


How can Sweden become more circular?

**Policy instruments and
measures for increasing
resource efficiency**

MARCH 2024





The proposals and conclusions presented in this report are Swedish Enterprise's own. Many individuals have contributed to the development of the material, suggestions for policy measures, and discussions on strategic choices, including significant portions of Swedish Enterprise's own expert organization, several member federations, and some twenty additional experts within this field: from the business sector, academia, and the public sector. The report has been written and put together by Marcus Wangel (Swedish Enterprise), with valuable assistance from Madeleine Svenberg (Swedish Enterprise) and Märta Martin-Åkesson (Nordic Public Affairs).

Contents

Foreword	2
Introduction	4
Conditions for the circular transition of business and industry	5
The importance of political leadership	5
Consider the circular economy as a tool for solving several parallel challenges	7
Favourable market conditions and competitive companies are essential	9
The importance of the EU and a well-functioning Single Market	10
National opportunities to strengthen the circular economy	13
Efficient authorisation processes and effective supervision	15
Improving resource efficiency through entrepreneurship and innovation	18
Policy instruments and incentives for more circular business models	25
Knowledge, expertise and research in the circular economy	30
The way forward	35
Chronological account of proposed decisions and measures in table form	36
Bibliography	41

Foreword

A market-driven, circular economy combines resource efficiency and economic growth

If the world is to succeed in addressing what the UN is calling a ‘triple planetary crisis’ – accelerating climate change, the global loss of species diversity and ecosystem services and the accelerating spread of harmful pollutants – