time is a crucial factor in climate policy. Decisions need to be taken swiftly to improve the chances of limiting global warming. Although some climate targets are fifteen to twenty years away, the right governance and conditions must be put in place in the near future to enable long-term investments that will take Sweden towards net-zero emissions by then. Urgent and early action is also required to limit accumulated emissions along the way towards a climate target.

In this chapter, the Swedish Climate Policy Council evaluates the effectiveness of the Government's decision-making processes. We draw lessons from the decision-making processes during this term of office and make recommendations on how these can be improved and made more efficient during the next term. The chapter begins with a discussion of the Government's 2023 climate policy action plan (section 6.1), followed by an assessment of the budget bills (section 6.2) and Sweden's actions within the EU (section 6.3).

6.1 Climate policy action plan and its implementation

THE CLIMATE POLICY COUNCIL'S ASSESSMENT
Necessary decisions have been postponed. The 2023 climate policy action plan had several shortcomings, and only around half of its measures have resulted in concrete decisions.

Under Sweden's Climate Act, the Government must submit a climate policy action plan to the Riksdag in the year following a general election. One of the aims of the action plan is to set out measures for achieving the climate targets during the term of office. The Swedish Climate Policy Council must, no later than three months after the action plan has been submitted, submit a report to the Government containing an assessment of the plan.

We evaluated the Government's action plan in our 2024 report. We reached the following main conclusions:

- The Government's climate policy action plan does not live up to the requirements of the Climate Act. It disregards the interim targets for 2030 and largely lacks emissions forecasts and timelines.
- The action plan lacks specificity and places too narrow a focus on increasing electricity generation through nuclear power.
- There is no plan for how Sweden's interim targets and EU commitments for 2030 are to be achieved.
- The Government presents a misleading picture of the action plan's expected contribution to achieving the net-zero emissions target.
- The Government emphasises that acceptance and cost-effectiveness are important starting points, but there is a lack of both analysis and strategy regarding these issues.
- The action plan sets Sweden's climate transition on an unnecessarily risky path. In the short term, because emissions are rising and necessary decisions are being postponed, and in the long term because the path laid out towards net-zero emissions risks being too narrow.

6.1.1 The Government's implementation of the 2023 climate policy action plan

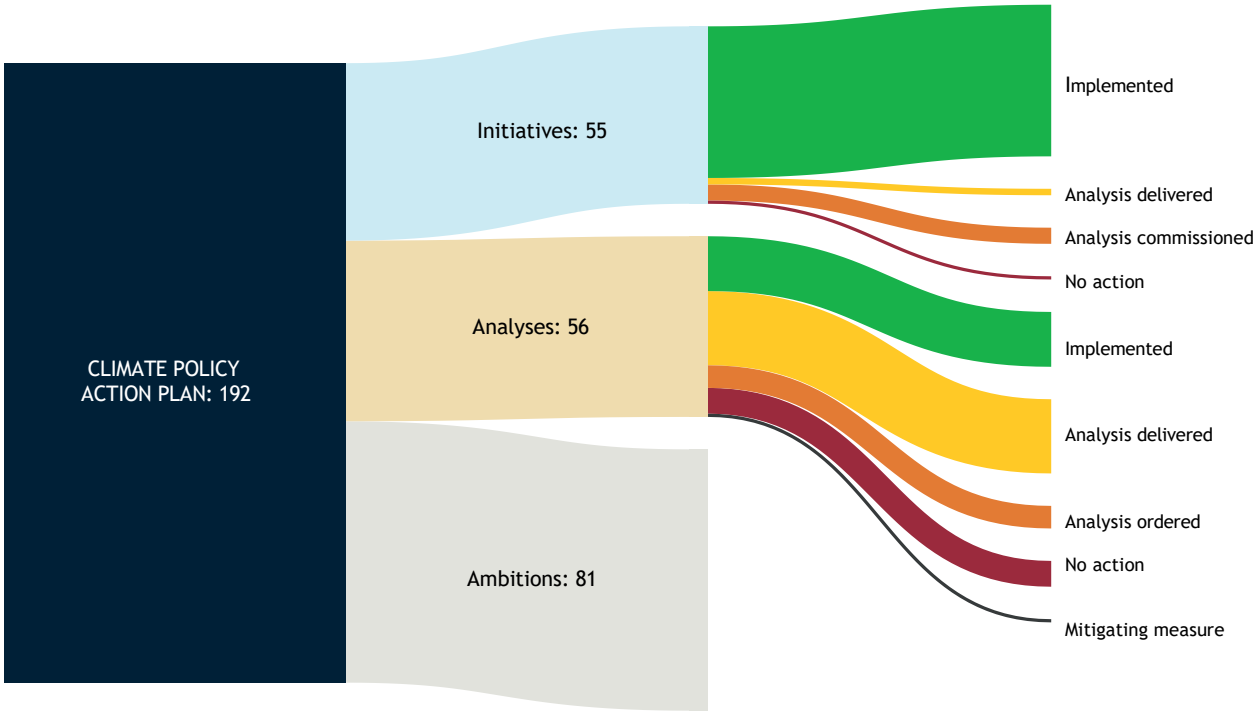
As we identified several shortcomings in the plan itself in the 2024 annual report, its implementation is not necessarily a reliable measure of how effective the policy has been in achieving the climate targets. At the same time, it has been entirely possible for the Government to address several of these shortcomings in the implementation of the policy, for example by presenting a clearer plan for achieving the targets and specifying in greater detail the policy instrument changes they intend to implement.

An overview of the Government's implementation of the climate policy action plan

In our assessment of the action plan, we noted that it comprised almost 200 announcements of various kinds. Just under a third consisted of concrete **measures**, that is, clear announcements regarding how policy is to be changed. A further just under a third of the announcements consisted of **analyses** where it was deemed necessary to investigate certain matters before a political decision could be taken. The remaining just over a third were **ambitions** that lacked a clear next step.

The Swedish Climate Policy Council has been able to monitor the Government's implementation of specific measures and analyses in quantitative terms, as shown in Figure 26. The heading *'Implemented'* (the green field) indicates that a specific policy decision has been taken in line with the action plan's announcement. The heading *'Analysis delivered'* (yellow) means that the Government has commissioned an analysis which has been delivered but that no concrete decision has yet been taken, whilst *'Analysis commissioned'* (orange) means that the Government has decided that an analysis should be carried out but that the analysis is still ongoing. The figure also includes announcements where *'No action'* (red) has been taken, and we have also identified a direct *'Counterproductive measure'* (black) that runs counter to the action plan's announcement.

Figure 26. Implementation of the 2023 climate policy action plan



Source: The Climate Policy Council's assessment based on the Government's 2023 Climate Policy Action Plan[45]

Our analysis shows that the Government has taken concrete policy decisions on just over half of the announcements we categorised as planned measures and analyses in the action plan. For nearly half of the announcements, therefore, no concrete policy decisions have been taken. Many analyses have been carried out or are currently underway. Given the timelines for these analyses, the Government will not have time to make decisions during the current term of office. Several decisions are therefore being postponed until the next term of office.

Policy instruments for achieving the 2030 targets are being carried over to the next term of office

A particularly important announcement in the climate policy action plan, which is of great significance for both long-term and short-term climate targets, is the so-called Policy Instruments Inquiry.[70] The announcement of this inquiry concerned the development of policy instruments for the period 2027-2030 to ensure that Sweden's EU commitment to the ESR is met. As the inquiry will not submit its report until May 2026, it will be impossible in practice for a new government to decide on legislative changes (though not tax changes; see section 5.1) that are to come into force as early as 2027. This means that even more robust policy instruments must be introduced from 2028, when only three years remain until the target year of 2030. The delay is largely due to the fact that the announcement of the inquiry did not come until December 2023, one year into the term of office, and that it then took a further ten months or so before the terms of reference were presented. The Swedish Climate Policy Council notes that this is a remarkably slow decision-making process for such a central issue as policy instruments to achieve climate targets in the short term.

The Government's decision-making has focused more on other aspects of the climate policy action plan. For example, the Government has moved swiftly to develop financing mechanisms to support the expansion of new nuclear power (see section 5.5). The Government has also taken the necessary decisions to bring about the first reverse auction for BECCS (section 5.6). The Government has also implemented legislative changes and taken further decisions relating to permitting processes (section 5.4). Other policy areas, such as crime and punishment and defence, indicate that effective decision-making processes depend to a large extent on political will and priorities.

Some of the ambitions in the action plan have been abandoned

It is challenging to follow up on the general statements of intent in the action plan - what we refer to as 'ambitions'. As they lack a clear next step, it is only possible to assess implementation in more qualitative terms. However, we consider that the Government has clearly departed from the following ambitions:

- 'The overall pricing of fossil greenhouse gases should be regulated on the basis of a clearly formulated long-term logic and, in a cost-effective manner, be coordinated with a common basic pricing framework at European level.' (p. 64)
- 'The Government is also continuing its efforts to ensure that the Swedish National Debt Office's green credit guarantee programme can continue to help facilitate long-term investments and thereby play an important role in the development of sustainable large-scale industrial technology, for example in the energy sector.' (p. 84)
- 'High transport efficiency is important for achieving climate, industrial and transport policy objectives in a cost-effective manner. Transport efficiency should therefore be increased.' (p. 162)

The Swedish Climate Policy Council also notes that the term of office has been characterised by a lack of a clear and long-term rationale for carbon pricing (see section 5.2). We further note that the green credit guarantees have been suspended (section 5.5) and that transport efficiency has weakened during the term of office, both in terms of policy instruments and actual developments (section 5.2).

6.1.2 Lessons for the 2027 climate policy action plan

Several lessons can be drawn from the 2023 climate policy action plan and its implementation. One key lesson is that the timeframe for implementing reforms becomes too short if the action plan is not published until December of the year following the general election, and it is only then that the government announces its intention to investigate new policy instruments. A more effective approach is to build on existing studies and, in addition, to swiftly initiate processes to produce the supporting documentation deemed to be lacking early in the term of office.
Given all the ongoing and recently concluded inquiries, such as the Policy Instruments Inquiry and the Cross-Party Committee on Environmental Objectives's report on the land-use sector, there is sound evidence in several areas to enable decisions to be taken early in the next term of office.

Existing proposals that have undergone impact assessments provide the Government with a good opportunity to set out the direction for how Sweden's EU commitments are to be met in the draft National Energy and Climate Plan, which is to be submitted by 31 June 2027 at the latest. This also improves the prospects of presenting a climate policy action plan earlier in the next term of office. We believe this should take place no later than September 2027, in conjunction with the submission of the Government's Budget Bill. This would provide a good opportunity to present the direction of legislative work alongside economic reforms in the national budget.

An important message for the Government is to ensure that the action plan meets all the 'should' requirements of the Climate Act. This means, among other things, that the action plan should be subject to an impact assessment, have a clear timeline, and include a rationale for the additional measures needed to achieve net-zero emissions by 2045. The Government Offices' processes for developing the action plan may need to be reviewed to enable a plan that better meets these legal requirements.

Based on our overall analysis and review of the 2023 climate policy action plan, together with the broader perspectives we will discuss in Chapter 7, we make the following recommendations for the development of the 2027 climate policy action plan.

THE CLIMATE POLICY COUNCIL'S RECOMMENDATION

Present a concrete climate policy action plan no later than in conjunction with the Budget Bill in autumn 2027.

- **Make use of existing proposals** from the large number of reports and government commissions that have already been carried out.
- **Use cost-effective policy instruments** that ensure, with a comfortable margin, that climate targets are met in the short term and that address any undesirable distributional effects through complementary, targeted measures that do not undermine the effectiveness of climate policy.
- **Give a standing and well-resourced mandate to government agencies** to provide input and implement the action plan, and conduct an analysis of EU climate policy.
- **Clarify responsibilities and provide municipalities and regions with more tools** to enable them to contribute further to climate targets, for example through regulations governing transport and urban planning or through climate agreements with central government.
- **Strengthen existing collaboration** with the business sector and broaden the dialogue to include other key stakeholders such as civil society, trade unions, educational organisations and academia.

6.2 The budget bills' contributions to the climate targets

The Budget Bill is perhaps the government's most important decision of the year. In the bill, the government sets out the direction of fiscal policy, together with an allocation of all budgetary resources, tax changes, certain legislative proposals and a description of the policy direction.

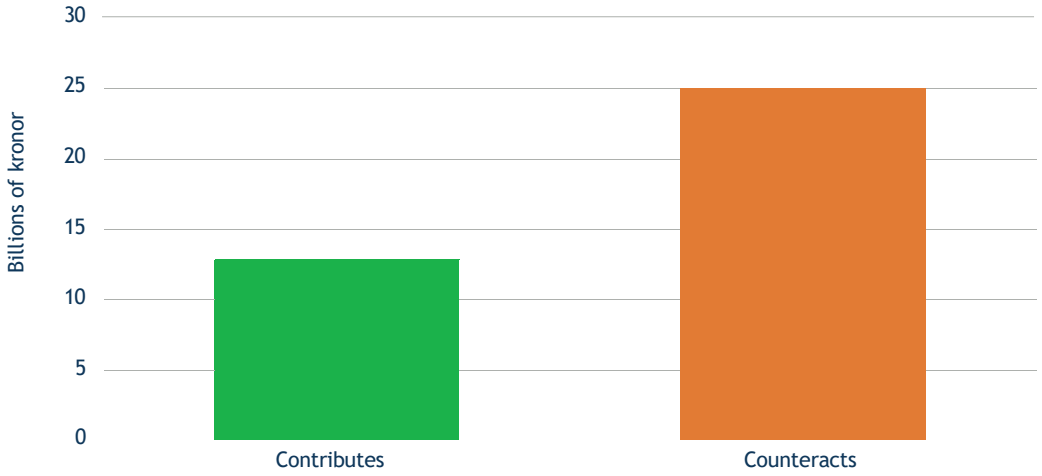
6.2.1 Most of the scope for reform is allocated to countermeasures rather than promotional measures

One measure of the Government's priorities is how it uses the scope for reform, or the fiscal space, in the budget. In this context, 'reforms' refers to newly adopted budget expenditure, i.e. increases in expenditure beyond previously estimated levels or tax changes in relation to what had previously been decided.

We have reviewed the budget reforms in the four budget bills during the term of office and identified which of the Government's budget decisions have contributed to the potential for achieving the climate targets and which budget decisions have hindered the achievement of the climate targets. This is therefore a simple form of budget analysis that does not assess the overall impact of the national budget on the potential for achieving the climate targets.

Overall, during its term of office (in the budget bills for 2023 to 2026), the Government has allocated around SEK 13 billion to budget reforms that contribute to achieving climate targets. This corresponds to approximately 5 per cent of the total reform scope of SEK 284 billion that the Government has allocated to itself for use on reforms deemed to be priorities. SEK 22 billion, or approximately 8 per cent of the scope, has been used for budgetary decisions that counteract the possibilities achieving climate targets, particularly various reductions in fuel taxation. Viewed over the entire term of office, a larger proportion of the reforms in the Government's budget bills has therefore been directed towards measures that undermine climate targets, rather than towards measures that contribute to the prospects of achieving them, as illustrated in Figure 27.

Figure 27. Summary of budget reforms that contribute to and undermine the prospects of achieving climate targets



Source: Analysis by the Climate Policy Council based on the 2023, 2024, 2025 and 2026 budget bills.

The final budget bill of the term of office was unusually expansionary, featuring substantial expenditure aimed at stimulating Sweden's economy, as well as continued support for Ukraine and increased defence appropriations. This results in a budget deficit, meaning that the Government needs to borrow 167 billion of the total SEK 1,527 billion covered by the budget. Government borrowing is therefore increasing relatively rapidly, which risks tying up a large part of the scope within the fiscal policy framework, whilst the gap to climate targets has widened. Both the Swedish Climate Policy Council and the Swedish Fiscal Policy Council have emphasised in previous reports that an analysis of the need for investment in the climate transition should have been included in the review of the fiscal policy framework carried out in 2024. This did not happen. There is a growing risk that budgetary constraints will make it difficult for the Government to bring emissions growth onto a trajectory that will lead to the climate targets being met in the coming years.

Our analysis further shows that the role of climate policy in tax policy has weakened during the term of office. A significant proportion of the total scope for reform during the term of office has been used to reduce environment- and energy-related taxes, which thus undermines cost-effective climate policy. This applies in particular to reduced energy and carbon on fuels, which have made it cheaper to emit carbon dioxide into the atmosphere. The abolition of the aviation tax and certain other minor tax changes also undermine the prospects of achieving climate targets or a more resource-efficient economy. Although the direct policy impact is small, decisions such as the increase in VAT on repairs to bicycles, shoes and clothing also send a signal. The previous lower VAT rate was intended to stimulate a more circular economy.

Cuts in environmental taxes mean that other policies must first offset this countervailing effect before any positive net effect is achieved. Furthermore, the Government loses tax revenue that could have been used for other tax cuts or investments aimed at contributing to the climate transition. The priorities in tax policy also mean that significant tax cuts have gone to car owners and drivers. This represents a not insignificant economic redistribution from other taxpayers, whilst fuel prices have fallen to historically low levels during the term of office.

During its term of office, the Government has, in an exemplary manner, given greater prominence to climate reporting in its budget presentation and increased transparency in climate policy. However, with regard to the specific budget proposals, it is difficult to see that the requirement in the Climate Act that '[t]he work shall be conducted in a manner that creates the conditions for climate policy and budgetary policy objectives to work in tandem' has been met. As the term of office draws to a close, we see that the robustness of both the climate policy and fiscal policy frameworks is being challenged.

6.2.2 How can the budget bills be put to better use during the next term of office?

The above discussion is limited to how the Government has utilised the annual scope for reform, that is, the comparatively small amounts included in each budget bill. A more comprehensive analysis should ideally cover how the state utilises the entire extensive national budget, including the appropriations that remain unchanged this year. For example, we have highlighted shortcomings in the planning process that governs major appropriations for investment in and maintenance of transport infrastructure (see section 5.2). The OECD and the EU are developing methods and support for more advanced budget analyses that could be utilised more actively by the Ministry of Finance.

Ultimately, however, budgetary policy is about political priorities between various pressing societal goals. Rising expenditure, particularly on security and defence, will during the next term of office necessitate tougher prioritisation in the state budget. It will therefore become even more urgent to identify smart synergies between different societal goals and to utilise state funds as efficiently as possible (see section 7.5.3).

6.3 Sweden's actions within the EU

The EU's climate policy provides the framework for Sweden's national climate efforts. As a significant proportion of climate policy is either decided within or influenced by the EU, Sweden's role in shaping and implementing the Union's common climate policy is of central importance. The Swedish Climate Policy Council has therefore analysed how the Government - which represents Sweden in the EU context - has, during this term of office has influenced and engaged with the EU's climate framework. In this section, we also look ahead and offer recommendations on how Sweden can contribute constructively to the EU's climate efforts, both now and during the next term of office, with a focus on the EU's climate framework up to 2040.

6.3.1 Primarily a driving role in EU cooperation during the current term

THE CLIMATE POLICY COUNCIL'S ASSESSMENT

Sweden has, for the most part, championed the EU's climate policy. During the final negotiations on the EU's 2040 climate targets, Sweden played a leading role in reaching an agreement and has helped to maintain the level of ambition in key parts of Fit for 55 package. At the same time, Sweden's domestic emissions increases and the widening gap to the 2030 targets have contributed to weakening Sweden's climate leadership within the EU.

Sweden made a predominantly constructive contribution to an ambitious outcome in Fit for 55

During its term of office, Sweden has helped to ensure that the EU's 2030 climate legislation has been finalised. During both the previous Swedish Presidency (2018-2022) and at the start of the current one (2022-2026), Sweden has been a driving force behind ambitious climate legislation in the Fit for 55 package. A key achievement of Sweden's Presidency of the Council of the European Union (Council of Ministers) in spring 2023 was that several of the then remaining and most negotiation-intensive parts could be finalised in trilogue negotiations with the European Parliament,[181] helping to maintain the level of ambition in the overall agreement on the package. A key factor in this success was that Sweden prioritised process management and compromise-building between the Member States and the Parliament. At the same time, much of the preparatory work ahead of the final negotiations had already been carried out during previous presidencies, which gave Sweden a better foundation on which to focus on reaching final political agreements.

The regulatory framework governing climate requirements for vehicle manufacturers has been the subject of renewed political debate and adjustments at EU level in 2025 (see Chapter 5). Sweden's latest position is that the current requirements for 2030 and 2035 should continue to form the basis, and that any exemptions must be strict and clearly regulated, whilst ensuring genuine and additional emissions reductions.[182]

Within the framework of discussions on individual legislative acts, however, Sweden has adopted a more restrained stance on issues affecting national implementation. This applies primarily to the negotiations on the Nature Restoration Regulation and the LULUCF Regulation, where Sweden has repeatedly advocated for greater flexibility and amendments to the implementing rules. The Government has also sent a letter to the European Commission urging it to review the LULUCF regulations.[183] Despite this, Sweden has consistently emphasised during this term of office that the EU should stick to its climate ambitions for 2030 and 2050, even in times of uncertainty and global upheaval.[184,185]

The Swedish Climate Policy Council believes that there is a risk that Sweden's actions in certain individual negotiations - where the country has adopted a more cautious stance in relation to its overarching ambition to safeguard the EU's climate targets - may undermine both the Union's collective climate efforts and Sweden's ability to achieve its own climate commitments. Such positions, for example in the negotiations on the LULUCF Regulation and the Nature Restoration Act, may undermine Sweden's credibility as a consistent and proactive actor in EU climate policy.

Ultimately, Sweden also contributed to an ambitious European climate target for 2040

In our last two reports, we have recommended that the Government unconditionally support an ambitious European climate target for 2040. A key basis for this recommendation was that Sweden did not participate in joint advocacy efforts for a high level of ambition in 2024.[27] The lack of Swedish participation in statements, letters and coalitions during 2024 signalled a less proactive role on Sweden's part in the EU's climate work. It was not until December 2024 that the Government formulated an official Swedish position supporting the European Commission's recommendation for a net emissions reduction of at least 90 per cent by 2040, which corresponds to the lower end of the range (90-95 per cent) that the European Scientific Advisory Board on Climate Change has assessed as compatible with the EU's long-term goals, but with reservations. The Government made it clear that support for the 90 per cent target applies only on condition that its implementation is deemed realistic.[186] In its position, Sweden listed several conditions of a technical, economic and negotiating nature for the target level to be considered feasible.

In 2025, Sweden took a more active role in the negotiations on the EU's climate targets for 2040. Ahead of the EU environment and climate ministers' meeting at the Environment Council in September 2025, Sweden expressed its support for the Commission's proposed 90 per cent target and argued that the process should not be delayed. Ahead of the Environment Council meeting in November 2025, where EU environment ministers agreed on a general approach to incorporate the binding 90 per cent target for 2040 into climate legislation, Sweden acted as a driving force. This development strengthened Sweden's contribution to the EU's collective climate ambition and the fulfilment of the Paris Agreement.

A restrictive approach to budgetary matters is a poor catalyst for greater climate ambition

Sweden has a long history of being among the so-called frugal Member States that are opposed to a large EU budget. Even in the ongoing negotiations on the EU's long-term budget for the next period, Sweden has adopted a frugal stance.[187]

In the process of tightening the EU's climate targets, this position has often run counter to the compromises needed to persuade other Member States to agree to higher climate ambitions. When key EU decisions on raising climate ambition have been taken, this has exclusively been accompanied by increased support for a just transition. When EU heads of state and government unanimously agreed in December 2019 on climate neutrality by 2050, this was accompanied by a decision to establish a Just Transition Fund.[188] When the heads of state and government agreed a year later on the EU's climate ambition for 2030, this included significant funding under the so-called Recovery Fund and more generous rules for the EU's Modernisation Fund, which supports the climate transition in the EU's poorer countries.[189]

Even during the current term of office, Sweden has balanced its frugal stance with its climate ambition. Sweden's position in the negotiations on Fit for 55 was to limit the size of the social climate fund that was to be established to support households and businesses affected by higher prices as a result of ETS 2.[190] As we have shown in section 5.1.2, ETS 2 has been delayed precisely to mitigate the consequences for households and businesses of the common pricing of carbon dioxide emissions. Although it is difficult to draw conclusions about counterfactual outcomes, we note that a restrictive stance in budget and support negotiations may have reduced the scope for the compromises often required to agree on higher climate ambition at EU level, as climate policy agreements have repeatedly been linked to elements of financing for a just transition.

6.3.2 Stand up for and implement the EU's climate policy up to 2030

The EU Member States share a collective responsibility for implementing the agreed climate policy and achieving the EU's climate targets. Under the Paris Agreement, the EU has a collective commitment to reduce emissions, for which the Member States are jointly responsible, with the burden of reducing emissions shared among the countries. As mentioned above, Sweden was a driving force behind the ambition of the Fit for 55 package, and we have pointed out in previous reports that Sweden should take the measures necessary to fully implement the package. Conversely, this means that attempts to renegotiate or weaken already adopted climate targets and regulations could undermine the EU's collective ability to achieve its climate goals and create uncertainty that hinders investment.

Member States' implementation of agreed climate policies through long-term, stable and predictable measures creates long-term stability and predictability for businesses, the public sector and households, enabling them to plan for and invest in the climate transition. When the EU agrees on ambitious climate policy (such as Fit for 55), it sends a clear signal about the way forward, which reduces uncertainty and strengthens the economy's resilience.[191] We find that consistent and predictable implementation of the EU's climate policy is crucial for stable planning conditions that enable investment in long-term sustainable solutions.

Conversely, this also means that any attempts to renegotiate or weaken climate targets and regulations that have already been adopted create uncertainty that hinders investment. Companies may postpone or refrain from making new green investments if future rules and targets appear unpredictable, and this uncertainty may simultaneously worsen conditions for companies that have already invested in the transition by altering business models and competitive conditions. Such delays mean that necessary emissions reductions will not be achieved and that future measures will become more expensive and more drastic. Capital and innovation costs also rise in times of uncertainty. Uncertain signals from climate policy can drive up risk premiums and the cost of financing new technologies, which ultimately makes the transition more expensive for consumers.

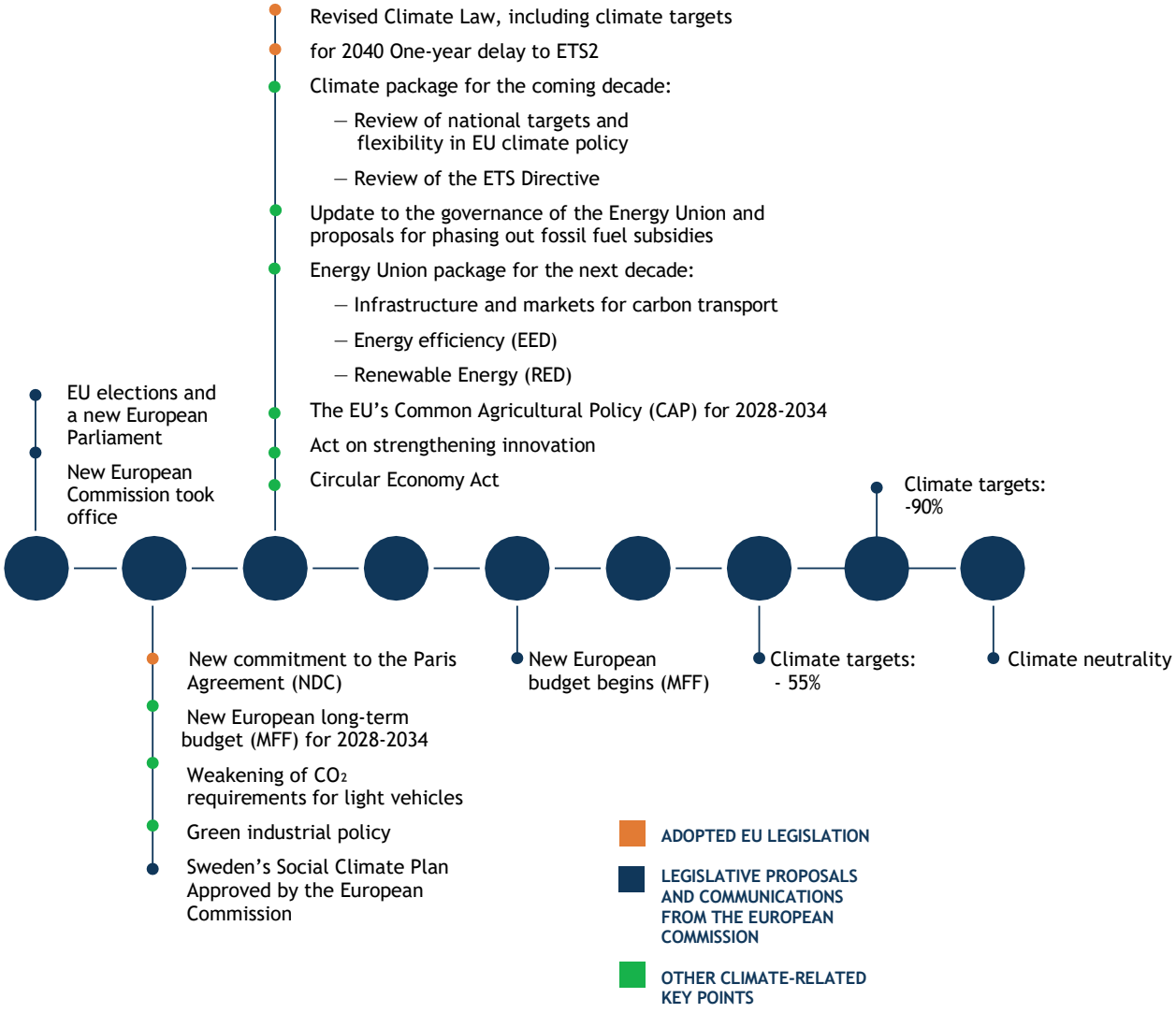
The Swedish Climate Policy Council believes that a consistent climate policy within the EU is beneficial for the Swedish economy and competitiveness, as it favours Swedish companies that have already taken the lead in the climate transition.

6.3.3 Develop an ambitious climate framework to meet the 2040 target

The coming years will be particularly important for the EU's climate policy as the Union develops a climate framework to achieve the new 2040 climate target. The revised Climate Act states that the European Commission is to review relevant EU legislation for the period after 2030 and propose a framework that enables the target to be achieved.[192] In this work, it is important that Sweden takes a proactive role at an early stage to develop policies that combine ambition with a long-term perspective for society's stakeholders. Being active in the EU's climate policy processes gives Sweden the opportunity to influence the design of regulations that will guide national policy. Early and constructive participation in negotiations increases the chance of designing rules and policy instruments that are both ambitious and compatible with Swedish conditions.

With the EU's 2040 climate target in place - to reduce net emissions by 90 per cent compared with 1990 levels - a new and coherent legislative package is now required. The forthcoming framework needs to set out how the target is to be achieved and how Member States and sectors are to contribute, whilst taking socio-economic perspectives into account, including equity considerations. This autumn, the Commission will present proposals for revisions to the EU's climate and energy legislation; see Figure 28.

Figure 28. Timeline of key interim targets in the EU's future work



Source: The Climate Policy Council's own presentation based on the European Commission[193]

The Swedish Climate Policy Council believes that Sweden should take a proactive and forward-looking role in these negotiations. Sweden's ability to be an influential and constructive player in EU climate policy is strengthened by ensuring that national policy is aligned with the EU's objectives and that commitments are put into practice. This can strengthen the country's influence and increase its ability to affect the distribution of commitments, the development of new policy instruments and the design of flexible mechanisms.

To achieve a 90 per cent reduction in net emissions, a significantly broader and more integrated regulatory framework will be required, one that covers a wider range of emission sources and activities within the sectors that are already regulated. The regulatory framework must also cover areas such as new forms of carbon sinks (alongside those already covered by EU legislation), political and technical innovation, and the fair distribution of responsibilities, burdens and benefits. We believe that the areas described in the following sections will be particularly important for Sweden to prepare positions, analyses and proposals on.

Limit and ensure strict requirements for international credits in the EU's climate targets

In the negotiations on the EU's 2040 climate targets, the Council of the European Union and the European Parliament have agreed that verified emissions reductions outside the EU may count towards the EU's 2040 climate targets up to a limit of 5 percentage points (5 per cent of the EU's 1990 net emissions). The revision of the Climate Act also states that the European Commission may propose that further measures under Article 6 of the Paris Agreement may be counted towards Member States' future commitments for the period 2031-2040.[192]

The Commission's original aim was to reduce net emissions within the Union by 90 per cent compared with 1990.[194] The new agreement, which allows for 5 per cent to be offset through Article 6 measures, means that the domestic commitment falls below the 90-95 per cent level that the European Scientific Advisory Board on Climate Change considers compatible with the Paris Agreement.[195] During the negotiations, they commented that the EU should strengthen its international climate efforts, and that Article 6 offers one of several ways to do so. At the same time, the European Scientific Advisory Board on Climate Change argued that Article 6 measures should not be used at the expense of the ambition for climate transition within the Union.[196] On the contrary, they argue that a high level of domestic ambition offers investment in new technology and reduced dependence on fossil fuel imports.

A majority of Swedish stakeholders are critical of including Article 6 measures in the EU's climate targets. They point to a dilution of climate ambition and risks of reduced credibility, as well as the possibility that investments may be diverted away from the transition within the EU. At the same time, some stakeholders welcome the possibility of using international emission credits as a means of promoting global cost-effectiveness and technological development, provided that high quality standards are ensured.[197]

The Swedish Climate Policy Council has no objections in principle to that the EU, in the same way as Sweden, develops policies for verified emissions reductions in other countries, for example through Article 6. This could be a cost-effective way of raising ambition and helping to achieve global climate goals. However, we object to the fact that Article 6 has been used in the negotiations to reduce domestic emissions reductions compared with the Commission's original approach and the range that the European Scientific Advisory Board on Climate Change considers compatible with the Paris Agreement.

We also find it concerning that the European Climate Law opens the door to potentially allowing even more Article 6 measures to help Member States meet their climate commitments in the 2030s. To ensure clarity and stability in climate policy, reduce uncertainty for investors, maintain strong pressure for transition, and equip the EU for a competitive society that is not dependent on fossil fuels, we believe that Sweden should push to prevent the scope for using Article 6 from being expanded.

We also believe it is important for Sweden to be involved in shaping the framework for the development of Article 6 regulations within the EU. Sweden has extensive experience of working

with Article 6 of the Paris Agreement and the Clean Development Mechanism (CDM) under Article 12 of the Kyoto Protocol. Through its experience with the CDM, Sweden has gained insight into potential pitfalls; in several projects, for instance, overly optimistic assumptions were made regarding the level of emissions that would have occurred without the project, which contributed to the actual global emissions reductions being lower than the credits suggested.[198,199]

The Swedish Climate Policy Council considers that Sweden should draw on this experience to ensure that credits counted towards the EU's climate targets meet strict requirements regarding additionality and their contribution to sustainable development in the host country. We welcome the fact that the Government has adopted a position that only credits of high quality and with long-term sustainable results, even after funding has ceased, should be eligible for use towards meeting targets.[200] Furthermore, we find that work on international climate initiatives should also focus on enabling the development of cost-effective policy instruments in other countries.

Work towards a cost-effective phase-out of fossil fuels within the ESR

A key issue for the EU's climate policy up to 2040 is how the governance framework for reducing emissions from the sectors currently covered by the Effort Sharing Regulation (ESR) should be designed after 2030. The Swedish Environmental Protection Agency identifies two main options: continued governance through commitments by Member States or a transition to governance via an emissions trading system.[201]

Several of the government's consultative bodies, including the Swedish Environmental Protection Agency, the National Institute of Economic Research and the Swedish Energy Agency, consider that a transition from the current ESR to an emissions trading system, for example through an expanded role for the new ETS2 emissions trading system, after 2030 could be considered, particularly if the transition contributes to increased cost-effectiveness and equivalent policy signals within the EU. At the same time, several bodies emphasise the importance of maintaining clear national commitments and responsibilities, regardless of the future governance model. Some consultation bodies also warn that the abolition of national commitments within the ESR could weaken Member States' accountability in sectors such as transport, buildings and agriculture.[197]

The Swedish Climate Policy Council generally considers emissions trading schemes to be a cost-effective policy instrument that both imposes an absolute cap on emissions and enables market-based pricing within the framework of this cap (see section 7.2). A rapid rate of emission reduction within ETS 2 could phase out fossil fuels within the EU in a cost-effective manner and contribute to convergence between Member States' emissions. At the same time, it is important that any transition from Member States' commitments to EU-wide emissions trading does not diminish Member States' responsibility to create the conditions for households and businesses to switch to fossil-free alternatives.

One challenge with ETS 2 is gaining acceptance across the EU for this pricing mechanism. The EU can contribute to this by further developing the Social Climate Fund and channelling other financial flows to help households and businesses transition from fossil-based to fossil-free heating sources and transport. It is these sectors that account for the vast majority of emissions within ETS 2. By stimulating the production of fossil-free fuels and fossil-free electricity, the EU can also strengthen its energy security, whilst the additional cost of blending fossil-free fuels or powering, for example, heat pumps and electric cars with fossil-free electricity would reduce fuel and heating costs for households. The Climate Policy Council considers that Sweden should be open to supporting further funding for a just climate transition across the EU to ensure a high level of climate ambition.

Ensure that the EU Emissions Trading System (ETS) rewards those who lead the way

Carbon pricing is generally a cost-effective policy instrument for reducing emissions, as it creates a uniform price for emissions that gives every company an incentive to reduce emissions where it is cheapest. A strength of European climate policy is that a large proportion of emissions from EU industry and electricity generation, as well as aviation and shipping, are covered by ETS 1. ETS 1 is vital for ensuring the long-term viability of all industrial projects transitioning to net-zero emissions, several of which are major projects being carried out in Sweden. For these pioneers, it is important that stable rules are established and maintained in the review of ETS 1, as the Confederation of Swedish Enterprise, together with its Nordic counterparts, has made clear in a letter to the Commission.[202] In line with the Swedish Environmental Protection Agency[203], we assess

that a continued ambitious ETS 1 is important for maintaining the pressure for transition. Any proposals that water down the ambition of the trading system should be opposed. The Government should also work towards stable and transparent rules within the Carbon Border Adjustment Mechanism (CBAM).

There is also further potential for developing ETS 1. The Swedish Environmental Protection Agency, for example, points out that the system should include waste incineration in all Member States. Furthermore, there is potential to include permanent removals in ETS 1, which we discuss further in the next section.

Integration of permanent removals into the EU's climate framework

Under the European Climate Law, the EU's post-2030 climate framework must incorporate provisions for permanent carbon sinks, namely BECCS, DACCS and biochar. Permanent removals generate collective benefits in the form of negative emissions that are currently not compensated for in the European policy mix, whilst permanent removals are deemed necessary to meet the EU's long-term climate targets.

A background report to the Swedish Climate Policy Council lists various principles that should underpin the development of policy instruments for permanent carbon sinks.[102] The following principles are applicable in a European context:

- The polluter pays principle, which means that those responsible for emissions should contribute to the cost of permanent carbon sinks.
- The cascade principle for biomass, which means that biomass is allocated to purposes that create the highest possible value for the economy and the environment.
- The principle of equivalence, which means that fossil emissions released (permanently) into the atmosphere should only be offset by carbon sequestration that is stored permanently.

A key scenario under the Emissions Trading Directive is to include permanent removals in the existing Emissions Trading System (ETS 1) and thereby allocate emission allowances to those who facilitate permanent removals. This would mean that the 'polluter pays' principle would be applied, and that the collective climate benefit would be rewarded. It would create an economic value for the sink and enable trading under ETS 1 to contribute to both cost-effective net emissions reductions and the application of the cascade principle. It would also mean that the equivalence principle is applied, i.e. that fossil emissions are only permitted if they are offset by permanent sinks.

However, integrating permanent sinks into ETS 1 presents certain challenges. A fundamental challenge is that the price of emission allowances is not expected to be high enough in the foreseeable future to provide incentives for the development and deployment of permanent sinks. Another challenge is maintaining the pressure for transition in existing sectors within ETS 1. There are also challenges regarding liquidity in the emissions allowance market as the emissions cap in ETS 1 approaches zero.

The Swedish Climate Policy Council finds that Sweden should press for the introduction of European incentives for permanent carbon sinks. We believe that the development of policy instruments should consider the benefits of integrating permanent carbon sinks into the ETS 1, whilst also considering the challenges involved. Initially, supplementary support beyond the ETS 1 may be required to facilitate market uptake. Funds from auction revenues could be used to finance this support, a financing solution that is in line with the polluter pays principle. We also consider that the Government should consider how to promote permanent sinks in scenarios where emission allowances are moving towards zero in ETS 1, and how European policy can ensure that permanent sinks do not delay the transition in other sectors within ETS 1.

Policies that increase temporary removals within the EU's climate framework

To achieve the EU's climate targets by 2040, the carbon sink capacity in the land-use sector (LULUCF) will be crucial.[72] This currently poses a challenge, as the use of biomass, and the effects of climate change on emissions and removals from agriculture and forestry, have resulted in reduced net removals in several Member States.[180] This is also the case in Swedish land use where the decline in net uptake has been evident in previous years, but this trend now appears to have been broken, as net uptake in forest land has risen again since 2022 (see section 5.2).

With regard to the design of the regulatory framework for the land-use sector (the LULUCF Regulation) after 2030, several consultation bodies highlight the importance of clear and robust governance and emphasise various aspects that need to be included to achieve this.[197] At the same time, there are differing views on how flexibility should be structured. Some call for clearer frameworks and clarifications on how flexibility between sectors should work and how a fair and effective distribution can be ensured. Others stress that the post-2030 regulatory framework should not limit the potential of the bioeconomy or the supply of forest raw materials, and propose, for example, substitution targets in various industries. At the same time, views are also expressed that climate ambition risks being undermined if flexibility between sectors remains, and that LULUCF targets and measures therefore need to be tightened. There are also proposals to introduce a cap on the extent to which LULUCF may contribute to the EU's 2040 climate targets, similar to the cap that applies to the sector's contribution to the EU's 2030 target, to ensure that emissions reductions also occur in other sectors.

With regard to the design of the targets, both the Swedish Environmental Protection Agency and the European Scientific Advisory Board on Climate Change see advantages in breaking down the targets in different ways. The Swedish Environmental Protection Agency proposes a binding baseline target for LULUCF equivalent to just over 200 million tonnes, combined with an indicative additional target that can raise the level of ambition without introducing increased legal risks for Member States.[204] Such a two-part target system can ensure stability even during periods of significant natural disturbances, whilst also allowing scope to reward additional removals under favourable conditions. The European Scientific Advisory Board on Climate Change recommends continuing to separate the targets for emissions reductions and removals, whilst formulating the targets as relative values to account for natural uncertainties in the sector. According to the Advisory Board, the regulatory framework should also be designed to account for the increasing impact of climate change on forests and land.[196] This means that the targets should not be based on historical conditions, but instead adapted to a future where storms, fires, droughts and pest infestations are expected to become both more frequent and more extensive. The target level should take such uncertainties into account.

There are various ways of designing governance within the LULUCF sector that warrant further analysis. The key point is that Sweden should work to ensure that the EU introduces a target for the land-use sector that corresponds to the net removals required for the EU as a whole to achieve its goal of reducing emissions by 90 per cent by 2040.

Another way to achieve the target is to design a framework that covers not only net emissions from the land-use sector, including carbon dioxide from agricultural land, but also other emissions from agriculture, primarily methane and nitrous oxide. The European Commission's impact assessment ahead of the 2040 target also uses an AFOLU concept that combines agriculture and LULUCF in the scenarios.[72] This is in line with the recommendations of the European Scientific Advisory Board on Climate Change and could be more effective in managing the entire land sector as a whole. The Swedish Environmental Protection Agency has noted in previous analyses that it would be challenging to set targets due to differences between countries.[204] We assess that there are potential benefits to having a common regulatory framework for agriculture-related emissions currently covered by the Effort Sharing Regulation (ESR), combined with emissions and removals from the current LULUCF Regulation, as it includes the same land, actors and measures. However, such a development is complex and requires further analysis. We also note that there are a number of challenges associated with potential AFOLU regulation. One example is that there is a greater risk that diffuse emissions of methane and nitrous oxide from agriculture will be offset by

carbon uptake in forests. There is significant potential to reduce emissions of methane and nitrous oxide through changes in consumption patterns. If these emissions are allowed to be offset by uptake, there is a risk that this will reduce the pressure on the agricultural sector to transition.

To ensure that targets can be monitored in a legally sound and effective manner, the EU needs to improve data quality and harmonise Member States' inventories. A more coherent and comparable system for monitoring, reporting and verifying (MRV) net removals is important both for evaluating the effects of measures taken and to ensure that future policy is based on reliable knowledge of developments in land and forestry. This is also highlighted by several stakeholders in sectors such as agriculture and forestry.[197] The Swedish Climate Policy Council considers that Sweden should work to support the EU in its development of a harmonised MRV system. Sweden has made significant progress in its work to improve statistics and should share this experience within the EU.

Finally, Sweden should advocate for the EU to establish a common funding mechanism for land-based measures that enhance net carbon sequestration. The European Commission is already analysing the possibilities for such a scheme, for example within the framework of the Common Agricultural Policy or as a separate fund. The voluntary purchasing club recently established under the EU's bioeconomy strategy (Joint Purchasing Initiative for Carbon Farming), in which Member States and companies jointly finance carbon-sequestering land-based measures, also demonstrates growing interest in coordinated financing and could complement future public support mechanisms. Such funding should primarily support measures with high sequestration potential, such as the rewetting of drained peatlands in agriculture and forestry or longer rotation periods in forestry. These efforts are key to both enhancing sequestration and reducing vulnerability in the land-use sector in the long term.

The importance of broader climate integration in policy

International research and expert bodies emphasise the importance of integrating climate targets into all policy areas so that climate action is not pursued in isolation.[205] Although the EU has established cross-sectoral climate targets, many crucial policy decisions are taken in sectors and areas that lie outside the scope of direct climate legislation, such as agriculture, energy, industry and funding frameworks. If climate targets are not integrated into these areas, climate governance will be undermined. The European Scientific Advisory Board on Climate Change emphasises that the EU's climate targets can only be achieved if emissions reductions occur across all major sectors of society.[196] Subsidies for fossil fuels are a clear example of a lack of integration of climate targets into broader policy, which hinders the climate transition. Although the EU's climate targets have already been integrated into several policy areas, more effective integration could strengthen climate governance. This is also in line with Article 11 of the Treaty on the Functioning of the European Union,[206] which stipulates that environmental protection requirements must be integrated into the formulation and implementation of the Union's policies and activities.

Sweden should work to ensure that the climate transition becomes a key component of the EU's forthcoming legislative package, including the revision of EU energy, transport and agricultural policies, as well as in the negotiations on the EU's long-term budget. Sweden can contribute to the development of a more proactive and technology-driven green innovation policy at EU level. Such an approach can in many cases be more cost-effective when designed and implemented jointly within the Union, whilst complementary national efforts remain necessary.[207,208] Climate is also increasingly linked to issues of competitiveness and preparedness at EU level, creating new opportunities to integrate climate objectives into broader political strategies.

The European Commission's proposal for a new multiannual financial framework (MFF) for 2028-2034 includes a new approach involving national and regional partnership plans.[209] There is also a horizontal target that 35 per cent of the EU budget should be allocated to climate and environmental measures.[210] At the same time, EU rules on climate tracking and crediting have become more generous in several contexts, which may mean that even investments such as railways and certain energy initiatives, such as nuclear power, can be counted as climate-related. This could make it administratively easier to reach the target percentage, without

necessarily indicating what proportion of the budget is allocated to measures that directly reduce emissions. According to the Commission's proposal, the national and regional partnership plans are to serve as the tool through which Member States pool investments and reforms, and they are to be designed to support the EU's priorities, including the green transition.

The new Common Agricultural Policy (CAP) is also being shaped within the framework of the budget, making the budget negotiations a key opportunity to strengthen the climate focus of agricultural support and conditions. We believe that, in its work on the EU's next long-term budget, the Government, with the help of relevant agencies, draw up a comprehensive report identifying which reforms and investments should be prioritised in the national and regional climate partnership plans.

In previous reports, we have highlighted the need for stronger governance of climate work within the Government Offices.[211] We believe that the ministries responsible for relevant areas should be given clear mandates to include climate analyses in EU negotiations within their areas of responsibility. This requires that agencies with expertise in both climate and sectoral matters are given the mandate and resources to provide relevant input in good time ahead of negotiations.

Principles for the EU's climate framework for 2040

Our overall conclusion is that the Government should prioritise work on the EU's climate framework for 2040, as it could have significant implications for the EU's and Sweden's climate transition. We submit the following recommendation to the Government.

RECOMMENDATION OF THE CLIMATE POLICY COUNCIL

Work to ensure that the EU Fit for 55 package is implemented by 2030, as agreed, and take a proactive role in developing an ambitious European climate framework for 2040. Push for:

- **Strengthening the EU Emissions Trading System so that it provides incentives to lead the way.** Maintain a steep reduction in the total number of emission allowances and phase out free allocation. Develop governance to promote investment in the capture of both fossil and biogenic carbon dioxide and work to include more emission sources in the system.
- **Phasing out fossil fuels in a cost-effective manner.** Work towards a rapid rate of emission reduction within the ETS 2 emissions trading system, whilst maintaining national responsibility to create the conditions for the phase-out.
- **Developing a framework that strengthens carbon sinks.** Advocate for a target for the land-use sector (LULUCF) that takes into account increased climate-related risks, as well as support for increased carbon sequestration through EU-wide funding.
- **Advocating against expanding the limited amount of international carbon credits (Article 6) that may be used to achieve the 2040 target.** Also ensure that the credits have high environmental integrity and are sustainable in the long term.
- **Strengthening climate mainstreaming across all EU policy areas.** Work to ensure that the climate transition becomes an integral part of future EU legislation on energy, transport, agriculture and the long-term budget.

7 Overarching perspectives to achieve the climate targets

- **Much of the current parliamentary term has been characterised by unnecessary and protracted uncertainty regarding the goals, direction and policy instruments of climate policy.** The Cross-Party Committee on Environmental Objectives's proposal for an updated 2030 target, however, has broadened parliamentary support, increased clarity and strengthened the link to Sweden's EU commitments.
- **The cost-effectiveness of climate policy has increased at European level but decreased at the Swedish level.** Cost-effective policy instruments should be prioritised during the next term of office, and distributional effects should primarily be addressed through complementary, targeted measures, not by abolishing or weakening effective policy instruments.
- **There is broad support for effective climate policy, which policymakers should capitalise on** by proposing policy instruments that are sufficiently robust to achieve climate targets. The next climate policy action plan should be accompanied by a distributional analysis to serve as a basis for an objective discussion on the economic impacts of climate policy.
- **Broader stakeholder collaboration and a clearer role for municipalities and regions** have the potential to strengthen Sweden's climate transition during the next parliamentary term.
- **The Government should amend the directives of the relevant agencies and strengthen their analytical capacity.** This would help provide the Government with a better basis for both the development of national policy instruments and proactive work on the EU's legislative package for the 2040 target.

Following the sector-by-sector review in Chapter 5 and the examination of decision-making processes in Chapter 6, this chapter presents an evaluation of the policy. Here, we evaluate the policy from a number of overarching, cross-sectoral perspectives that are essential for achieving a sustainable transition to net-zero emissions. These are analytical perspectives that we are continually developing and which we have also used in various forms in previous reports.[212] The main focus is on the most recent term of office, with some retrospective analysis of the entire period since the introduction of the Climate Act in 2018.

7.1 Vision and long-term perspective

THE CLIMATE POLICY COUNCIL'S ASSESSMENT

This term of office has been characterised by uncertainty regarding the objectives and inconsistency in the development of policy instruments.

Much of the last term of office has been characterised by uncertainty regarding the goals and direction of climate policy. The current Government announced proposals early on to lower the reduction obligation and reduce fuel taxes, which would undermine the chances of achieving the 2030 targets, without presenting any proposals that could offset the expected increases in emissions. Although the Government stated that the targets remained unchanged, uncertainty arose early on. This was compounded by the fact that the Government described the 2030 targets more as 'checkpoints'[45] than as targets, and attached significantly greater importance to the long-term net-zero target.[q]

In the Government's 2023 climate policy action plan, the Government announced that 'the Cross-Party Committee on Environmental Objectives should be tasked with reviewing the design of the national interim targets so that they are better aligned with Sweden's commitments within the EU.[45] However, the committee was not appointed until January 2025. The inquiry led to a unanimous report from the Cross-Party Committee on Environmental Objectives, which represents significant progress in that all parties in the Riksdag now support the targets in the climate policy framework. Furthermore, both the target trajectory and the definitions of supplementary measures have been clarified. The link between the national climate targets and the EU targets has been strengthened and made clearer.

However, it took the Government almost four years to initiate and implement this update, whilst the gaps in target achievement have widened. The Swedish Climate Policy Council has previously pointed out that the protracted process has contributed to uncertainty surrounding the targets, which has undermined the prospects of achieving them. Once the new targets have been adopted by the Riksdag, there remains only one term of office before they are due to be achieved.

The situation is similar in key sub-areas, such as energy efficiency. In this area too, the Government has contributed to uncertainty regarding current targets and the direction of policy, whilst the majority of the term of office has passed before any new targets have been decided. In last year's report, the Swedish Climate Policy Council recommended that the Government set out a vision and strategy for the agricultural sector's contribution to the climate transition. This has yet to be done.

In contrast to the protracted processes described above stands the target for electricity generation. In its first policy statement in autumn 2022, the Government announced that the target would be 100 per cent fossil-free electricity generation by 2040, rather than, as previously, 100 per cent renewable electricity generation. In this area, the Government has been clear and proactive in strengthening the regulatory framework and improving the conditions for new nuclear reactors in Sweden. However, the Government chose not to seek broad support in the Riksdag but has taken these decisions based on its own parliamentary basis. Combined with contradictory signals regarding investment conditions for other forms of fossil-free power generation, this has created a different kind of uncertainty which has contributed to the current lack of new investment decisions in any form of fossil-free electricity generation in Sweden (see section 5.5).

Historically, Swedish climate policy has sought to employ general, uniform economic instruments combined with overarching emissions targets rather than sector-specific targets, as the latter risk leading to sub-optimisation and reduced cost-effectiveness. The Swedish Climate Policy Council believes there are good reasons for this overarching approach.

The lack of explicit ambitions or targets in key sectors such as agriculture or forestry creates uncertainty about what needs to be done, by whom and when. And this leads to passivity rather than action and innovation. This applies not only to businesses and citizens but also to the Government's own

q Formally speaking, the 2030 and 2040 targets are interim targets in the environmental target system, the same as the more long-term net-zero target.

r The previous target also did not rule out the continued use of nuclear power: 'It is a target, not a cut-off date that prohibits nuclear power, nor does it entail the closure of nuclear power stations by political decision.' Prop. 2017/18:228, p. 17.

sectoral agencies. This gives rise to the opposite risk, namely that an unclear direction contributes to cost-effective measures not being implemented. A large majority in the parliamentary Cross-Party Committee on Environmental Objectives considered that the sectoral objective for domestic transport played an important role in stimulating engagement, innovation and transition in the transport sector.

'Inconsistency' has been a frequently used term in our dialogue meetings with stakeholders in the climate transition. This was also highlighted in the OECD's evaluation of Swedish climate policy.[213] A lack of long-term vision and consistency in policy risks undermining stakeholders' confidence in the policy and reducing their willingness to invest in the Swedish climate transition. Relative political stability across several parliamentary terms and changes of Government has otherwise been a key asset for Sweden and a primary objective of the climate policy framework.

Restoring confidence in climate targets and clarifying the vision

During the next term of office, confidence in climate targets must be restored through policy measures that provide sufficient and clear conditions for the targets to be achieved. Our discussions with key players in the climate transition show that they have become more pessimistic about the chances of achieving the targets, and that the main reason is considered to be that policy is too weak.

In addition, the next Government should initiate a review of Sweden's interim targets for 2040 and the climate policy framework. The Swedish Climate Policy Council shares the current Government's assessment, set out in the climate policy action plan, that Sweden's interim targets for 2040 should be reviewed once the EU's 2040 legislative package is in place. The European Commission is expected to present proposals for this legislative package in 2026, and negotiations are likely to continue into the early part of the next term of office period. As soon as the picture regarding the new EU legislation becomes clearer, the Government should instruct the parliamentary Cross-Party Committee on Environmental Objectivesto analyse the need to revise Sweden's national interim targets for 2040. It is essential to provide clarity to stakeholders as early as possible, and with continued broad parliamentary support, regarding what Sweden needs to achieve over the next decade, thereby avoiding the current situation of uncertainty so close to the target year of 2030.

As part of the review of the 2040 interim target, the Government should also commission the Cross-Party Committee on Environmental Objectives to assess how the climate policy framework can be developed. When the framework was adopted in 2017, Sweden was one of the first countries to introduce such legislation. Since then, a large number of countries have developed similar frameworks. The Swedish Climate Policy Council believes that lessons should be drawn from other countries regarding the institutional conditions for the climate transition in order to further strengthen the clarity and long-term nature of the policy. There will also be lessons to be learned after the first decade of the current framework, for example regarding how Sweden's national planning and evaluation cycle works in relation to the EU's equivalent processes. In this context, there are also lessons to be learnt from the fiscal policy framework, which includes a built-in rule requiring periodic parliamentary review every other parliamentary term, i.e. every eight years.

In connection with the review of the climate policy framework and the 2040 interim target, we believe that the Government should also take the opportunity to commission the Cross-Party Committee on Environmental Objectives to develop an international climate strategy (see the reasoning in section 7.5).

THE CLIMATE POLICY COUNCIL'S RECOMMENDATION

Develop the Swedish climate policy framework up to 2040.

- **Review the national interim target for 2040** to ensure that it is more closely aligned with EU climate legislation.
- **Evaluate and develop the climate policy framework** based on the experiences of the past decade and drawing inspiration from other countries' climate frameworks.
- **Develop a strategy for Sweden's international climate policy**, with the aim of better integrating climate negotiations, climate diplomacy, and trade, investment and aid policies.

7.2 Cost-effectiveness

THE CLIMATE POLICY COUNCIL'S ASSESSMENT

The cost-effectiveness of nationally determined climate policy has declined. This is a consequence of increased volatility, lower carbon pricing and technology-specific initiatives. At EU level, however, cost-effectiveness has increased during the term of office through strengthened and expanded emissions trading and common vehicle requirements.

The Swedish Climate Policy Council defines cost-effective climate policy as policy that enables climate targets to be achieved at the lowest possible socio-economic cost. This means that the policy needs to combine sufficient impact - that is, reducing emissions so that climate targets are met - with the lowest possible socio-economic costs. Cost-effectiveness can sometimes be quantified as the cost in pounds per tonne of carbon dioxide equivalent reduced, although the results are often heavily dependent on factors such as time horizons and system boundaries and may therefore be difficult to compare. A qualitative assessment is also often required and is sometimes the only option. This applies in particular to policy instruments that do not directly reduce emissions but rather create the conditions for doing so, such as measures to streamline permitting processes, investments in the electricity grid and skills provision.

For climate policy to be cost-effective, it must first and foremost focus on addressing the barriers that prevent individuals and businesses from having socially appropriate incentives to make decisions on their own that are consistent with achieving climate targets - in other words, what economists typically refer to as market failures. This requires policies that internalise the costs and benefits of the transition. In general, policy is usually regarded as more cost-effective if it aims to:

- design policy instruments so that they target identified market failures,
- be long-term and predictable,
- set a sufficiently high price on carbon dioxide and apply this broadly and consistently across the economy,
- design policy instruments that are as technology neutral as possible,
- design any compensatory measures so that they do not undermine these principles.

A mix of several different policy instruments, rather than a single instrument, is normally required for a cost-effective climate policy.[22,214] Different types of policy mixes may also be needed at different times, as the transition in a sector encounters different obstacles depending on how far the transition has progressed.[215] Carbon pricing is a key policy instrument for cost-effective climate policy, but it therefore needs to be supplemented with other policy instruments that address further market failures, such as insufficient technological development of climate-friendly technologies and the corresponding infrastructure. Furthermore, investments with long lead times and high risks, such as those in infrastructure and industrial transition, need to be initiated in good time if long-term climate targets are to be met on schedule.

Public investment is needed in enabling infrastructure (such as railways, electricity grids and charging infrastructure) and public funding for research and innovation (for example, through the research funding programmes run by Vinnova, the Swedish Energy Agency and Formas). Furthermore, regulations, standards and, in some cases, bans are needed to create clear, long-term expectations and drive technological leaps when market development would otherwise be slow (for example, the EU's CO_2 requirements for new vehicles or regulations governing waste streams), and which also facilitate coordination, thereby reducing costs for businesses. In addition, 'green' government interventions in the form of targeted investment support for companies and public risk-sharing may be justified, not least when new technology is capital-intensive and private financing is limited (for example, Industry Leap or reverse auctions for BECCS). Similarly, demand-side incentives that accelerate market introduction and generate clear economies of scale (such as green public procurement and market introduction support for electric vehicles) may sometimes be justified to avoid

society becoming locked into old fossil-fuel-dependent investments.[207, 208] Taken together, this means that policy should normally shift its focus over time from building knowledge and capacity in the early stages to, increasingly, allowing pricing and competition to drive efficiency gains once the technologies and markets have matured.

The state plays several roles in this regard: as a regulator, facilitator and coordinator, and sometimes as a risk-sharer or active investor. The state can contribute through targeted initiatives and its own investments where these are socio-economically viable, but where the scale, time horizon, risk or distribution of benefits of the investments mean that they are not profitable or feasible for private investors. This applies in particular to infrastructure, for example in transport and energy, where the benefits are system-wide but the costs are local or individual. State investment support is another example where the state can contribute, such as through the Climate Leap scheme, where the state contributes to socio-economically cost-effective emissions reductions that would otherwise not be achieved in time (such as charging infrastructure and biogas production) and Industry Leap, where the state shares the risk in technology transitions and demonstration projects. For certain types of investment, factors such as uncertainty, long lead times and high initial costs may cause private actors to hold back, whilst significant societal benefits in the form of, for example, rapid emissions reductions, innovation and knowledge dissemination justify public intervention and support.

The state can contribute to risk-sharing by assuming certain risks from private investors; one advantage of this is that the state can normally borrow at significantly lower interest rates than private investors, but the level of risk-taking needs to be carefully weighed up. Historical experience of industrial policy shows that state aid can be costly if it locks in resources or lacks clear objectives and phase-out strategies. Therefore, Swedish support programmes for specific sectors or technologies should be designed with a clear purpose and only when broader enabling measures are not deemed capable of achieving the objective.[216]

Cost-effectiveness has declined during the term of office

During its term of office, the Government has repeatedly emphasised that climate policy should be cost-effective, a view with which the Swedish Climate Policy Council concurs. However, the Council notes that the Government has, to a large extent, used the term without operationalising it.

Our overview of the Government's approach and key decisions during the term of office, presented below, shows that the Government has implemented both measures that contribute to making policy more cost-effective and measures that reduce cost-effectiveness. Our overall assessment is nevertheless that cost-effectiveness has declined during the term of office. This is primarily because the Government's policies have increased emissions, heightened uncertainty and the political risk for investors, has largely focused on technology-specific initiatives and, not least, on reducing the price of carbon emissions, which is widely regarded in the relevant academic literature as highly cost-effective.

Policies that we assess have contributed to more cost-effective policies:

- **EU-wide climate targets and policy instruments.** The Government has advocated for ambitious climate targets and tightening of the EU Emissions Trading System (ETS) 1. EU-wide economic policy instruments strengthen the conditions for long-term and cost-effective climate policy and transition.
- **Implementation of ETS 2.** The Government has decided to introduce the ETS 2 emissions trading scheme in Sweden as early as 2027, with broader coverage than required by the EU directive (including agricultural and forestry machinery), which will result in more comprehensive carbon pricing. The introduction now looks set to be delayed until 2028 due to new EU decisions.

- **More efficient permitting processes.** The Government's efforts to streamline permitting processes and similar long-term initiatives to create the right conditions reduce barriers to investment, thereby lowering the costs of the transition. Provided that the protection of human health and the environment is maintained, this also helps to manage the negative side-effects (externalities) that the permitting processes are designed to address in a more cost-effective manner.
- **Guidance on assessing the cost-effectiveness and feasibility of climate policy instruments.** In 2024, on behalf of the Government, the Swedish Environmental Protection Agency and the National Institute of Economic Research jointly presented guidance for public agencies on assessing the effectiveness of climate policy. This guidance can help to improve and harmonise the evidence base on which the Government bases its policy.

Policies that we assess have undermined cost-effective policy:

- **Increased inconsistency in climate policy.** The Government's political inconsistency relates both to the actual policy instruments and to how it communicates its climate policy and has increased the political and financial risk associated with investments in the transition. This affects the willingness to invest in green industrial initiatives, investments in renewable electricity generation, and the purchase of electric vehicles by households and businesses. Uncertainty is generally detrimental to socio-economically efficient investments.
- **Eroded carbon pricing at national level.** The Government has reduced taxes on transport fuels and introduced further reductions on agricultural diesel. We believe that consistent and sufficiently high carbon pricing is key to cost-effective climate policy and should be given higher priority during the next term of office.
- **Lowered reduction obligation.** The Government's lowered reduction obligation has led to a sharp increase in the use of fossil fuels. This increases the need for more drastic emissions reductions in the future, potentially requiring more costly measures. We consider the reduction obligation to be a relatively cost-effective policy instrument in the short term (see section 5.1.3). It is one of the few policy instruments that can reduce emissions sufficiently in the short term, but should be viewed as a transitional measure until the vehicle fleet is fully electrified.
  The reduction obligation also indirectly contributes to higher prices for fossil fuels, which creates incentives for the transition. It also promotes investment in the refinery sector's transition, which is needed to make fossil-free fuels available to aviation and shipping, where the transition is more difficult than for road transport. However, the volatility in the scope of the reduction obligation during the term of office has resulted in significant adaptation costs for the refining sector.
- **General compensation for increased energy costs, whether already decided or promised, undermines cost-effective climate policy.** This primarily concerns the Government's reduced taxes on fuel, price caps to protect against temporarily high electricity prices, and pledges to fully compensate consumers and businesses for the costs of the EU Emissions Trading System (ETS 2). Such compensation for increased costs, which directly neutralises cost-effective policy instruments, undermines a cost-effective transition. We consider that there are other distributional policy instruments that are better suited to compensating vulnerable groups whilst simultaneously enabling effective climate policy (see section 5.1.3).
- **Extensive technology-specific subsidies for new nuclear power without a cost-effectiveness analysis.** The Government has described new nuclear reactors as its single most important climate policy measure, but this is being implemented without broader analyses of the socio-economic costs in relation to other, less technology-specific, strategies for fossil-free electricity systems. The focus of the Government's analyses is on how new nuclear power should be built, not on whether new nuclear power should be built. There is therefore a significant risk that the Government will not choose the most cost-effective development of the electricity system. Today, there are several technologies for fossil-free power generation that compete in the electricity market. This is not a situation that would normally justify extensive subsidies for a specific, designated technology - one which, moreover, has a history of project costs that are difficult to control - but rather one that would normally call for more technology-neutral

policy instruments. Different types of generation contribute different types of system services to the electricity system (power regulation, frequency control, etc.) for which markets, alternative pricing systems or more general policy instruments are also gradually being developed.

- **A rejection of almost all offshore wind projects in the Baltic Sea.** By effectively excluding the entire Swedish part of the Baltic Sea from the possibility of developing offshore wind power, on the grounds of defence interests, the Government risks driving up the costs of fossil-free electricity generation by severely limiting competition.
- **Weak policy instruments in major sectors such as agriculture and the land use, land-use change and forestry (LULUCF) sector.** The Government has largely avoided deciding on climate policy instruments within the agriculture and land-use sector, where incentives are needed to increase carbon dioxide uptake in forests and soil. When entire sectors are in this way more or less exempted from stringent policy instruments, there is a significantly increased risk that socio-economically cost-effective measures will not be implemented.
- **Failure to require impact assessments in impact assessments.** The Government refrained from implementing previously consulted proposals requiring the reporting of climate impacts of relevant proposals from inquiries and agencies, through the Ordinance (2024:183) on Impact Assessments, contrary to recommendations from both the Swedish Climate Policy Council and the Cross-Party Committee on Environmental Objectives. Being able to assess the impact of various policy instrument proposals is a fundamental prerequisite for even being able to discuss the cost-effectiveness of the proposals.

Justified investment support that needs to be continuously evaluated and developed

The Government has also made changes to a number of investment support schemes which we consider to be reasonably cost-effective, but where the design of the schemes or the Government's administration of them limits their cost-effectiveness. We believe that investment support schemes such as Climate Leap, Industry Leap, support for BECCS and market introduction support for electric vehicles, as described below, have generally been well-founded and have helped to accelerate the transition. However, we wish to emphasise that there is a general risk that such direct support may become too technology-specific and ineffective, as it risks providing support for investments that would have been made anyway, even without support. Therefore, the support schemes need to be continuously evaluated and developed, and phased out where necessary, when they no longer contribute to the transition in a cost-effective manner. Furthermore, the Government's unpredictable handling of several of the support schemes has limited their cost-effectiveness.

- **Increased funding for Climate Leap and Industry Leap**. The Government's increased funding for these state investment support schemes has reduced investment costs and financial risks associated with new technology and infrastructure. This type of support may be justified to facilitate necessary investments but requires careful assessment to avoid inefficiency. Evaluations of Climate Leap have shown that the initiatives are generally cost-effective and have gradually led to the development of priorities.[217] However, the inconsistency in management described in section 5.4.2 undermines overall socio-economic efficiency.
- **Market introduction support for electric vehicles.** At various times, the Government has introduced, extended, developed and abolished different types of purchase support for electric vehicles (passenger cars, trucks and machinery). Such support is important in the early stages to help achieve price parity between electric and fossil-fuel-powered vehicles, thereby accelerating the pace of electrification. The subsidies need to be continuously monitored and phased out once electric vehicles are competitive on market terms. However, the Government has managed the subsidies inefficiently. The short extensions of the purchase subsidies for trucks and the long processing times have limited companies' willingness to invest in new electric trucks. The fact that the Government abolished the broad electric car subsidy for passenger cars at short notice, on the grounds that the costs to the public purse were rising too quickly, also caused new sales of electric passenger cars to stall.

s For more details on the agricultural sector, see the Swedish Climate Policy Council’s 2025 report.

This will lead to higher emissions for many years to come and risks leading to increased costs when more expensive alternative measures have to be taken later on. A more controlled and gradual phasing out and development of the electric car subsidy would have been preferable to the current approach of abruptly abolishing the entire subsidy only to introduce a new, more limited electric car subsidy a few years later.

- **Suspended credit guarantees.** The Government has suspended its green credit guarantees for major industrial projects, despite the fact that the state is well placed to share the risk in large projects with significant societal benefits, provided that the risks are analysed carefully. Furthermore, as the state is to charge a risk premium for the credit guarantees, they should, at least in theory, not result in any fiscal costs. It is good that the support schemes are being evaluated, but we believe that the credit guarantees should not have been suspended before the evaluation is complete.
- **Support for BECCS.** New, substantial support through a reverse auction to stimulate the expansion of BECCS. Sweden is the first country in the world to introduce such support and is contributing to the development of knowledge and technology, both nationally and globally, regarding new technologies for permanent sequestration. The short-term cost per tonne of reduced carbon dioxide emissions is comparatively high, but the support is likely to contribute to the dissemination of knowledge, technological development, market development and reducing the risk for similar projects worldwide.

Good opportunities to increase cost-effectiveness in the future

We believe there is good potential to improve the cost-effectiveness of climate policy during the next term of office, including through the following measures:

- Continue to work towards long-term, stable emissions trading systems within the EU that are sufficiently ambitious to achieve the net-zero emissions target on time.
- Raise the level of carbon pricing in national climate policy, particularly for fossil fuels.
- Conduct a broader socio-economic analysis of various strategies for a future fossil-free electricity system and subsequently secure broad majority support in the Riksdag for the chosen path.
- Continue to develop support schemes for households, businesses and public organisations to promote investments in the climate transition that would otherwise not take place.
- Develop policies in sectors where climate governance is currently weak, not least in agriculture and the land-use sector.
- Work to ensure that policy contributes as far as possible to creating stable and predictable conditions for investment.

All these points are discussed in more detail in other sections of this report.

7.3 Acceptance and engagement - just transition

The Government emphasised in its climate policy action plan that public support is crucial for the transition to succeed.[45] We share this assessment but noted in our evaluation of the plan that it lacked both analysis and strategy regarding how the Government intended to work for acceptance, participation and engagement to actually be achieved and sustained over time.[37] At the same time, consistent research and opinion polls show that there is broad public support for the climate transition, and an expectation of increased political action.[218]

We have conducted in-depth studies on acceptance during this term of office, including through the background report 'Social acceptance of climate policy - what does the research say?'[219] In summary, several factors emerge that are important for public acceptance of climate policy instruments.

The two most important factors are considered to be:

1. perceived justice - particularly distributive justice (the distribution of costs and benefits) and procedural justice (how decisions are made and whether the process is perceived as open, understandable and fair)
2. perceived effectiveness - citizens need to believe that the policy instrument actually reduces emissions and contributes to the achievement of the targets.

Thereafter, three further key factors emerge, relating to:

3. perceived economic consequences - resistance arises when households feel they are bearing an unreasonably heavy economic burden.
4. trust - confidence in institutions and decision-makers is strongly linked to policy acceptance.
5. individual factors - for example, climate anxiety, ideology and fundamental values.

We can see that these factors interact; for example, perceived costs are influenced by how fair and understandable the process is.

As we now look back on the Government's term of office, the impression remains that it has not presented a clear strategy for how it intends to work to increase support for the new measures and strengthen the policy instruments required to achieve the climate targets. Certain individual decisions have been explicitly justified on the grounds that they are expected to increase acceptance of the transition. The Government thus appears to focus primarily on the economic consequences of policy instruments (point 3) and perceived justice (point 1). This applies in particular to:

- **Reduced fuel taxes and a lower reduction obligation** (section 5.2).
  As the Government has not presented any other policy instruments capable of bridging the gap that has emerged in relation to the climate targets, this does not appear to be a 'new' policy direction with a better chance of gaining wider acceptance, but rather a retreat, which was subsequently followed by a partial restoration of the level of the reduction obligation. Furthermore, section 5.2 shows that household expenditure on fuel is at a historically low level, which illustrates that the Government and other leading politicians themselves influence the perception of fairness or high prices through the way they choose to describe the climate transition.
- **The Social Climate Plan - targeted support for electric cars in rural areas** (section 5.2). The Swedish government decided early on to allocate all available funds under the plan to a new, targeted electric car subsidy. Its stated aim is to facilitate the transition to electric cars for lower-income households and in those parts of the country where there is virtually no access to alternatives to private cars, thereby contributing to distributive justice.
- **Measures to increase local acceptance of onshore wind power** (section 5.6).
  In the 2025 national budget, the Government allocated funds for a range of measures aimed at compensating for perceived injustices and increasing support for the expansion of onshore wind power. No support has yet been paid out, and the Government has not yet made a decision regarding support for local residents.

We believe that, in its work on both the climate policy action plan and the updated National Energy and Climate Plan (NEKP), as well as the Social Climate Plan, the Government has underestimated the importance of procedural justice, as well as other values with stronger public support and stakeholder dialogue (see section 7.4).

We also believe that, during its term of office, the Government has placed too narrow a focus on issues of fairness specifically for those who drive their own cars. In addition to the targeted electric car grant, the scrappage scheme linked to the purchase of an electric car was also intended to help lower-income households. Compared with other Member States, the impact of the ETS 2 emissions trading scheme on housing costs will certainly be small, but it would have been valuable to conduct a broader analysis and possibly include more measures in the transport sector within the Social Climate Plan. An electric car is not the solution for all vulnerable households, even with some form of subsidy. The work on the Social Climate Plan could also have been used to conduct a broader analysis of the distributional effects of climate policy and the associated issues of public acceptance. In this respect, the Social Climate Plan turned out to be something of a missed opportunity, not least since the Government has strongly emphasised acceptance issues during its term of office.

In summary, we recommend that the Government translate the documented public support for ambitious climate policy into stable acceptance over time by:

- prioritising effective and cost-efficient policy instruments and addressing undesirable distributional effects through targeted, time-limited supplementary measures - rather than abolishing or weakening effective policy instruments
- carrying out a distributional policy analysis linked to the forthcoming climate policy action plan and the national energy and climate plan, which identifies winners and losers, compensation needs and regional differences
- making participation more concrete through developed consultation processes, regular stakeholder dialogues and citizens' panels linked to the development and monitoring of the action plan - with clear feedback on how views have influenced decisions
- strengthening trust through transparent reporting of targets and results, including indicators for perceived justice, perceived effectiveness and the distribution of costs and support
- expand the Social Climate Plan into a package that could also include mobility services, public transport in sparsely populated areas, energy efficiency measures and support schemes that do not require car ownership.

7.4 Stakeholder collaboration

Stakeholder collaboration has not played a prominent role in the climate policy action plans that have guided either the current or the previous government's work on the climate transition. This applies both to the process of developing the action plans and to how they have been designed and implemented.

However, the second climate policy action plan represented a step forward in terms of the ambition to collaborate, compared with the first action plan. In January 2023, the Government announced its intention to convene a national climate meeting with Swedish businesses, trade unions, researchers, the public sector and civil society.[220] This was to be preceded by dialogue meetings based on the roadmaps developed by the business sector within the framework of the Fossil-Free Sweden initiative. The five round-table discussions that were eventually held involved almost exclusively business sector stakeholders. Representatives from trade unions, civil society, municipalities or regions did not participate, and the work did not build on the extensive roadmap work that already existed. Nor did the concluding national climate meeting build on these roundtable discussions; instead, it consisted mainly of separate expert panels. Overall, the process appears to be a missed opportunity to secure support for the action plan among a broader range of stakeholders.

The first action plan in 2019 was, in practice, drawn up through political negotiations within the government, without any dialogue with external stakeholders. The second action plan ultimately followed a similar approach.

However, the initiative that has been consistently highlighted by previous and current governments is Fossil-Free Sweden, which since 2015 has served as a platform for the business sector's work on sector-specific roadmaps for fossil-free competitiveness. A total of 23 roadmaps have been drawn up and are updated on an ongoing basis. The Fossil-Free Sweden secretariat works to monitor how the roadmaps have been implemented, but the Government has not established any organisation or process of its own to systematically address the shortcomings in policy identified in the roadmap process, as previously recommended by the Swedish Climate Policy Council. Nor is it intended to monitor or impose corresponding requirements on the sectors' implementation of their own commitments. There is a risk that the high ambitions set out in the roadmaps will lead to disappointment and reduced engagement if the Government fails to demonstrate that they are having a real impact on policy formulation. For a long time, it was also unclear whether Fossil-Free Sweden's mandate would continue beyond 2024. It was not until December of that year that the Government decided to broaden and extend the mandate until 2026. At present, no decision has been made regarding what will happen thereafter.

Another tool for stakeholder collaboration is the Climate City Contract 2030, a form of multi-level agreement in which municipalities, central government agencies, innovation programmes and other stakeholders make mutual commitments to accelerate the local climate transition and review these annually. The first climate contracts were signed in 2020. During this term of office the Government, through central government agencies, continued and developed the work on climate contracts. In 2025, 48 municipalities signed their climate contracts.[124]

Towards the end of its term of office, the Government launched two further initiatives for collaboration with the business sector. In June 2024, it decided to establish the Green Acceleration Office for the industry's transition, with a mandate to strengthen coordination between public and private actors in areas with major industrial clusters.[221] It is not clear from the Government's directives whether, or in what way, the work of the Green Acceleration Office is expected to be linked to the activities of Fossil-Free Sweden. In the 2026 Budget Bill, the Government also allocated SEK 20 million annually for a new public-private partnership aimed at strengthening the industry's green transition and Swedish competitiveness.

Despite these initiatives in the business sector, there is no overarching strategy for broad stakeholder collaboration. This is remarkable given Sweden's strong traditions of civic engagement and the considerable interest that exists, not least at regional and local level, in contributing to climate action.

Another example is the process of developing Sweden's updated national energy and climate plan and the Social Climate Plan. The EU's Governance Regulation sets out specific requirements for public consultations and climate and energy dialogues in which municipalities, civil society organisations, the business sector, investors and other stakeholders must be given the opportunity to participate actively.[222] The Government's consultation processes have been minimal and were criticised by the European Commission. These processes also represent a missed opportunity to build support for climate policy and mobilise more stakeholders, particularly given that the Government itself has emphasised the importance of acceptance for the policies pursued.

The Swedish Climate Policy Council finds that there is significant untapped potential in strengthening collaboration between stakeholders ahead of the next term of office, both to increase acceptance of climate policy decisions and to mobilise more stakeholders to contribute more vigorously and in a coordinated manner towards achieving climate targets.

We are aware that the need to make swift decisions on stricter regulatory measures may make it more difficult to secure support for the action plan itself through dialogue with relevant stakeholders. One alternative is therefore to include a collaboration strategy in the action plan that sets out how implementation is to take place and be monitored in dialogue with relevant stakeholders during the term of office. For such forums to be credible, they need to have a clear structure, stakeholders with clear mandates to contribute, and a direct link to policy development, budgeting and implementation. The focus should be on both strengthening and coordinating existing business initiatives and broadening collaboration with civil society, municipalities, regions and other stakeholders.

The Government can draw inspiration from models in other countries, such as Finland's regular climate policy round-table discussions,[223] Denmark's climate partnership[224] or the Netherlands' national climate agreement.[225]

7.5 Policy coordination

The transition to net-zero greenhouse gas emissions entails far-reaching changes affecting large parts of society, from the local to the global level. This requires that national climate policy be coordinated with other policy areas (horizontal coordination) and that it functions effectively in relation to the local and regional levels, the EU and the international level (vertical coordination).

Policy coordination between different levels of decision-making

During this term of office, vertical coordination has been both strengthened and challenged. In the following section, we discuss how it has functioned at the various levels.

Internationally

In the context of international climate action, the Government has, during its term of office, signalled increased ambitions: both to encourage other countries to step up their climate efforts and to boost exports of Swedish climate and industrial solutions. To this end, in 2024 the Government appointed the International Climate Commission with a mandate to help strengthen and develop Sweden's international climate efforts.[226] Both the Government's directive and the Cross-Party Committee on Environmental Objectives's report on the national climate targets also express a desire for the Climate Policy Council's evaluations to cover the Government's policy for reducing global greenhouse gas emissions.[32] If the Swedish Climate Policy Council is allocated the increased resources proposed by the Cross-Party Committee on Environmental Objectives, we believe we could develop a more systematic and regular review of Sweden's international climate work. This is currently done, for example, by the Danish Climate Council, and the international perspective is more clearly expressed in the Danish Climate Act.[227]

To further strengthen Sweden's voice in international efforts, we believe there is a need for a clearer focus on how Sweden should operate within various areas of cooperation. This requires

a more coherent strategy covering climate negotiations, climate diplomacy, export and investment promotion, trade policy and international development policy. Such a strategy could, for example, be formulated as part of a review of the climate policy framework.

EU

The EU's climate policy framework has developed rapidly (see section 6.3), which has strengthened the interaction between climate policy at EU level and at national level. In the Cross-Party Committee on Environmental Objectives's proposal for updated Swedish interim targets for 2030, these will be formulated in a way that more closely resembles Sweden's commitments within the EU. This increases clarity and simplifies monitoring. However, with regard to certain sub-targets, developments have moved in the opposite direction. The Government's proposal for a new energy efficiency target diverges from the EU's targets and direction. The proposal also does not contain any analysis of how this divergence is to be addressed. Sweden's policies in the forestry sector and in the land-use sector (LULUCF) have also created friction with the direction taken within the EU.

Sweden's climate policy is increasingly governed by decisions taken jointly at EU level, and these have a more direct impact on the stakeholders involved. As highlighted in this report, this places greater demands on the Government and Swedish agencies in several respects. The Government needs a strategy for its EU work on climate issues that:

- sets out Sweden's priorities and approach in upcoming EU processes at an early stage, and, not least, outlines ways to exert influence at an early stage
- ensures coordinated national implementation of EU decisions with clear roles, timetables and indicators
- includes action plans to achieve binding commitments within the ESR and LULUCF
- provides targeted guidance and support to small businesses, municipalities and regions to increase predictability and reduce administrative costs.

Such a strategy strengthens Sweden's capacity for implementation and its credibility and influence in the EU's ongoing climate work, and helps Sweden to make more effective use of the opportunities offered by, for example, EU funds and investment support.

Municipalities and regions

Municipalities and regions play a vital role in the climate transition. This applies to areas such as urban planning, transport infrastructure, public transport, waste management, business development, regional development and, in many cases, ownership of energy companies. They deal with many everyday issues and are closer to the public, which in turn is important for acceptance of and participation in climate policy.

Despite this, the role of municipalities and regions in national climate policy is not clearly defined. They have no formal responsibility to contribute to Sweden's climate transition, other than to a limited extent within the framework of spatial planning regulations. Nor does collaboration with municipalities and regions play a significant role in either the current or the previous climate policy action plan. Many municipalities have their own ambitious climate targets and are actively engaged in climate work. In our dialogues with municipal representatives, we observe that municipal ambitions in areas such as transport sometimes clash with the priorities of central government agencies such as the Swedish Transport Administration.

At various times, there have been specific investment grants, such as Climate Leap, which municipalities can apply for and benefit from, but there is no overarching framework for cooperation with the municipal level. Another example is the support for municipal climate and energy advisory services. During the current term of office, this has partly shifted its focus to civil energy preparedness. The instrument that existed in the transport sector, the so-called Urban Environment Agreements, which aimed to support projects for sustainable urban environments, has been abolished, and no new agreements can be entered into from 2024 onwards.

National climate policy therefore lacks an overarching framework, planning guidelines and forums for dialogue to facilitate cooperation with municipalities . Nor is there a well-developed system for providing knowledge support to smaller municipalities, although the county administrative boards do play a role in this regard. Municipalities could be given greater responsibility, but also more tools to support the climate transition, for example, more flexible rules for environmental zones, the option to regulate parking or introduce congestion charges (see section 5.1). The partnership association Klimatkommunerna has proposed that climate agreements be established between the state and all of the country's municipalities - whereby municipalities commit to specific climate targets and measures, whilst the state provides funding and support.[228] There are also international examples to draw upon in this area, such as Finland's climate service, which provides expert support to municipalities , or Denmark's and the Netherlands' performance-based support for municipalities that lead the way.

In summary, the Swedish Climate Policy Council considers that there is potential to strengthen the vertical coordination of national climate policy in Sweden with other levels of government. To make the Government's efforts more effective, more can be done to ensure that national policy, EU requirements and international climate action are aligned. The Government can also give municipalities and regions greater mandate, responsibility and support to play a stronger role in the climate transition.

Policy coordination across policy areas

Horizontal policy coordination involves ensuring that climate objectives are integrated into and underpin decisions across all relevant policy areas. During the current term of office, horizontal integration has evolved in various ways at both European and national levels. In section 6.3, we discuss the integration of climate considerations into other policy areas at EU level.

One of the aims of the Climate Act is to integrate climate issues into all aspects of the Government's work. To strengthen coordination in practice and drive the implementation of the climate policy action plan, the Social Democrat-led government established a Climate Council in 2020, comprising eight relevant ministers under the leadership of the Prime Minister, tasked with implementing the climate policy action plan. Attached to this council were both a group of state secretaries and a small secretariat at civil servant level. In practice, the Climate Council had ceased to function even before the 2022 election.

The current government has chosen to place greater responsibility for the coordination of climate policy with the Ministry of Finance; this is reflected, among other things, in the fact that the Government's climate report is now an annex to the overall financial plan, rather than a sub-annex to the environmental policy annex of the Budget Bill.

It is difficult to assess from the outside the effects of both these approaches under different governments and during different periods. We have understood from officials at the Government Offices that both reforms have had certain positive effects on the Government's internal workings, but our assessment is that the Government needs to further strengthen its capacity for coordination between different policy areas and that this needs to be reflected, not least, in the Government's governance of its agencies.[229]

The current government has prioritised international climate policy, thereby strengthening the links with trade, development aid and climate diplomacy. In this and previous reports, we have highlighted the importance of analysing the impacts on climate targets across all relevant policy areas. We have also identified other key policy areas where climate targets need to be more strongly integrated into objectives and implementation. This applies, for example, to agricultural policy,[27] transport infrastructure[71] and forestry policy.[71]

One of the most significant political priorities of the current term of office has been to strengthen Sweden's total defence. This has entailed, and will continue to entail, major investments with a potential impact on the ability to achieve climate targets.

In-depth: Climate targets and the strengthening of total defence

The deteriorating international situation has made the modernisation of Sweden's total defence one of the Government's and the Riksdag's top priorities. Over the past five years, annual defence appropriations have more than doubled to reach SEK 145 billion by 2026 and is projected to reach SEK 186 billion by 2030. This means that defence spending has risen from around 1.2 per cent of GDP and is now targeting NATO's new target of 3.5 per cent of GDP, plus a further 1.5 per cent for broader defence and security investments.

These major investments will also affect the prospects of achieving climate targets. Direct emissions from the Swedish Armed Forces' activities are difficult to quantify, but were estimated in the early 2020s to account for approximately 0.4 per cent of Sweden's territorial emissions. Added to this are life-cycle emissions from the procurement of defence materiel. At the same time, these were estimated to account for a further 0.7 per cent of territorial emissions, but occur only partly in Sweden and largely in other countries where the materiel is manufactured.

Unless there is a shift in the defence sector's operations, these direct emissions alone will multiply in proportion to the scale of those operations. However, the bigger issue in relation to climate targets concerns how the structure of total defence affects society as a whole, investments and social structures, technological choices and potential lock-ins, as well as our resilience to ongoing climate change. The growing expenditure in the defence budget also affects the ability of policymakers to prioritise other societal goals.

In previous reports, the Swedish Climate Policy Council has noted that it is crucial to harness synergies and manage conflicts with other objectives in order to achieve the societal transformation required to meet climate targets. Against this background, we have commissioned a background report on potential synergies and conflicts of interest between the objectives of total defence and climate targets, as well as how these are currently managed in the governance of total defence.[230] This in-depth analysis is primarily limited to emissions reductions, but there are significant synergies between total defence and climate adaptation that are not covered here.

Synergies and conflicts in key areas

The background report summarises key areas where the strengthening of total defence can generate both synergies and create conflicting objectives in relation to climate targets. It highlights where measures can contribute to both increased resilience and reduced emissions, as well as where there is a risk of increased emissions and long-term lock-ins to fossil-dependent systems.

Throughout, circularity - for example in defence equipment and construction - can contribute to increased self-sufficiency, reduced vulnerability and a lower climate impact. Circularity principles can also be important cornerstones of resource supply during crises and war, where supply chains may be disrupted and materials need to be prioritised for the most socially critical purposes. Building greater capacity for industrial symbiosis, reuse and recycling can prepare the country for crises and war whilst simultaneously contributing to the climate transition.

Table 5. Examples of synergies and conflicts between climate action and total defence in key areas

Area	Synergy or conflict
Transport and infrastructure	Within this area, there are several points of contact where measures can reinforce one another, but where priorities may also pull in different directions. Railway maintenance and measures that enhance the capacity for long and heavy trains can benefit both climate policy and emergency preparedness. At the same time, there is a risk of conflicting objectives if investments in the road network, for example to increase load-bearing capacity, in practice lead to a relative increase in truck transport compared with rail and shipping, which would counteract the shift towards lower-emission transport.
Energy	An overarching synergy is that reduced dependence on imported energy can strengthen energy security and resilience by reducing vulnerability to disruptions in import flows and price fluctuations in fossil fuels. At the same time, this can have positive climate effects if it entails an increased share of domestic fossil-free and renewable energy, biofuels or synthetic fuels. Measures that increase the robustness of the electricity system and strengthen repair readiness can contribute to a more stable electricity supply, which facilitates the climate transition. However, measures such as building up emergency stocks of liquid fossil fuels and backup power solutions that are often diesel-powered may instead lead to continued fossil fuel dependency. If such solutions are scaled up and institutionalised without a clear transition strategy, they can create lock-in effects and thus conflict with climate targets. Defence-related restrictions may also affect the potential for expanding wind and solar power, for example, which risks hindering the expansion of fossil-free electricity generation. The expansion of fossil-free electricity generation also makes significant demands on land and sea, where, for example, offshore wind power in the Baltic Sea and onshore wind power may require ongoing trade-offs between defence interests and other societal interests.
Food, agriculture and land use	In these areas, increased diversification in agriculture and more efficient use of inputs can strengthen national self-sufficiency whilst reducing emissions. Certain land-based measures, such as wetland restoration, can also create synergies between reduced emissions and preparedness. Re-wetting reduces greenhouse gas emissions from drained peatlands, whilst from a preparedness perspective, wetlands can serve as strategic protection against a ground offensive.
Industry and equipment	In the industrial and equipment sector, climate requirements in procurement, as well as modernisation and measures that extend the lifespan of existing systems, can reduce climate impact whilst strengthening supply resilience. On the other hand, rapid expansion may increase the risk of solutions being chosen based on short-term availability rather than long-term climate performance, thereby creating lock-in to fossil-dependent technology and logistics.
The construction and civil engineering sector	Here, the conflict of objectives is clear in that a major expansion drives the need for large quantities of materials with a high climate impact and extensive construction work. However, increased coordination in construction and property operations can reduce material waste and lead to more efficient use of resources, which can reduce emissions whilst also enhancing implementation capacity and delivering cost savings.

The climate in the management of total defence

The most obvious conclusion from the report we commissioned is that there is currently no clear, overarching framework for taking climate targets into account in the increased investment in total defence. Despite the obvious links and the shared aim of creating a more resilient society, coordination between climate targets and total defence has so far been poorly developed.

One example of this is that the civil defence sector's focus on resilience takes little account of how it is structured in a way that simultaneously supports a fossil-free energy supply and the climate transition. There is a risk that measures which may, in practice, prove to be long-term, such as backup power solutions, may be developed without a clear transition strategy, or that measures to strengthen security of supply for liquid fuels may lead to lock-in to fossil-based solutions unless fossil-free alternatives are given real scope and potential synergies in the form of increased self-sufficiency are explored. In the area of food security, significant resources are directed towards emergency stockpiling, particularly of cereals, but the link to emissions reductions and climate synergies does not appear to be guiding the overall design of the measures. We believe that policymakers are missing opportunities to simultaneously strengthen resilience and reduce emissions in the food supply chain.

The strengthening and management of total defence need to be integrated with the goal of net-zero greenhouse gas emissions so that, taken together, these can lead to a more resilient society. In this way, important synergies can be identified and harnessed. It should also create better conditions for strong public support for initiatives relating to both total defence and the climate transition. Here are some examples of how this can be implemented in practice:

The defence sector's transformation must be based largely on the civil development of technology and systems. This requires solutions to be developed in collaboration with the private sector, where innovation and implementation capacity are largely to be found. With clear political guidance and incentive structures for suppliers, investment in total defence can generate innovations and spillover effects in other areas, thereby contributing to sustainable fuels, fossil-free steel, bio-based materials, energy-efficient operations, resource optimisation and more. Public procurement and research and development initiatives should be actively utilised. In general, climate performance should be taken into account across the board without compromising functionality and interoperability; where this is not possible, the trade-offs should be justified and monitored.

Our background report suggests that, at present, NATO standards in some cases hinder the transition of the total defence system towards fossil-free operations in the short term. However, by working towards integrated climate initiatives within NATO, we believe that Sweden can also contribute to a significant shift at the international level, whilst learning from developments within NATO and its member states. Where relevant, Sweden should also integrate elements of the EU's governance and regulatory framework, such as the Waste Directive, to strengthen climate action within the total defence sector's supply chains and resource use. NATO has adopted an overarching policy framework for climate action (Climate Change and Security Action Plan[231]) and targets to reduce its civilian and military emissions by at least 45 per cent by 2030 and achieve net-zero emissions by 2050 at the latest, but these targets apply to NATO's own organisation and not to the armed forces of member states. Sweden therefore needs to make greater use of NATO's governance, working groups and standardisation efforts as a lever to ensure that the transition can take place without undermining interoperability and operational capability.

The Government should integrate climate targets into the management of total defence initiatives by giving the relevant agencies, as well as municipalities and regions - which play a central role - clear mandates to collaborate, identify synergies and conflicting objectives, and report on how trade-offs have been made. This should include a systematic impact assessment of major investments and packages of measures. The Government should avoid becoming locked into fossil-dependent solutions. Where fossil dependence is deemed unavoidable in the short term, governance should ensure that the choice of systems, logistics and storage solutions does not hinder a future transition.

Our overall conclusion is that the links between total defence and climate targets cannot be addressed through isolated initiatives. They require strengthened and systematic coordination between the responsible ministries and agencies, with clear principles for how synergies are to be realised and how conflicting objectives are to be identified, minimised and, where they cannot be avoided, managed with transparency and follow-up.

RECOMMENDATION FROM THE CLIMATE POLICY COUNCIL

Integrate the climate transition into the comprehensive modernisation of total defence through the following measures:

- **Give the relevant agencies clear mandates** to integrate the strengthening of total defence with the climate transition so that synergies are harnessed and conflicting objectives are identified, minimised and monitored.
- **Use public procurement strategically** as a policy instrument to integrate climate targets into total defence initiatives.
- **Use NATO's governance systems and standardisation work** to incorporate climate targets into the total defence transition.

7.6 Innovation and learning

Transforming all of society into a fossil-free society with net-zero greenhouse gas emissions within a few decades requires a great deal of innovation - that is, new technology or new ways of acting that become widespread in society and lead to change. There is also a need for policy innovation, the development of policies, working methods and leadership to drive the necessary change. This requires, among other things, opportunities to test new initiatives and effective feedback mechanisms for learning and continuous improvement. It is therefore important, firstly, that the policies pursued stimulate innovation in society, and secondly, that the policy-making process itself and the policies are characterised by sufficient innovation. Sweden should also work towards a targeted innovation policy at EU level that contributes to achieving the goals of the Paris Agreement.

In international rankings, Sweden is regarded as a society with a comparatively high capacity for innovation, which is a key asset as the country transitions towards a fossil-free future and net-zero emissions.[232] Sweden also ranks highly among EU countries in terms of innovation capacity specifically within green growth, or so-called eco-innovation.[233] However, the perceived inconsistency in policy during the last term of office (see section 7.1) is something that does not promote innovation or encourage those who wish to explore new avenues and take risks. From an innovation perspective, too, it is essential to provide clarity regarding the long-term direction and the conditions for investment.

The research and innovation policy bill presented by the Government during its term of office generally provided for increased budgetary resources for the years 2025-2028, including initiatives relevant to the climate transition[234]. With regard to the climate impact of forestry and agriculture, there is a need for greater knowledge of the functioning of biophysical systems. Such knowledge must also be specifically applicable to Swedish ecosystems and the Swedish climate. This justifies increased efforts in both research and the practical development of knowledge within central government (see section 7.6). The latest government research bill included increased funding for research linked to, among other things, the bioeconomy and society's food supply, but not specifically regarding the food system's climate impact.

Policy innovation and learning

During both the previous and current terms of office, the agencies' impact assessments of climate policy instruments have improved, particularly assessments of proposed new instruments. Evaluations of individual investment programmes, such as Climate Leap, are also carried out regularly. There is still room for improvement, particularly with regard to the ex-post evaluation

the adopted policies. In this area, the Swedish Climate Policy Council plays a role at an overarching level, but with limited resources.

A more systematic approach to learning from the work on the business sector's roadmaps would be a significant contribution to policy development. It is also important to draw on the experiences of those municipalities and regions where substantial investments are being made in fossil-free industry. Best practice from local and regional initiatives needs to be utilised and disseminated to create the conditions for a continued transition across the board. Sweden has a proven ability to adapt during structural changes and closures, but there is less experience of managing new large-scale industrial establishments that place heavy pressure on local communities in other ways.[122]

One obvious weakness is that the Government has not yet established a clear framework for preparing the necessary documentation, implementing and following up on the climate policy action plans. Ahead of the first action plan in 2019, the responsibility for preparing the necessary documentation lay largely with the Swedish Environmental Protection Agency. Ahead of the second action plan, a new working method was trialled involving many more agencies, with coordination responsibilities assigned to the agency Transport Analysis, the agency Growth Analysis and the County Administrative Board of Uppsala. Ahead of the third climate policy action plan, the Government has reverted to obtaining background material solely from the Swedish Environmental Protection Agency and ongoing or already completed inquiries. It is unfortunate that the lessons learnt from previous action plans do not appear to have been taken on board.[229] The climate policy framework is still a long way from the developed, permanent system of requests, preparatory processes and follow-ups that characterises the fiscal policy framework and the state budget process. In the 2023 climate policy action plan, the Government announced that the tasks of relevant agencies linked to the climate transition would be specified in the agencies' instructions. This would have been an important change, but it is one of the points in the plan that has not yet been implemented and will therefore not have time to take effect for the forthcoming action plan.

Certain efforts have been made to strengthen innovation, a holistic approach and work on cross-sectoral issues across the Government Offices and the committee system, including through the Committee on Technical Innovation and Ethics (Komet), which presented its final report in 2022. Reforms along these lines would be significant for the climate transition.

7.7 Institutional capacity

To achieve an effective climate transition and meet established climate targets, it is important that there is sufficient institutional capacity across the various sectors of society. This means that government agencies, organisations and other social institutions have the resources, expertise and structures required to plan, coordinate and implement the necessary climate measures.

Lack of government resources for analysis and policy development

The role of government agencies in the climate transition is becoming increasingly important. In its climate policy action plan, the Government announced around fifty government mandates for various agencies. In addition to these new mandates, a large number of tasks have been added for the agencies as a result of the EU's evolving climate policy and regulations. Existing legislation has evolved and entirely new tasks have been introduced. The climate issue is also gaining prominence in the international work of Swedish agencies, for example in efforts to promote the export of climate solutions and in climate negotiations within the UN's aviation and maritime organisations (ICAO and IMO).

This development places increased demands on the implementation of climate legislation, the administration of various forms of support, and, not least, expanded analysis of policy instruments. These demands are placed not only on the central agencies but also on the system of government inquiries. The county administrative boards are also taking on greater responsibilities through various coordination tasks and review cases. The latter also applies to the judiciary.

During the past term of office, the administrative appropriations of the agencies responsible for relevant aspects of the climate transition have grown slightly, even when taking inflation into account. In

the climate sector, increases in administrative appropriations have primarily been implemented to enable the construction of new nuclear power plants, accelerate permitting processes and implement new EU legislation. Certain temporary increases have also been allocated to the agencies to enable them to carry out specific tasks in the climate policy action plan.

On closer examination of the respective agencies, however, we can see that the Government has not introduced any permanent measures to strengthen the agencies' analytical capacity for developing policies to achieve the climate targets. For example, the Swedish Environmental Protection Agency has had many of its budget requests for 2026 approved that relate specifically to case handling, but not the proposal for increased resources to analyse the EU's forthcoming climate framework for 2040. We believe that this work needs to be given higher priority, that more relevant agencies should be involved, and that the work should aim to produce well-founded, proactive proposals and early Swedish negotiating positions (see section 6.3). In addition, there is a need to amend the directives of the relevant agencies so that they are given a standing mandate to contribute to the evidence base within the climate policy framework and the implementation of climate targets. This will require human resources, and the Government needs to assess whether this can be achieved entirely through internal reprioritisation within each authority.

We see a risk that mandatory tasks for Swedish agencies - such as the implementation of EU legislation and the processing of permits and climate subsidies - will divert resources away from more in-depth analyses of how policy needs to evolve in order to achieve the climate targets.

The Government Offices and its ministries have an important role in assisting the Government in leading the country towards achieving climate targets. The Government Offices' overall administrative appropriation has grown slightly during this term of office. The initiatives have been directed towards the Government's reform agenda. NATO membership, Russia's invasion of Ukraine and other total defence preparations are specifically mentioned in connection with the initiatives implemented under the administrative appropriation. Within the Ministry of Climate and Enterprise's area of responsibility, for example, preparedness issues and reforms to enable new nuclear power have been prioritised. The Climate Unit, which coordinates work on the climate targets and is responsible for a large proportion of the relevant policy instruments, has seen its staff numbers reduced by around a third during this term of office. We have been unable to establish that resources for work on climate transition have increased in other units within the Government Offices, such that this would offset the cuts to the Climate Unit.

The fact that climate transition has been deprioritised does not mean that it has become any less important or urgent, either at national or EU level. The EU's new climate targets for 2040 will be accompanied by a new comprehensive legislative package, and the outcome will be of great significance for the competitiveness and investment of Swedish companies as well. For reference, the European Green Deal under the previous Commission was the EU's largest legislative package ever.

Overall, the Swedish Climate Policy Council considers it important that the Government is able to strengthen the agencies' capacity both in terms of implementing policies to achieve climate targets and analysing how these policies should be developed. With the increased workload associated with the management, implementation and administration in the policies to achieve climate targets, there is a risk that the analysis and development tasks linked to the climate transition will otherwise have to be deprioritised.

Glossary

BECCS
Bioenergy with Carbon Capture and Storage. Technologies for capturing and storing carbon

Biochar
Biomass that has been carbonised by heating in an oxygen-deficient environment (known as pyrolysis). Biochar can be used, among other things, as a soil improver and as a carbon sink in the soil.

Bioeconomy
An economy designed to advance society through a sustainable use of biological resources. It aims to reduce climate impact and the use of fossil fuel inputs.

Carbon dioxide equivalent (CO_2e)
A measure used to compare emissions of different greenhouse gases by taking into account their ability to contribute to global warming. By converting greenhouse gas emissions into carbon dioxide equivalents, it is possible to compare and summarise the effect of emissions from individual gases.

Carbon leakage
The displacement of carbon dioxide emissions, either because production moves to countries with lower ambition levels regarding emissions reductions or because domestic products are replaced by more carbon-intensive imported goods.

Carbon sink
A process in which the uptake of carbon dioxide in an ecosystem or other natural system exceeds the emission of greenhouse gases. Important natural sinks include the world's oceans and forests

CBAM
Carbon Border Adjustment Mechanism. An EU-wide carbon border adjustment mechanism which, by imposing a levy on imports of certain goods, is intended to protect EU industries exposed to international competition after 1 January 2026, when the requirements under the EU Emissions Trading System are tightened. The aim is to ensure a level playing field between companies within and outside the EU and to counteract the risk of carbon leakage.

CCS
Carbon Capture and Storage. A process in which carbon dioxide is captured from major emission sources, such as incineration plants, power stations or process industries. The carbon dioxide is then compressed and transported for long-term storage in geological formations

Climate neutrality
When there is a balance between greenhouse gas emissions and the uptake of carbon dioxide from the atmosphere by natural and managed systems (such as forests).

Climate policy
Policies whose stated aim, in whole or in part, is to reduce society's impact on the climate.

Climate policy framework
The Swedish climate policy framework was adopted in 2017 and consists of three parts: the Climate Act, the climate targets and the Climate Policy Council.

Cross-Party Committee on Environmental Objectives
A parliamentary committee established by the Government in 2010 to achieve broad political consensus on various climate and environmental issues. The Cross-Party Committee on Environmental Objectives' task is to propose how Sweden should achieve its environmental quality objectives through politically supported proposals, strategies with interim targets, policy instruments and measures.

COP
Conference of the Parties. Annual conferences where representatives of the parties to the United

Nations Framework Convention on Climate Change (UNFCCC) meet and negotiate.

ESR
Effort Sharing Regulation. An EU regulation governing emissions from sectors not covered by the EU ETS, namely transport, agriculture, machinery, domestic and commercial heating, and others. The ESR includes, among other things, binding targets for Member States. ESR is often used as an abbreviation for the emissions or sectors not covered by the EU ETS. This group is sometimes referred to as the non-trading sector.

ETS 1
EU Emissions Trading System, the EU's system for trading in emission allowances. ETS 1 is part of the system and covers emissions from major industries and combustion plants, as well as from certain air traffic and shipping companies.

ETS 2
The EU's forthcoming emissions trading scheme for carbon dioxide emissions from the combustion of fuels used in road transport, residential buildings, and commercial or public premises. It also covers parts of the energy, manufacturing and construction sectors that are not already covered by the EU ETS 1.

Fit for 55 package
The reform agenda presented by the European Commission to enable the achievement of the target of reducing net emissions by 55 per cent by 2030 compared with 1990 levels. The package, known as 'Fit for 55', comprises a number of different legislative measures adopted within the EU and forms a central part of the EU's efforts to contribute to the Paris Agreement.

Flexibilities
Mechanisms that a Member State can use to meet the emissions reductions required of it under the Effort Sharing Regulation (ESR) and LULUCF. These mechanisms include, for example, the ability to borrow and save emission allowances between years, transfer emissions between Member States, utilise emission allowances from the EU ETS and utilise net removals from LULUCF, in order to achieve the required emissions reductions.

Fossil-free
When the use of fossil fuels such as coal, natural gas and oil is zero, for example within a specific sector or in a country.

Greenhouse gas emissions
Emissions of carbon dioxide, methane, nitrous oxide (laughing gas) and fluorinated gases. This definition applies to climate reporting to the UN and to Sweden's and the EU's climate targets.

IPCC
Intergovernmental Panel on Climate Change, the UN's climate panel. An intergovernmental organisation established in 1988 by two UN bodies, the World Meteorological Organisation (WMO) and the UN Environment Programme (UNEP). The IPCC's purpose is to summarise the current state of scientific knowledge regarding climate change, its consequences and possible solutions.

LULUCF
Land Use, Land Use Change and Forestry. The sector covering land use, land-use change and forestry in the EU's climate reporting. EU Member States report changes in carbon stocks (emissions and removals) in vegetation and soil for different land types, as well as in harvested wood products. Changes in carbon stocks are calculated for all land types considered to be managed, i.e. those influenced by human activity. Often referred to as the land-use sector. Regulated by the LULUCF Regulation.

LULUCF Regulation
The EU Regulation on land use, land-use change and forestry, which, among other things, regulates how greenhouse gas emissions and removals from these sectors are to be reported and accounted for in the EU's climate targets. The Regulation includes, among other things, a binding

EU target and national commitments for net emissions from forests and land.

National Energy and Climate Plan
In 2019, each EU Member State drew up a national energy and climate plan covering the period 2021-2030. The plans were updated in 2024 and aim to meet the EU's energy and climate targets for 2030.

NDC
Nationally Determined Contribution. Parties to the Paris Agreement are required to set out their national contributions to the agreement by describing concrete targets and measures for emissions reductions. NDCs are updated every five years, with the next update due in 2025. Sweden is part of the EU's NDC.

Negative emissions
When total greenhouse gas emissions are lower than total removals.

Net greenhouse gas removals
The difference between total removals and total emissions of greenhouse gases. Used in the land-use sector, LULUCF.

Net-zero emissions
When greenhouse gas emissions and removals balance each other out. See also climate neutrality. A net-zero emissions strategy involves reducing emissions as far as possible, with any remaining emissions offset, for example, by removals in forests and land.

Paris Agreement
A global climate agreement adopted at COP21 in Paris in 2015. Among other things, the agreement stipulates that global warming must be kept well below two degrees, but ideally limited to 1.5 degrees.

This is to be achieved primarily through a reduction in greenhouse gas emissions. Another part of the agreement concerns increasing the ability to adapt to adverse effects, and to manage the damage and losses arising from climate change.

Reduction obligation
Policy measures requiring fuel suppliers to reduce greenhouse gas emissions from petrol and diesel by a certain percentage each year, through increased blending of renewable or other fossil-free fuels.

Renewable energy
Energy from renewable sources such as the sun and wind, as well as from sustainably managed biomass.

Renewable fuels
Fuels produced from renewable raw materials. Some examples are ethanol, biogas and biodiesel.

Supplementary measures
Measures within the Swedish climate policy framework that may be used to offset remaining emissions. Examples of such measures include increased carbon sequestration in forests and soil, BECCS, and investments in emission-reducing measures in other countries. Under the Swedish climate framework, the interim targets may be achieved through a limited number of supplementary measures.

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Appendix I - The Government's Climate Report 2025

- **The 2025 Climate Report is more developed in terms of structure and content,** and reports on emissions trends and key decisions. At the same time, the Climate Report does not fully meet the requirements of the Climate Act, primarily because it does not state clearly enough whether, when and how further measures are to be decided upon, and what assumptions and calculation bases underpin the impact assessments.
- **The Government has improved the follow-up** through a more systematic review of the measures in the climate policy action plan and detailed responses to the Swedish Climate Policy Council's recommendations. At the same time, we assess that the follow-up only partially meets the recommendations.
- **The Government's scenarios for emissions trends are based on a sound methodology, but nevertheless contain significant uncertainties**. The Government should therefore design climate policy in such a way that the climate targets are achieved with a reasonable margin of safety.

In this appendix, the Swedish Climate Policy Council describes how the 2025 climate report meets the requirements of the Climate Act. The climate report was submitted in September 2025, as part of the 2026 Budget Bill. As in previous years, the Government also presented the 2025 Climate Report in Volume 1 of the Budget Bill, alongside the overall financial plan. In this appendix, we also assess the emissions scenarios that form the basis for both the Government's and our own assessment of Sweden's prospects of achieving its climate targets.

Assessment of the Government's climate report in relation to the requirements of the Climate Act

The Government is required to submit a climate report to the Riksdag each year in the Budget Bill in accordance with Section 4 of the Climate Act (2017:720). The climate report must contain:

- A report on emissions trends.
- A report on the most important climate policy decisions taken during the year and what these decisions may mean for emissions trends.
- An assessment of whether there is a need for further measures and, if so, when and how decisions on such measures can be taken.

We find that the climate report largely meets the Climate Act's primary requirement to report on emissions trends. The Government reports on emissions trends in relation to targets and assumptions and describes developments in the sectors covered by ETS 1, ESR (including reports on emissions trends in relation to targets and assumptions and describes developments in the sectors covered by ETS 1, ESR and the LULUCF Regulation).

We find that the climate report partially meets the Climate Act's requirement to report on the Government's key decisions and their expected effects on emissions trends. The Government reports on key decisions and policy instruments deemed to affect emissions or the conditions for achieving the targets, and reports on assessments of the emissions gap for the years 2030, 2040 and 2045. At the same time, there is limited clarity regarding the assumptions and calculation methods underpinning the impact assessments and the uncertainties associated with them. The following improvements could be made:

- Provide a clearer account of the assumptions and calculation methods used for the impact assessments.
- Provide a clearer account of the uncertainties associated with the impact assessments.

We find that the climate report does not meet the requirements of the Climate Act regarding the need for further measures, and when and how decisions on such measures can be taken in such cases. The Government describes measures that could reduce the emissions gap, but does not state clearly enough when and how decisions on such measures can be taken. This was a shortcoming that we highlighted in last year's evaluation of the climate report, and which remains in the 2025 climate report. The list of inquiries and international initiatives presented by the Government may provide context, but does not replace a clear decision-making plan for measures deemed necessary to achieve the climate targets. The Council believes that the climate report should:

- Set out a clear action plan for further measures deemed necessary to achieve the climate targets.
- Specify when and how decisions on such measures can be taken (do not merely report on studies and initiatives).

Overall, the Council considers that the climate report has improved in certain respects, but that it still needs to be strengthened to fully meet the requirements of the Climate Act.

Follow-up on the Government's implementation of the Climate Policy Council's recommendations from 2025

The climate report includes a section in which the Government comments on the Swedish Climate Policy Council's recommendations from the previous year. The Government provides detailed responses and describes measures taken following the Council's report, issues being addressed in ongoing inquiries, and areas where the Government intends to return to the matter. We consider this approach to be consistent with the Climate Act and with the direction of the climate policy framework.

In our 2025 report, we recommended that the Government should strengthen the monitoring of the climate policy action plan within the climate reporting framework to improve transparency and quality. Among other things, we highlighted the need to clarify the scope of the measures in the climate policy action plan, identify the responsible parties, set out timetables and link implemented measures to the plan's points and relevant decisions. We also recommended that the Government should more clearly report on which measures remain to be taken, how they relate to the climate targets and what effects they are expected to have.

We welcome the fact that, in the 2025 Climate Report, the Government has improved the monitoring process in certain areas, but note that the monitoring remains incomplete in relation to the Council's recommendations. The Government has included a review of the measures in the climate policy action plan and states that the plan comprises around 70 measures. The Government reports that 34 of these have been implemented, which is more than in the previous climate report. At the same time, it is only to a limited extent clear which measures
what remains to be done and how implementation is planned going forward. A more systematic and comprehensive follow-up not only contributes to general transparency and accountability to the Riksdag, but also has communicative value in the run-up to future terms of office and in relation to the expectations of societal stakeholders and their own decisions. In line with the Swedish Climate Policy Council's previous recommendations, the Government can continue to develop this work by:

- Providing a clearer account of the measures that remain to be taken.
- Outlining how implementation is planned going forward.

And furthermore:

- Provide a clearer account of what the approximately 70 planned measures are (not just how many).
- Clarifying the division of responsibilities (which ministers, ministries and agencies are responsible for which measures).
- Provide a timetable for when the measures are to be implemented.

- Link completed measures to the relevant point in the plan and to official documents (decisions, directives, mandates, inquiries, reports).
- Indicate which remaining measures are planned for the coming year.
- Link completed and planned measures to targets and report on the estimated effects of the measures.

Assessment of the Government's scenarios for emissions trends

The Swedish Climate Policy Council's remit includes evaluating the evidence and models on which the Government bases its policy. In previous reports, we have focused our evaluation on, for example, reviewing the supporting data for the climate policy action plan[229] and the assumptions regarding fuel use and electrification in the Government's scenarios.[27] In its audit report[235] on the Climate Policy Framework, the Swedish National Audit Office has recommended that the Swedish Climate Policy Council focus more clearly on evaluating the supporting documentation and models on which the Government bases its policy, with a focus on the emissions scenarios (hereinafter 'the scenarios') in the Government's climate report.

In the 2025 Climate Report, the Government sets out scenarios based on agreed policies that describe emissions trends up to 2030 and 2045. The Government develops its scenarios on the basis of data produced by the Swedish Environmental Protection Agency with the support of several other government agencies. These scenarios are regularly reviewed by the EU and the UN within the framework of the EU and UN reporting systems and were also reviewed by the National Audit Office as part of its audit of the Climate Policy Framework.

Our review focuses in particular on the results of the scenarios, the key assumptions and uncertainties, and how the results are used, interpreted and communicated by the Government. We make the following assessments.

The Government and the agencies have a robust process and methodology for producing the supporting documentation for the Government's scenarios. The scenario work is based on the collective knowledge of several expert agencies, with many man-years of work invested in the process. The scenarios are largely based on reasonable assumptions, although they contain significant uncertainties.

Several key assumptions are uncertain, meaning that emissions are likely to be higher than the scenarios indicate. This applies in particular to key assumptions regarding the necessary conditions for the transition, and specific assumptions concerning the transition in the transport sector, industry, agriculture and forestry - sectors which account for the largest territorial emissions and net removals respectively. Furthermore, new information has emerged since the scenarios were developed, suggesting that emissions risk being higher than the scenarios indicate. Additional sensitivity analyses and alternative scenarios, complementing a main scenario based on agreed policies, could help to shed further light on the potential effects of these uncertainties.

We share the National Audit Office's view that there is scope for greater transparency regarding how the Government and the agencies have developed the scenarios and what assumptions have been made. In its audit of the supporting documentation for the climate policy framework, the National Audit Office called for a clearer description of how the documentation was produced (the Swedish Environmental Protection Agency has now produced such a description,[236] which we welcome) and an even clearer description of key assumptions and uncertainties in the scenarios. We share this assessment. Following the National Audit Office's review, the Government has also tasked the Swedish Environmental Protection Agency with analysing how the transparency, clarity and accuracy of the scenarios can be improved, and with implementing improvements regarding the reporting of assumptions and uncertainties no later than in the supporting documentation for the Government's climate report. We believe this could further improve the scenarios and the climate report.

However, we do not share the Swedish National Audit Office's conclusion that the Swedish Environmental Protection Agency is using the emission scenarios incorrectly to assess the impact of individual policy instruments.
As far as we can assess, the Swedish Environmental Protection Agency uses the scenarios primarily to describe emissions trends resulting from overall policy and societal developments. When the Swedish Environmental Protection Agency conducts impact assessments of policy instruments, it uses the same scenario with unchanged assumptions and external factors, but with adjustments made for the specific policy instrument in question. We consider this to be the correct way to conduct impact assessments.

The Government does not explain how impact assessments of policy instruments have been prepared, which makes it difficult to assess the reasonableness of the impact assessments. The Government presents impact assessments of new and amended decisions taken between July 2024 and July 2025, as well as for certain proposals in the 2026 Budget Bill. Some of the assessments have been quantified, whilst others are described briefly in qualitative terms. However, the Government does not provide further details on how these assessments were produced or what uncertainties are associated with them. This should be clarified in the 2026 Climate Report.

In its 2025 Climate Report, the Government has made more accurate use than previously of the Swedish Environmental Protection Agency's data to present its outlook on future emissions trends.
We welcome this change. The Government has previously, in the climate policy action plan[45] and in the 2024 Climate Report[237] by assessing that the Government's policies would lead to the Swedish Environmental Protection Agency's so-called target scenario - which describes a possible path to net-zero emissions by 2045 - being met, despite the fact that the Agency's scenarios based on agreed policies did not support this.

The Government should instruct the relevant agencies to regularly develop and update target scenarios showing how the climate targets can be achieved. In 2021, the Swedish Environmental Protection Agency produced
a target scenario that illustrates a possible pathway to achieving the long-term climate goal. However, the agencies' instructions and letters of appropriation do not include a mandate to regularly develop and update target scenarios. We believe that every new government should have one or more target scenarios to draw upon when developing a new climate policy action plan. We also believe that multiple target scenarios can contribute to a better understanding of the possible pathways available for achieving the climate targets.

Most importantly, the Government should take greater account of the uncertainties surrounding future emissions trends and design climate policy in such a way that the climate targets are met with a reasonable margin of safety. Given the significant uncertainties, there is a risk that future emissions will be higher - and that the gap to the climate targets will therefore be wider - than the Government's scenarios indicate. The Government should therefore not design climate policy to achieve emissions reductions that mean the climate targets are expected to be met by the narrowest possible margin, but should strive to achieve the targets with a reasonable margin of safety.

In the detailed assessment that follows, we describe the scenarios in greater detail, the uncertainties in the assumptions and, where possible, how these affect the emission trends in the scenarios.

In-depth assessment of uncertainties and assumptions in the Government's scenarios for emissions trends

FACT BOX. WHAT IS A SCENARIO?

Scenarios are tools for systematically investigating what possible future developments might look like under different assumptions regarding policy, technology, the economy and behaviour. The aim is often to analyse possible outcomes and consequences of different courses of action rather than to predict the future, even though some scenarios may appear more likely than others.

A **forecast**, on the other hand, is an assessment of the most likely outcome given current knowledge, trends and decisions. One example is Statistics Sweden's population forecast, which is Statistics Sweden's estimate of the most probable population development.

Both scenarios and forecasts are based on several underlying assumptions about how society will develop. These assumptions can be both uncertain and have a significant impact on the results of the scenarios and forecasts. Scenarios and forecasts should therefore always be interpreted with these uncertainties in mind. Sensitivity analyses, in which particularly important assumptions are varied, as well as outcome intervals showing the range within which developments can be expected to fall, can help to highlight these uncertainties.

In the scenario work carried out by the Government and public agencies, the terms 'reference scenario', 'scenario with planned policy instruments' and 'target scenario' are frequently used. A reference scenario describes policy based on currently adopted policy (often referred to as 'frozen policy'). A scenario involving measures that have not yet been formally decided, but which may be decided shortly, are referred to in the Government's and agencies' scenario work as a scenario with planned measures. A target scenario, on the other hand, shows a possible path to achieving climate targets, often broken down by sector, as in the Government's 2023 target scenario, which shows how the net-zero target could be achieved by 204545 based on estimates of the potential of measures. A target scenario can also be more detailed at the transition level, as, for example, in the Panorama web platform's target scenario.[238]

Description of the Government's scenarios and the work involved in developing them

The Swedish Environmental Protection Agency has overall responsibility and a coordinating role in producing supporting data, including scenarios, for the Government's climate report. The work is carried out in collaboration with several agencies responsible for producing supporting data within their areas of expertise. The Swedish Environmental Protection Agency describes on its website[236] how the scenarios are developed. The Swedish Environmental Protection Agency submitted its background material for the Government's climate report in April 2025. The material contained an updated emissions scenario for all sectors with the exception of the LULUCF sector, for which two scenarios were developed.[46] The material also reported on corresponding scenarios developed in 2024. The scenarios are based on agreed policy, which in the input for the climate report includes decisions taken up to and including 31 March 2025, and should, according to the Swedish Environmental Protection Agency, be viewed as impact assessments of emissions resulting from this policy.[236]

The Government draws up its scenarios for emissions trends, which are presented in the climate report, based on data provided by the Swedish Environmental Protection Agency. In practice, the Government uses the Agency's scenarios as a basis and makes certain adjustments and additions to its own scenarios. In the 2025 Climate Report, which formed part of the 2026 Budget Bill, the Government presented three different scenarios describing emissions trends for each year up to the relevant climate targets, i.e. up to 2030, 2040 or 2045 depending on the climate target and sector.[239] The Government describes the three scenarios as follows:

1. **The 2024 scenario** presented in last year's climate report. The scenario includes the effects of relevant policy decisions and announcements made before 1 July 2024.

2. **The 2025 scenario** also includes the effects of relevant policy decisions taken between 1 July 2024 and 1 July 2025. This scenario aims to demonstrate the impact of the Government's policies over the past year on emissions. The scenario also includes updated external factors, investment decisions within the industrial sector and preliminary emissions statistics for 2024. For the LULUCF sector, where uncertainties are particularly high, developments are described based on two scenario alternatives: one with average growth and one with lower growth.
3. **The BP26 scenario**, which, in addition to what is included in the 2025 scenario, also incorporates preliminary estimates of the effects of measures set out in the 2026 Budget Bill for the years up to and including 2030.

In the 2025 Climate Report, the Government presented quantitative and/or qualitative impact assessments of new and amended decisions taken between July 2024 and July 2025. However, the Government does not describe in detail how these calculations and assessments were produced or what uncertainties are associated with them. In the 2026 Budget Bill,[154] the Government also presented several measures aimed at directly or indirectly reducing emissions. In the 2025 Climate Report, the Government presents estimated impacts for some of these proposals, whilst proposals that primarily affect the conditions for the climate transition are described in general terms and qualitatively. The estimates have been produced within the framework of a working group within the Government Offices, which includes staff from the Swedish Environmental Protection Agency. The Government states that the estimates are preliminary, but the report does not explain how the calculations were made or what uncertainties they contain. This makes it difficult for outsiders to assess the plausibility of the estimated effects.

Assumptions and uncertainties in the scenarios

Annex 1 to the Swedish Environmental Protection Agency's background material for the 2025 Climate Report[46] sets out the scenario assumptions that the Agency considers to be the most important. We welcome the fact that the Swedish Environmental Protection Agency presents these assumptions, which enables outsiders to interpret and understand the scenarios. As the Government has used the Swedish Environmental Protection Agency's scenarios as the basis for its scenarios in the 2025 Climate Report, this means that the assumptions in Annex 1 also apply to the Government's scenarios.

We consider that several of these assumptions have a significant impact on future emissions and are uncertain, and in some cases optimistic. This means that emissions risk being higher than the scenarios indicate. This applies in particular to assumptions regarding:

- The necessary conditions for the transition.
- Technological shifts for the industrial transition.
- The electrification of the vehicle fleet and fuel use in the transport sector.
- Growth and harvesting rates in forests.
- Agricultural production volume and production mix.

In the following section, we describe these assumptions and the uncertainties associated with them in more detail.

Prerequisites for the transition

The underlying assumption in the Swedish Environmental Protection Agency's and the Government's scenarios is that all the necessary conditions for the transition are in place. This assumption applies to all sectors and emissions except for industrial process emissions, where specific assumptions are instead made regarding the transition in each individual facility. This means, for example, that the scenarios assume that all necessary infrastructure will be built in time, that the electricity grid can meet the demand for fossil-free electricity at competitive

t Ahead of this year's climate report, the 2025 scenario was updated by a working group within the Government Offices, which includes staff from the Swedish Environmental Protection Agency. The Swedish Environmental Protection Agency's 2025 scenario was originally presented in April 2025, and the update was carried out to take into account the preliminary emissions statistics for 2024, which were presented in June 2025. The emissions statistics showed that emissions, particularly from transport and machinery, were higher than expected due to increased fuel consumption.

prices, that biofuels and materials are available in sufficient quantities, that all necessary environmental permits are approved on time, and that the required expertise is in place.

The Government states in its climate report that a limitation of the methodology is that all scenarios assume the conditions for the transition are already in place. We share this assessment and therefore welcome the fact that the Swedish Environmental Protection Agency does not make this assumption for the industrial transition, where such conditions currently represent a major constraint (see section 5.4). Nevertheless, we consider it likely that certain emissions reductions, for example in the transport sector, which are included in the scenarios, cannot in reality be achieved because the necessary conditions for the transition are not in place.

In the 2025 Climate Report, the Government presented quantitative indicators on the status and progress of certain factors that it considers to be particularly important for the transition. We welcome this initiative, although we believe there may be other indicators and metrics that are at least as important for the transition.

Technological shifts in the industrial transition

Industry is the second-largest emitting sector and generates significant emissions from a relatively small number of industrial facilities. Consequently, technological shifts in individual facilities are of great importance for Sweden's climate transition. The scenarios make the following assumptions regarding in which sub-sectors and facilities such technological shifts will occur and when:

- The steel industry will transition to fossil-free technology by 2030, resulting in emissions reductions of several million tonnes per year.
- The iron industry will commence new production of fossil-free sponge iron by 2040. As this involves new production, it will not have a particularly significant impact on the industry's current emissions.
- The cement and minerals industry will commission a large CCS plant by 2030 and a smaller one by 2040.
- The refining industry will commission a CCS plant by 2030.
- The chemical industry will implement an emissions-reducing technology shift by 2040.

Even after these technological shifts have been implemented, some emissions will remain in the respective sub-sectors by 2045.

The Swedish Environmental Protection Agency assesses specific technology shifts based on a comprehensive evaluation of, among other things, the following factors:

- How concrete and realistic the transition plans are.
- Whether the company has initiated the process for, or has been granted, an environmental permit.
- How likely it is that the facility will secure an adequate electricity supply.
- What other risk factors exist, such as access to necessary raw materials.

We consider it realistic, based on currently available public information, to assume that most of these technological shifts will take place before 2045, by which time Sweden aims to achieve net-zero emissions. At the same time, the realisation of these technological shifts is uncertain, particularly regarding when they will occur, but in some cases also whether they will occur at all. These uncertainties stem, among other things, from companies' internal capabilities and decisions, whether the necessary conditions will be in place, the price of emission allowances, demand for fossil-free products, the economic cycle, access to financing and government support, and so on. Some delays are bound to occur, which would increase cumulative emissions up to 2045 by several million tonnes. We note, for example, that Heidelberg Materials has recently paused its

u For reasons of confidentiality, the Swedish Environmental Protection Agency does not disclose which companies and facilities are involved in each technology shift.

CCS project for the cement factory in Slite after funding was not granted by Industry Leap.[111] It is currently uncertain whether or when the project will be resumed, but provided it is implemented before 2045, it will not affect the prospects of achieving the net-zero target.

Electrification of the vehicle fleet and fuel use in the transport sector

The transport sector accounts for the largest emissions in Sweden, and uncertainties in the assumptions affecting the transport sector's emissions can have a significant impact. In the Government's scenarios, it is primarily the electrification of the vehicle fleet that contributes to future emissions reductions, as transport activity is assumed to increase and the reduction obligation is assumed to remain constant at 10 per cent.

Assumptions regarding the electrification of the transport sector are uncertain and optimistic

The scenarios assume a rapid pace of electrification, based on Trafik Analysis' short-term forecasts up to 2027, and that the EU's emissions requirements for vehicles will, in practice, result in a ban on the sale of petrol and diesel cars by 2035.

Since the scenarios were published, new information has come to light that alters expectations regarding the rate of electrification. New statistics and forecasts from the industry organisation Mobility Sweden show that the rate of electrification has levelled off in 2025 and is expected to be lower up to 2030 than assumed in the scenarios.[38] The introduction of the ETS 2 emissions trading scheme, which was intended to raise the price of fossil fuels, will be postponed by one year to 2028, meaning that petrol and diesel prices could be around SEK 0.8 lower in 2027 than they would otherwise have been. The European Commission has also proposed lower emission standards for vehicles, which means that petrol and diesel cars would still be permitted for sale after 2035. Vehicle standards are particularly significant for the scenarios, as they assume compliance with these standards, meaning that no passenger cars with internal combustion engines are sold after 2035 in the scenarios. All of this has a negative impact on the rate of electrification. Furthermore, there is a risk that insufficient charging infrastructure - which is a necessary prerequisite (see previous discussion) - will limit the rate of electrification, particularly for public and semi-public charging of trucks, where the infrastructure is currently not sufficiently developed.

Overall, we believe that this means emissions from the transport sector are likely to be higher than indicated by the latest scenarios. In the background material for the 2024 Climate Report, the Swedish Environmental Protection Agency carried out a sensitivity analysis of the impact of a slower pace of electrification. Sales of electric passenger cars were assumed to remain at 2023 levels until 2030 and then increase to 100 per cent by 2035. Total emissions for 2024-2030 were then 1.5 million tonnes higher than in the main scenario, and for 2024-2035, emissions were 5 million tonnes higher.

Assumptions regarding the use of fossil fuels are uncertain

The use of fossil fuels also has a significant impact on Sweden's emissions. This use is determined by assumptions regarding the composition of the vehicle fleet, policy instruments, fuel prices, and the price sensitivity and substitution patterns of households and businesses. In the Swedish Environmental Protection Agency's background material for the 2024 Climate Report, two scenarios for fuel consumption were presented - one with lower consumption and one with higher consumption - due to the difficulties in assessing the effect of the reduced reduction obligation. In our 2025 report, we assessed that the Government was overly optimistic when it concluded, based on the scenario with lower fuel consumption, that Sweden would meet its EU commitment under the ESR by 2030. Emissions from the transport sector in 2024 were also higher than the Government's assessment, and the Government's latest scenarios now show a gap of 4.3 million tonnes compared with the EU commitment; see Chapter 3. We assess that future fossil fuel consumption remains uncertain and risks being higher than the scenarios indicate, partly because Sweden's low fuel prices compared with our neighbouring countries (see Figure 17) may lead to large amounts of so-called cross-border refuelling, which in the statistics is counted as emissions occurring in Sweden.

Growth and felling rates in the forest

Sweden's net removals in the land-use sector, of which forests account for the largest share, are substantial and on a par with Sweden's total territorial emissions. Consequently, the key assumptions regarding the forest's net uptake have a very significant impact on net uptake in absolute terms (millions of tonnes). Net uptake in the forest is primarily influenced by growth and harvesting rates (see 5.2.1 for a detailed analysis). Here, the uncertainties are also particularly high compared with other sectors, primarily because:

- Net carbon uptake in forests is influenced by many different natural processes that are difficult to predict and which are, moreover, affected by climate change, the effects of which are themselves uncertain.
- Growth and harvesting reflect small changes in very large carbon stocks, meaning that relatively small changes in carbon stocks can have a very significant effect on net uptake.
- The methods used to measure changes in the forest are rough, unreliable and subject to constant revision, making it difficult to determine the actual size of the net carbon sink.

It is therefore positive that the Swedish Environmental Protection Agency is presenting two scenarios for net removals in the land-use sector, rather than just one. The scenarios reflect different levels of forest growth resulting from natural variations.

The uncertainties surrounding the forest's net carbon uptake are also illustrated by the latest statistics, published in 2025, which showed that net carbon uptake was significantly higher during 2021-2024 than previously reported in the statistics and compared with the Government's two scenarios. This was partly due to increased growth, thanks to favourable natural conditions, reduced felling and updates to how net absorption is measured. We assess that net removals in the forest will continue to be more uncertain than for other sectors and that net removals could be both significantly higher and significantly lower than the Government's scenarios indicate. However, this does not diminish the need for a climate policy that improves the conditions for increasing net removals.

Agricultural production volume and production mix

Agricultural emissions account for the second-largest share of emissions within Sweden's ESR sector. A large proportion of the remaining emissions in 2045 is also expected to come from agriculture, as there are still no realistic measures in place to eliminate large parts of agricultural emissions.

We consider that the Government's assumptions regarding the future production volume and production mix in agriculture are reasonable in light of historical trends and currently adopted policies.

However, we believe there is a risk that emissions from agriculture and agricultural land may be higher than the scenarios indicate. This is because domestic agricultural production may increase as a result of national preparedness and food security having gained increased importance in recent years, as reflected in the Government's Food Strategy 2.0[107] and the Swedish Board of Agriculture's proposal for new agricultural targets for 2035.[240] The increase in production and land use for agricultural purposes that the Swedish Board of Agriculture anticipates will be needed to achieve the proposed agricultural targets is greater than as assumed in the Government's scenario. Increased agricultural production in itself leads to higher emissions unless these are offset by efficiency improvements.[108] Furthermore, agricultural land on organic soils (approximately 140,000 hectares or 6 per cent of Sweden's agricultural area) gives rise to greenhouse gas emissions, and land used for agriculture cannot be utilised for other carbon sequestration measures such as rewetting or afforestation.

We therefore consider that emissions from agricultural production and land use are likely to be higher than indicated in the Government's scenarios. When formulating climate policy, the government should take into account that emissions from agriculture and agricultural land may be higher than the scenarios indicate, which must be offset by further efficiency improvements in agriculture and/or greater emissions reductions in other sectors.

Appendix Part II - The Council's assessment of the Government's efforts during the period 2025

As part of the Swedish Climate Policy Council's remit to evaluate the Government's overall policy and its impact on Sweden's prospects of achieving its climate targets, we compile the Government's climate-related decisions on an ongoing basis throughout the year. The decisions are listed and categorised according to a number of parameters.

This review facilitates various qualitative and quantitative analyses and is used in conjunction with a review of the Government's various policy documents, interviews and dialogue sessions, reports from agencies and research bodies, and so on, to assess how the Government's overall policy has developed over the past year in terms of the prospects for achieving climate targets.

Selection of the Government's initiatives

The list of the Government's climate-related initiatives for 2025 has been compiled by bringing together decisions published on the Government's website. All legal documents (ministry series and memoranda, explanatory notes to regulations, committee directives, referrals to the Council on Legislation, government bills, letters, government inquiries and Sweden's international agreements), referrals, government assignments, regulations and press releases published during the year are included in the selection. An assessment and selection is then made of which of these can be considered 'climate-relevant'. This gross list is compiled to track the flow of policy development and capture various stages in the process, including incoming evaluations and other documents that do not constitute active decisions by the Government.

A government decision is considered to be climate-relevant if it is expected to affect Sweden's ability to achieve its agreed climate targets. This includes both decisions that are expected to have a direct impact on greenhouse gas emissions and decisions that affect the conditions for the transition, and thus have an indirect or longer-term impact. Both decisions expected to have a positive and those expected to have a negative impact are included.

The Swedish Climate Policy Council's remit is to evaluate the Government's overall policy. Consequently, initiatives from all ministries are, in principle, included. The Ministry of Climate and Enterprise, followed by the Ministry of Rural Affairs and Infrastructure, account for the largest share of government decisions in our compilation.

The climate issue is complex and is linked to many different societal issues. Decisions that are not intended as climate measures, but which may nevertheless have a significant impact on emissions, and can therefore be considered climate-relevant, are included in the analysis. There are many related areas, such as climate adaptation or biodiversity, but these are not included unless they are also assessed as having an impact on Sweden's ability to achieve its climate targets.

Categories

In addition to listing the Government's initiatives, certain additional information (date, reference, brief explanation) is also noted, and they are classified according to a number of parameters.

1. The first parameter is industry/sector, which refers to the economic sector affected by the decision. This could be, for example, the transport sector, the green sector, or all sectors of the economy.
2. The second parameter is the emissions sector. Here, we have based our classification on the Swedish Environmental Protection Agency's emissions sectors and grouped these into: Electricity and heating; transport and machinery; industry; agriculture; LULUCF; and other. Decisions that do not affect any specific sector are listed as 'not relevant' or 'all'.

3. The third parameter is the Climate Policy Council's four key areas. This is a classification of emission-reducing measures into four cross-sectoral areas: more efficient use of resources and energy; fossil-free electrification; biomass from forestry and agriculture; and carbon capture and storage. Not all decisions can be attributed to a specific key area.
4. The fourth parameter is policy instruments and governance/leadership. The latter category concerns, for example, the Government's governance of public agencies or may take the form of methodological guidance for cost-effective climate policy. Policy instruments are in turn divided into the following categories: economic instruments; administrative instruments; and informational instruments.

In cases involving budgetary decisions, the amounts for each year are also specified, covering the three-year period covered by the Budget Bill. Decisions on appropriations and tax revenues are treated in the same way. Credit guarantees, authorisations and so on, which do not directly affect central government expenditure or revenue, are noted separately.

Quality assurance

The list is checked and, as far as possible, cross-referenced with the monitoring carried out by the Swedish Environmental Protection Agency, including in preparation for its reports to the EU and the UN. The Secretariat of the Climate Policy Council also sends the list to the Climate Unit at the Ministry of Climate and Enterprise and invites them to point out if any relevant government initiatives have been omitted. Furthermore, a degree of informal quality assurance takes place by sharing the list with the Panorama editorial team, which includes members from the Swedish Environmental Protection Agency and the Swedish Energy Agency, who are responsible for keeping Panorama updated on decisions regarding climate policy instruments.

List of the Government's climate initiatives in this year's report

This list sets out the initiatives in 2025 that the Climate Policy Council assesses as likely to influence Sweden's prospects of achieving its climate targets. The purpose of the list is to reflect the active decisions taken by the Government during the year. Consequently, it does not include, for example, reports received from committees or government agencies, but it does include the commissioning of new inquiries. To make it clearer, the list also does not include all stages of the process leading up to, for example, a government bill to the Riksdag, such as referral to the Council on Legislation and so on, but only the final stage in the legislative chain. Nor are government initiatives included that, in the final assessment, are deemed to have little significance for the prospects of achieving the climate targets.

In the tables below, we have indicated how we assess that the measure contributes to or undermines the climate targets. Where applicable, we have also indicated the budgetary and climate impact of the government's measure. For these measures, we are reproducing the Government's own assessment.

Table 6. The Government's cross-sectoral initiatives in 2025

Date	Heading	Description	Contributes to or undermines	Council's comment	Source
23 January 2025	The Cross-Party Committee on Environmental Objectives is tasked with reviewing the climate targets for 2030 and the Climate Policy Council	Supplementary instructions to the Cross-Party Committee on Environmental Objectives to submit proposals on how Sweden's interim targets for 2030 can be formulated so that they are more closely aligned with Sweden's commitments within the EU. The Committee is also to review the Climate Policy Council's remit and the nomination of its members.	Contributes	Contributes to greater clarity and political support regarding the emissions reduction targets for 2030.	Dir. 2025:3
22 September 2025	Climate Leap is strengthened	Climate Leap is being strengthened and extended. The support is aimed at several different types of climate measures. Budgetary impact: SEK 1,500 million in increased expenditure in 2026 Climate impact: 661,000 tonnes reduction in emissions (2026-2030)	Contributes	The support is based on climate benefits per krona invested and contributes to reduced emissions and enabling measures.	Prop. 2025/26:1 (Budget Bill for 2026)
22 September 2025	The Swedish Environmental Protection Agency's increased resources for the administration of climate legislation	The Swedish Environmental Protection Agency will receive increased resources targeted at the implementation of EU legislation on the circular economy, as well as the implementation of the EU ETS and CBAM. Budgetary impact: SEK 25 million in increased expenditure in 2026.	Contributes	Increased resources can contribute to the effective implementation of EU climate policy at national level.	Prop. 2025/26:1 (The 2026 Budget Bill)
18 December 2025	Develop scenarios for emissions trends	The Swedish Environmental Protection Agency shall analyse how the transparency, clarity and accuracy of emission scenarios in the climate field can be improved.	Contributes	Developed scenarios provide a better basis for the Government to develop climate policy.	KN2025/00560
18 December 2025	Analyse the EU's climate framework up to 2040	The Swedish Environmental Protection Agency is to analyse proposals for measures that could be introduced at EU level, with a particular focus on the EU Emissions Trading System, CBAM, LULUCF, Article 6 of the Paris Agreement and any Member States' climate commitments.	Contributes	The Swedish Environmental Protection Agency's mandate has existed previously. This mandate specifies particularly important areas for the ongoing work.	KN2025/00560
18 December 2025	Background material for the national energy and climate plan	The Swedish Energy Agency is tasked with producing a draft proposal for Sweden's integrated national energy and climate plan for the period 2031-2040.	Contributes	The national energy and climate plan is a key policy document for ensuring compliance with the EU's climate and energy targets. The background material for this plan is therefore important for demonstrating how Sweden will close the gap to the targets.	KN2025/02354

Table 7. Government initiatives in 2025 in the transport and construction machinery sectors

Date	Heading	Description	Contributes to or counteracts	Council's comment	Source
11 March 2025	Implementation of EU requirements for sustainable aviation fuels (Refuel EU Aviation)	Proposal for a new Act on the supply and use of sustainable aviation fuels. The Act contains supplementary provisions to the EU regulations concerning sanctions, supervision and appeals.	Contributes	Through this measure, Sweden is fulfilling the national implementation of the EU's climate policy.	Prop. 2024/25:118
18 March 2025	Changes to the reduction obligation	The level of the reduction obligation is raised from 6 per cent to 10 per cent. At the same time, it becomes possible to fulfil the obligation through the supply of fossil-free electricity.The proposal also contains changes to the sustainability criteria for renewable fuels.	Contributes	The change will lead to reduced emissions in the ESR sector. However, the tightening of the reduction obligation was already announced in 2024 and was included in the Council's evaluation in the 2025 report.	Prop. 2024/25:131
18 March 2025	Legislative changes resulting from the EU's emission standards for heavy-duty vehicles	The amendments concern which vehicles are to be deemed emission-free, as well as clarifications regarding reference values for carbon dioxide emissions. The proposal is a consequence of the EU's new emission standards for heavy-duty vehicles.	Contributes	Through this measure, Sweden is continuing the national implementation of the EU's climate policy.	Prop. 2024/25:122
28 March 2025	Assignment to analyse and propose support to promote the transition of shipping and aviation	The Swedish Energy Agency is tasked with analysing the need for support to promote the transition to fossil-free shipping and aviation, and to propose how such support might be designed.	Contributes	The analysis lays the foundation for support for the climate transition in shipping and aviation.	KN2025/00082
25 April 2025	Increase in the scrapping premium	The scrappage incentive is being increased from 10,000 to 25,000 for private individuals who scrap an older car with a combustion engine and simultaneously purchase or lease an electric car. The measure applies only in 2025 and is implemented within the existing budgetary framework.	Contributes	In theory, the incentive is intended to help ensure that vehicles with phase out internal combustion engines and encourage the purchase of electric vehicles. So far, the incentive has had limited impact. Despite the increase, it is likely that few households will make the leap directly from scrapping an older car to buying an electric car.	SFS 2025:296
13 May 2025	Assignment on more efficient freight transport	Trafikanalys has been tasked with producing a knowledge base that can contribute to more efficient rail freight transport.	Contributes	Greater knowledge of how freight transport can be made more efficient contributes to improved opportunities to reduce emissions from freight transport.	LI2025/00938
20 May 2025	An investigator is to draw up an action plan for fossil-free fuels for shipping and aviation	An investigator is to analyse and propose ways to promote access to sustainable, fossil-free and low-carbon fuels for shipping and aviation in Sweden.	Contributes	Access to fossil-free fuels is important for the climate transition that there is access to fossil-free fuels. This assignment has the potential to contribute to this.	LI2025/01033

Date	Heading	Description	Contributes to or counteracts	The Council's comments	Source
22 September 2025	Vehicle tax abolished for certain trailers, including caravans	The annual vehicle tax and sales tax will be abolished for trailers — including caravans — with a taxable weight of up to 3 tonnes. Budgetary impact: SEK 190 million in lost revenue (2026)	Counteracts	Hampers climate transition to a limited extent, as it is expected that there will be more trailers and caravans on Swedish roads.	Prop. 2025/26:1 (Budget Bill for 2026)
22 September 2025	Increased environmental compensation for rail freight transport	The decision means that the amount of environmental compensation for rail freight transport will be increased during the period 2026-2030. Budgetary impact: SEK 335 million in increased expenditure in 2026 Climate impact: 95,000 tonnes reduction in emissions (2026-2030)	Contributes	The decision strengthens the competitiveness of rail transport compared to road transport and thus contributes to the shift of freight to modes of transport with lower emissions. The decision makes a marginal contribution to reducing emissions in the ESR sector.	Prop. 2025/26:1 (Budget Bill for 2026)
22 September 2025	Increased compensation for emergency airports and increased state grants for operating support to non-state-owned airports.	Compensation to airports with emergency response functions is being increased, and state operating support to municipalities for non-state-owned regional airports is being raised. Budgetary impact: SEK 351 million in increased expenditure (2026)	Counteracts	Operational support may be justified for emergency preparedness and accessibility. However, support for non-state-owned airports enables continued or increased aviation activity with high emissions.	Prop. 2025/26:1 (Budget Bill for 2026)
22 September 2025	Extension of support for light electric trucks	The climate bonus for light electric trucks is extended by two years, until the end of 2028. Budgetary impact: an estimated increase in expenditure of SEK 700 million by 2027 Climate impact: 135,000 tonnes for the period 2026-2030	Contributes	Extending the support will enable more companies to switch to electric light goods vehicles.	Prop. 2025/26:1 (Budget Bill for 2026)
22 September 2025	Extended reduction in tax on diesel in land-based industries	The temporarily extended reduction in carbon dioxide and energy tax on diesel used in machinery, ships and certain boats in commercial agricultural, forestry and aquaculture operations is extended to 2026. Budgetary impact: SEK 560 million in lost revenue in 2026 Climate impact: 20,000 tonnes of increased emissions in 2026	Counteracts	The reduced diesel tax is a fossil fuel subsidy that makes it more expensive for the land-based industries to switch to fossil-free fuels.	Prop. 2025/26:1 (Budget Bill for 2026)
10 October 2025	Assignment regarding the state's commitment to night trains	The Swedish Transport Administration is tasked with investigating the state's commitment to night train services.	Contributes	Night train services can replace flights with higher carbon emissions. A review of the government's commitment could lead to a more efficient night train service.	LI2025/01695

Date	Heading	Description	Contributes to or counteracts	Council's comment	Source
16 October 2025	Increase in the deduction limit for travel to and from work	The limit for deductions for work-related travel, travel to and from education, and travel to attend meetings will be raised from SEK 11,000 to SEK 15,000 from 2026. Budgetary impact: SEK 610 million in lost revenue (2026)	Contributes	The reform means that fewer people will be able to claim travel tax deductions, which may lead to slightly fewer people commuting to work by car - and thereby a marginal reduction in emissions.	Govt Bill 2025/26:31
23 October 2025	Mandate to strengthen Sweden's security of supply for liquid fuels	The Swedish Energy Agency is tasked with developing an action plan for the security of supply of liquid fuels.	Contributes	The remit includes analysing changes to the emergency stockpile resulting from a transition to electric power and other renewable fuels.	KN2025/01966
4 December 2025	More generous terms for the 'Charge Your Car' grant	The 'Charge Your Car' scheme provides incentives for the expansion of charging infrastructure. An amendment to the regulations enables companies to apply for support for more charging points and for a higher amount than previously.	Contributes	The amendment enables a faster expansion of charging infrastructure. The amendment to the regulation is primarily aimed at companies that have the capacity to expand charging points on a larger scale.	SFS 2025:1456
11 December 2025	Sweden's Social Climate Plan and the proposal for a new targeted electric car subsidy are approved	The European Commission approves Sweden's proposal for a Social Climate Plan. The plan includes a proposal for an electric car subsidy targeted at lower-income households, particularly in rural areas or areas with poor access to public transport. Budgetary impact: SEK 800 million in expenditure in 2026 Climate impact: 604,000 tonnes of reduced emissions (2026-2030)	Contributes	The targeted electric car grant was announced as early as 2024. The Social Climate Plan has clarified the conditions for the grant. The impact of the electric car grant depends on how many households can benefit the support, which in turn affects how many additional electric cars are brought onto the Swedish market.	Not available
16 December 2025	Permanent tax exemption for workplace charging benefits and extended entitlement to fuel expense deductions	Tax exemption for the benefit of charging electric or hybrid vehicles at the workplace will be made permanent from 1 July 2026, and the right to a deduction for fuel expenses for business travel using plug-in hybrid vehicles will be extended. Budgetary impact: SEK 140 million in lost revenue in 2026	Contributes	Strengthens incentives for rechargeable vehicles and may promote the transition from fossil-fuel-powered to electric-powered work and business travel, which supports climate targets.	Prop. 2025/26:80

Table 8. The Government's initiatives in 2025 within industry

Date	Heading	Description	Contributes to or counteracts	The Council's comment	Source
16 January 2025	Further instructions for the Environmental Permits Inquiry	A supplementary directive is issued to the Environmental Permits Inquiry to submit further proposals for more efficient permitting processes, including within planning and building legislation, the Environmental Code and the Industrial Emissions Directive.	Contributes	The aim of the inquiry is to achieve more efficient permitting processes and thereby improve the conditions for the industry's climate transition. The impact depends on how the legislative proposals are formulated.	Dir. 2025:2
23 January 2025	Abolition of track switching	Legislative changes that will abolish the track-switching system, i.e. the possibility of applying for a work permit following the rejection of an asylum application.	Counteracts	Risks having a negative impact on the supply of skills needed for the climate transition.	Govt Bill 2024/25:92
24 February 2025	A STEM strategy for Sweden	Contains a package of measures aimed at strengthening the supply of skills in science and technology in Sweden. The strategy also includes targets for increasing the number of people trained in these fields.	Contributes	The strategy both sets out a direction and presents measures for skills provision that are important for Sweden's climate transition.	Not available
2025-06-05	Reduced energy tax for certain biogas	The tax model for gas categories is being amended to include more biogenic gases than just traditional biomethane in the definition of biogas.	Contributes	The reform means that additional types of biogas will be subject to a reduced energy tax, which is likely to lead to increased biogas production and reduced emissions. The effects are expected to be more significant in the longer term.	Prop. 2025/26:1 (Budget Bill for 2026)
10 June 2025	Report on municipal incentives to attract and accommodate large corporate establishments	The Acceleration Office is tasked with analysing the incentives municipalities have to attract and host major corporate investments. It is also to assess whether there is a need for the state to facilitate municipal growth.	Contributes	The ability of municipalities to support major business set-ups is crucial to achieving the industry's climate transition. This analysis is a step towards expanding the Government's risk-sharing arrangements with municipalities in this work.	Dir. 2025:58
12 June 2025	A Swedish industrial strategy is presented	The strategy aims to create the conditions for a growing, technology-leading and fossil-free industry that enhances Sweden's competitiveness and resilience.	Contributes	The strategy outlines measures taken to strengthen the industry's competitiveness and discusses key policy areas for the future. The Government is not presenting any major new initiatives, but the strategy provides an overview of priorities for the future.	Not available

Date	Heading	Description	Contributes to or counteracts	Council's comment	Source
22 September 2025	Uniform energy taxation for metallurgical processes	The energy tax exemption for electricity consumed in metallurgical processes is extended to also cover the heating of ladles and similar vessels. Budgetary impact: SEK 20 million in lost revenue in 2026	Contributes	The proposal promotes the electrification of metallurgical processes by making electricity more cost-effective compared with fossil fuels. At the same time, however, the incentives for energy efficiency are reduced slightly.	Prop. 2025/26:1 (Budget Bill for 2026)
22 September 2025	New collaboration to strengthen industrial transition	The collaboration will assist various sectors in finding new solutions that accelerate the industrial transition, reduce emissions and strengthen Sweden's competitiveness. Budgetary impact: SEK 15 million in lost revenue in 2026	Contributes	It is unclear exactly how the partnership is intended to work. Increased partnership in general can accelerate industrial transition by pooling resources and expertise across sectors.	Prop. 2025/26:1 (Budget Bill for 2026)
22 September 2025	State green loans are being paused	Since 2021, the Swedish National Debt Office has been tasked with issuing credit guarantees for new loans taken out by companies for major industrial investments that contribute to Sweden's environmental and climate policy objectives. No authorisation is now being granted to issue new credit guarantees in 2026.	Counteracts	The green credit guarantees have been designed to share risk with industrial players in major industrial restructuring. Suspending the credit guarantees entails increased risk for these industrial investments.	Prop. 2025/26:1 (Budget Bill for 2026)
22 September 2025	A new environmental assessment authority	Preparations for a new environmental assessment authority are underway. Funds have been allocated in the budget for the gradual development of the authority. Budgetary impact: a loss of revenue of SEK 125 million is estimated for 2027	Contributes	A coordinated approach to environmental assessment may, in the longer term, contribute to a more uniform and efficient handling of environmental assessments. At the same time, there are transition risks associated with this major organisational change.	KN2025/01878
22 September 2025	Increased resources for more efficient permit assessment	Resources for the Swedish Environmental Protection Agency, the county administrative boards and the Swedish courts will be strengthened to ensure more efficient permit processes. Budgetary impact: SEK 19 million in lost revenue in 2026	Contributes	Increased resources for review bodies will improve the conditions for more efficient processing of permit applications.	Prop. 2025/26:1 (The 2026 Budget Bill)
16 December 2025	New rules on labour migration	Legislative changes aimed at tightening the conditions for labour migration whilst promoting the immigration of highly skilled workers.	Counteracts	The major change is that the minimum wage threshold and the rules for labour immigration are being tightened. This risks having a negative impact on the supply of skills in the climate transition.	Prop. 2025/26:87
18 December 2025	Supporting skills in electrification	The Swedish Energy Agency is tasked with supporting the supply of skills for electrification and quantifying the need for nuclear power expertise.	Contributes	Further support for the supply of skills in fossil-free electrification can support the climate transition. The impact is difficult to assess.	KN2025/02354

Table 9. The Government's initiatives in 2025 in the areas of electricity and heating

Date	Heading	Description	Contributes to or counteracts	Council's comment	Source
17 January 2025	Preparations for a new wind farm	The Uppsala County Administrative Board is tasked with preparing the application for a permit from Najaderna en an offshore wind farm with an annual electricity generation of around 4-5 TWh.	Contributes	By enabling renewable electricity generation, the decision contributes to the potential for achieving climate targets.	KN2023/04668, KN2024/01097
18 March 2025	Changed tax rules for solar power	The subsidy rate for the installation of solar panels under the green tax credit is being reduced from 20 to 15 per cent. At the same time, the tax relief for micro-generation of renewable electricity is being abolished.	Counteracts	The financial incentives for households and small-scale operators to invest in solar panels are being reduced, which may slow down the expansion of small-scale renewable electricity generation.	Prop. 2024/25:109
3 April 2025	Preparation of new offshore wind power	Approved cable laying for the Kattegatt Syd wind farm. At the same time, the Gävleborg County Administrative Board was tasked with preparing applications for new wind farms (Bothnia Offshore Sigma and Bothnia Offshore Lambda North).	Contributes	By enabling renewable electricity generation, these decisions contribute to the potential for achieving climate targets.	KN2023/03680 KN2024/02508 (partially) KN2024/02509 (partially)
17 June 2025	Increase in property tax for wind turbines	The decision means that the property tax for facilities consisting of wind turbines will be increased from 0.2% to 0.5% of the assessed value of such electricity generation units.	Counteracts	Increased costs for investments in renewable electricity generation may slow down the expansion of wind power. However, the increased property tax is expected to finance municipal compensation for wind power.	Prop. 2024/25:168
23 June 2025	Assignment to review and analyse the tax on waste	The Swedish Tax Agency and the Swedish Environmental Protection Agency have been tasked with jointly conducting a review and analysis of the waste tax	Contributes	The tax helps to reduce the amount of waste, and a review could result in increased circular governance.	Fi2025/01415
8 August 2025	Assignment to clarify the benefits and significance of hydropower for the electricity supply	The Government has tasked the Swedish Energy Agency and Svenska kraftnät with analysing the benefits of hydropower for the electricity system and for electricity supply at local, regional and national levels.	Contributes	Can contribute to climate targets by highlighting and evaluating the flexibility of hydropower, which can facilitate prioritised and effective investments to build a robust, fossil-free energy system.	KN2025/01564
8 August 2025	Assignment to propose measures to strengthen district heating and combined heat and power	The Swedish Energy Agency is tasked with developing proposals for measures to strengthen district heating and combined heat and power in Sweden.	Contributes	The analysis may help to secure and develop an important part of the fossil-free energy system - district heating and combined heat and power. At the same time, it is not clear from the mandate that the analysis takes into account the perspective of how Sweden can best utilise its bio-based raw materials.	KN2025/01566

Date	Heading	Description	Contributes to or counteracts	Council's comment	Source
2 September 2025	Uranium mining once again permitted in Sweden	The ban in the Environmental Code on granting licences for mining or mining facilities involving uranium-bearing material is removed.	Contributes	Uranium is a key input for nuclear power, i.e. fossil-free electricity generation. At the same time, it is important to take into account the negative impact of uranium mining on other societal objectives.	Prop. 2024/25:203
22 September 2025	New financing model for nuclear power	New government commitments to enable new nuclear power. A risk reserve for additional loans in the event of unexpected cost overruns (up to SEK 220 billion) and two-way difference contracts (up to SEK 400 billion). The terms of the support include a mechanism regulating risk and profit sharing.	Contributes	In the long term, the Government guarantees and support may contribute to increased fossil-free electricity production and thus support climate targets. At the same time, the decision entails significant financial commitments and a long lead time, meaning that the effects will only be felt far into the future. Guarantee prices for nuclear power may also crowd out investment in renewable electricity generation.	Prop. 2025/26:1 (Budget Bill for 2026)
22 September 2025	Extension of subsidies for energy efficiency improvements in single-family homes	The decision means that support for energy efficiency improvements in single-family homes will be extended and developed. Budgetary impact: SEK 300 million in increased expenditure in 2026.	Contributes	Efforts to reduce energy consumption in homes, which supports climate targets.	Bill 2025/26:1 (The 2026 Budget Bill)
22 September 2025	Strengthening of Kraftlyftet	Kraftlyftet is being strengthened. This is an investment support scheme for the electricity system aimed at enhancing security of supply and flexibility in the electricity and combined heat and power sector. Budgetary impact: SEK 250 million in increased expenditure in 2026	Contributes	May contribute to the ability to achieve climate targets by enabling more investment in technology that strengthens the electricity system's capacity, flexibility and ability to integrate more renewable energy, which is crucial for a fossil-free transition	Prop. 2025/26:1 (The 2026 Budget Bill)
22 September 2025	High-cost protection for electricity and gas	Development of the system for distributing temporary electricity support during periods of high prices	Counteracts	Counteracts efficiency improvements but may create more stable expectations regarding electricity prices, which could potentially facilitate electrification.	Prop. 2025/26:1 (Budget Bill for 2026)
22 September 2025	Reduction in electricity tax	The energy tax on electricity is being reduced to SEK 0.36 per kilowatt-hour, which is a reduction of SEK 0.082 öre compared with the adjusted rate that would otherwise apply. Budgetary impact: SEK 6,520 million in lost revenue in 2026	Contributes	Lower electricity prices may, to some extent stimulate electrification within industry and transport. However, the decision discourages efficient energy use.	Prop. 2025/26:1 (The 2026 Budget Bill)

Date	Heading	Description	Contributes to or counteracts	Council's comment	Source
22 September 2025	Increased resources for environmental assessment of nuclear power	The relevant agencies will receive increased resources for the environmental assessment of nuclear power. Budgetary impact: SEK 161 million in increased expenditure in 2026.	Contributes	More efficient processing of new nuclear power projects can help increase the production of fossil-free electricity.	Prop. 2025/26:1 (The 2026 Budget Bill)
23 September 2025	Improvements to the structure of the electricity market	Amendments to the Electricity Act to implement the EU Electricity Market Directive. The proposals essentially entail improved conditions for electricity users.	Contributes	Contributes to a small extent to the climate transition as the conditions for electricity use are strengthened, and thus also electrification.	Govt Bill 2025/26:16
2 October 2025	Inquiry into compensation in the event of the decommissioning of nuclear reactors as a result of political decisions	A special investigator is to submit proposals regarding the right to compensation in the event that political decisions lead to the decommissioning of a nuclear reactor.	Contributes	Such compensation may contribute to greater certainty for those currently considering decisions on new nuclear power.	Dir. 2025:89
5 November 2025	Energy policy objective for efficient energy use	The objective essentially states that energy use in Sweden should be efficient and contribute to enhanced resilience, competitive energy prices, a resource-efficient energy system and the electrification of society.	Contributes	Unlike previously, the target is not quantified but only principles for energy use. The principles are sound, but for effective management they should be be made more concrete, for example through interim targets or indicators.	KN2025/02031

Table 10. The Government's initiatives in 2025 within agriculture

Date	Heading	Description	Contributes to or counteracts	Council's comment	Source
20 March 2025	Study to develop measures to limit the climate impacts of peat for cultivation	The inquiry is to analyse appropriate measures to limit the climate impacts of peat for cultivation.	Contributes	Peat for horticultural use causes greenhouse gas emissions, and the inquiry can help to develop measures that reduce these.	Dir. 2025:29
21 March 2025	Food Strategy 2.0	Aims to strengthen the competitiveness of the Swedish food supply chain and increase Swedish food production.	Counteracts	As there is no clear direction on how this is to be reconciled with climate targets, there is a risk that the increase in production is not compatible with climate targets.	LI2023/00161
5 June 2025	Regulations for the Nitrogen Reduction Scheme adopted	Rules for the payment of the Nitrogen Reduction Scheme have been adopted. The support aims to reduce emissions of ammonia and nitrous oxide. It should, for example, provide support for investments in soil incorporation equipment, roofing for manure storage facilities, acidification and nitrogen sensors.	Contributes	The measure primarily contributes to other environmental objectives but may, to a very limited extent, also reduce nitrous oxide emissions from agriculture.	SFS 2025:655
22 September 2025	Strengthening of SLU's crop cultivation programme	A strengthening of SLU's cultivation programme Grogrund. Works on, among other things, plant breeding and variety testing of protein crops. Budgetary impact: SEK 10 million in increased expenditure in 2026	Contributes	May influence agricultural efficiency, and thereby also reduce climate emissions per unit of cultivated arable land.	Prop. 2025/26:1 (Budget Bill for 2026)
20 November 2025	Temporary reduction in VAT on food	The decision means that the VAT rate on food will be temporarily reduced from 12 per cent to 6 per cent and will apply from 1 April 2026 to 31 December 2027. Budgetary impact: SEK 15,940 million in lost revenue in 2026.	Counteracts	The impact on emissions is difficult to assess, but food consumption is likely to food consumption is likely to increase, which in the long run may contribute to increased food waste	Prop. 2025/26:55
18 December 2025	Support for farm-based biogas for electricity and heating is made possible under Climate Leap	Amendment to the Swedish Environmental Protection Agency's regulatory letter to enable Climate Leap to provide support for biogas used for electricity and heating. A ceiling of SEK 150 million has been set for 2026 for such biogas measures.	Contributes	Increased support for biogas for electricity and heating can reduce greenhouse gas emissions. Particularly in sectors where tax relief for fossil diesel remains in place.	KN2025/00560

Table 11. Government initiatives in the land-use sector in 2025

Date	Heading	Description	Contributes to or counteracts	Council's comment	Source
26 June 2025	Clarified consultation requirement for forestry measures in primeval and old-growth forests	The amendments clarify that forestry measures intended to be carried out in primeval and old-growth forests must be notified for consultation. In this way, Sweden meets the requirements for an A-country under the Renewable Energy Directive.	Contributes	The clarified consultation requirement may strengthen the protection of primeval and old-growth forests. However, the Government's aim is to meet to the requirements of the Renewable Energy Directive. Forest biomass from Sweden will thus have better prospects of meeting the EU's sustainability criteria.	LI2025/01286
22 September 2025	Amended regulations on the taxation of forest land	Amended tax rules for the taxation of forest land, whereby forest owners receive financial incentives to sign voluntary nature conservation agreements. Budgetary impact: SEK 50 million in lost revenue in 2026	Contributes	The reform means that forest owners receive slightly improved financial incentives to enter into nature conservation agreements, which in other words, to protect the natural values of forests on a voluntary basis. This may have a marginal positive effect on the carbon sink in the short term.	Prop. 2025/26:1 (Budget Bill for 2026)
22 September 2025	Advice to forest owners	The Swedish Forest Agency is to be given an expanded remit to advise forest owners on measures to increase the net uptake of greenhouse gases in forests. Budgetary impact: SEK 20 million in increased expenditure in 2026	Contributes	Can be an important support for landowners to improve forestry's ability to act as a carbon sink and thereby help achieve climate targets.	Prop. 2025/26:1 (Budget Bill for 2026)
22 September 2025	Increase the rewetting of abandoned agricultural land	The existing appropriation for rewetting is increased. Budgetary impact: SEK 50 million in increased expenditure in 2026 Climate impact: 155,000 tonnes reduction in emissions (2026-2030)	Contributes	Dried-out organic soils are one of the largest sources of emissions within the land-use sector, and rewetting can reduce these emissions. This initiative does not match the 1.65 billion per year proposed by the Cross-Party Committee on Environmental Objectives in its report on the LULUCF sector.	Prop. 2025/26:1 (Budget Bill for 2026)

Appendix aga III - Calculations underpinning the Council's conclusions

Penalty fee for breach of Sweden's ESR commitment

In our calculations of the potential penalty fee for breach of Sweden's ESF commitment (section 5.1.3), we have based our estimates on the price estimates in Table 12.

Table 12. Potential penalty fee s for breach of Sweden's ESR commitment

	Price estimate (SEK/tonne CO_2e)	Estimated cost (SEK billion)	
		Government's gap assessment (4.3 million tonnes)	Council's gap assessment (8.6 million tonnes)
ETS 1 futures	934	4	8
ETS 1 expert assessment	1,536	7	13
ETS 2 expert assessment	1,829	8	16
Marginal abatement cost (EU)	3,453	15	30
Marginal abatement cost (reduction obligation)	3,600	15	31
Marginal abatement cost (reduction obligation) + penalty payment in the ETS (Article 16)	4,705	20	40

As with Ireland's fiscal and climate policy councils, we present projected price estimates at 2032 price levels, which is when the final settlement against the ESR commitment will take place. The first four price estimates in the table are the same as those used by Ireland's fiscal and climate policy councils and have been converted to SEK at an exchange rate of 11.05 SEK/EUR. The price estimate for *ETS 1 futures* is based on price observations from markets where future emission allowances are traded; *the ETS 1 expert assessment* is based on a survey of market analysts regarding future ETS 1 prices; *the ETS 2 expert assessment* is a weighted average of three different expert assessments of future ETS 2 prices, and *the Marginal Abatement Cost (EU)* is a calculation of the potential costs of reducing emissions within the EU's ESR sector using the most cost-effective technology.

The cost estimate for *the marginal abatement cost (reduction obligation)* represents the Council's own estimates of the cost of reducing emissions through the reduction obligation (see section 5.1.3) and, for the price estimate *Marginal abatement cost (reduction obligation) + penalty fee (Article 16),* we have added a penalty fee of EUR 100 - equivalent to that in the EU Emissions Trading System - converted at a rate of SEK 11.05/EUR. The last two price estimates are calculated in 2025 monetary terms.

Assumptions underlying scenarios in the transport sector

In Table 13, we present the assumptions regarding traffic volume, the proportion of electric vehicles and the proportion of fossil-free fuels that form the basis for the results in Figure 18. The table also shows the estimated emissions from domestic transport (excluding aviation) resulting from the scenarios.

Table 13. Assumptions behind The Climate Policy Council's simplified emissions scenarios based on the transport sector's three pillars of transition

Year	Scenario	Traffic volume (million vehicle-kilometres)	Clean electric vehicles (% of fleet)	Fossil-free fuels (% of liquid fuels)	Emissions from domestic transport excluding aviation (Mt CO_2e)
2024	Today	81,189	7%	13%	16.6
2030	Approved policy	85,813	25%	15%	13.4
2030	1) Reduced traffic	79,565	25	15%	12.4
2030	2) Faster rate of electrification	85,813	33%	15%	11.8
2030	3) Higher proportion of fossil-free fuels	85,813	25	52%	7.6
2030	4) Moderate mix of measures	81,189	30%	37	8.7
2030	5) Ambitious mix of measures	79,565	33%	52%	6.2
2035	Approved policy	89,870	48%	10%	10.1
2035	1) Reduced traffic	77,941	48%	10%	8.8
2035	2) Higher rate of electrification	89,870	65%	10%	6.6
2035	3) Higher proportion of fossil-free fuels	89,870	48%	70	3.4
2035	4) Moderate mix of measures	81,189	57%	50	4.2
2035	5) Ambitious mix of measures	77,941	65%	70	1.9
2040	Adopted policy	94 123	69%	11%	6.3
2040	1) Constant traffic volume	76,317	69%	11%	5.1
2040	2) Higher rate of electrification	94 123	82%	11%	3.3
2040	3) Higher proportion of fossil-free fuels	94 123	69%	90	0.7
2040	4) Moderate mix of measures	81,189	75	70	1.4
2040	5) Ambitious mix of measures	76,317	82	90	0.3
2045	Approved policy	98,579	82%	18%	3.5
2045	1) Reduced traffic	74,694	82%	18%	2.6
2045	2) Higher rate of electrification	98,579	95%	18	0.8
2045	3) Higher proportion of fossil-free fuels	98,579	82%	100	0.0
2045	4) A moderate mix of measures	81,189	89%	90%	0.2
2045	5) Ambitious mix of measures	74,694	95%	100%	0.0

Description of the methodological update for the compilation of statistics on net removals within LULUCF

A methodological update was carried out prior to the publication of the latest LULUCF statistics in December 2025. The new method involves recalculating the three most recently reported years when new data is added (in this case, 2021-2023). This affects the comparison and is part of the reason why the trends differ between the previous and the latest statistics.

- Previous method: The old method was based primarily on interpolation between data points from the National Forest Inventory's sample plots. As the sample plots are surveyed in five-year cycles, data gaps arose for the most recent years, resulting in a lag where a trend could persist in the estimates and, moreover, be amplified by the interpolation. The method therefore struggled to capture inter-annual variation in growth, natural mortality and felling.
- Updated method: SLU has developed a new AI-based method that uses machine learning to fill the data gaps in years where the inventory data is not yet complete. In this way, trends based on older data have less impact on the latest statistics.

The methodological update affects the comparability and assessment of LULUCF statistics. It has resulted in the revision of historical emissions and removals statistics, which affects the levels and trends in the time series. The revised statistics are not included in the Government's latest scenarios.

The latest statistics show that net removals in the land-use sector in 2022, 2023 and 2024 were higher than indicated by the previous statistics used as the basis for the Government's latest scenarios. This means that the prospects for achieving the LULUCF commitment are better now than previously. The comparison should be interpreted with caution, as the scenarios are based on earlier statistical data and because inter-annual variation and uncertainties in LULUCF are significant.

Calculation of possible outcomes for target achievement for the 2021-2025 commitment period for LULUCF

To illustrate possible outcomes for target achievement during the 2021-2025 commitment period, we have calculated two alternative scenarios for the future, in which managed forest land (which is the land category with the greatest impact on the total) and the annual reference level for forests (which we know will be finalised in 2027) are the two factors that have been adjusted. That is to say, if we take the 2025 statistics as a basis, and assume that the 2025 net uptake is an average of the last four years, and with current following a technical adjustment, Sweden appears set to meet its first-period commitment with a significant surplus. However, if the value for the forest reference level is taken from SLU's preliminary technical adjustment for the reference levels, this results in a deficit for the period.

When methods and data change, certain historical reference levels may need to be updated, such as the reference level for forest land, which in turn affects the assessed target achievement. Sweden intends to update this reference level ahead of the 2027 compliance check.

Table 14. Calculation of possible outcomes for target achievement for the commitment period 2021-2025

	2021	2022	2023	2024	2025	Total
Annual recorded total (Mt) with preliminary technical correction for FRL	11.35	5.78	2.36	-6.08	3.94	17.35 (+)
Annual book value (MT) at current FRL	0.45	-5.11	-8.53	-16.97	-6.9	-37.06 (-)

Note: For 2025, the net uptake from managed forest land has been assumed to be the average for 2021-2024 based on 2025 statistics (-48,000 mt) and unchanged values for all land accounting categories except managed forest land. For FRL, a technically adjusted level has been assumed based on SLU's preliminary FRL of (-49,619 mt). (+) indicates a deficit and (-) a surplus.

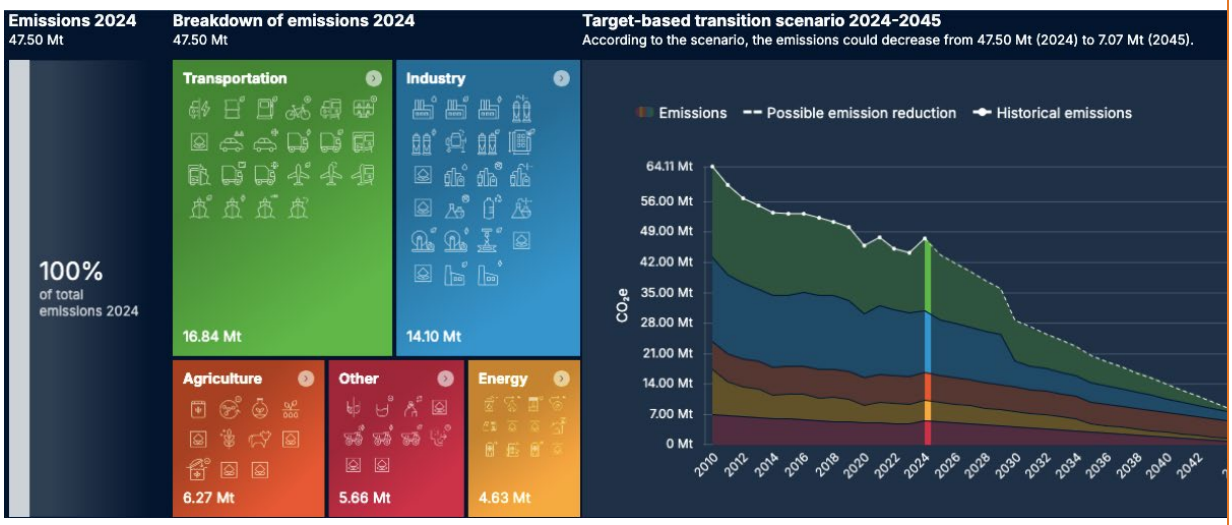
Appendix IV Panorama

FACT BOX. WHAT IS PANORAMA?

Panorama is a web-based platform that the Climate Policy Council has been running since 2019 in collaboration with the Swedish Environmental Protection Agency and the Swedish Energy Agency to encourage greater discussion about the climate transition and to increase knowledge and engagement (see Figure 29). The platform illustrates one of **several possible pathways** for Sweden to achieve **its 2045 climate targets**. The website panorama-sverige.se presents:

- Territorial greenhouse gas emissions, in total and by sector since 2010
- A target-based transition scenario for net-zero greenhouse gas emissions by 2045
- Ongoing and potential emission-reducing transitions within various sectors, showing potential and actual developments
- Key policy instruments, initiatives and research findings that can contribute to the transition

Figure 29. Panorama's target-based transition scenario - a possible pathway to the 2045 climate target

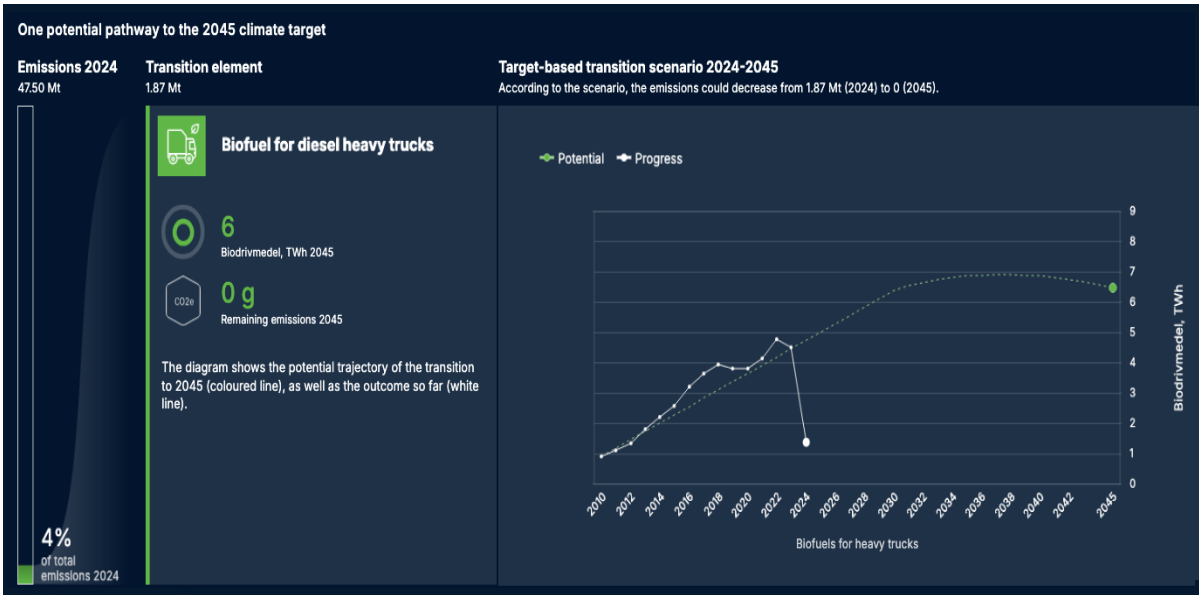


Note: The left-hand side shows current emissions broken down by emission sector. The right-hand side shows the scenario with estimated emission reduction potential within each sector.

Source: www.panorama-sverige.se.

Panorama draws on Sweden's official statistics on territorial greenhouse gas emissions and visualises how these are distributed across different sectors. For each sector, a number of ongoing and potential transitions are presented - nearly 70 in total - with descriptions and assessments of how they can contribute to reducing emissions by 2045. Together, they form a possible pathway to the net-zero target. The transitions are often also described using historical outcome data. There are thus indicators showing both the contribution and the status of a possible pathway towards the 2045 climate target; see the example in Figure 30.

Figure 30. The Biofuels for Heavy Goods Vehicles indicator



Note: The 'Biofuels for heavy trucks' indicator is an example of what a transition-level indicator might look like. The website contains further information about the indicator, the status of the transition rate and references.

Source: https://panorama-sweden.com

Panorama can be used in a variety of ways, both to gain an overview of Sweden's climate transition and to delve deeper into emission-reducing solutions, policy instruments and initiatives. Behind Panorama is an expert editorial team from the leading agencies, which continuously monitors developments and updates the platform.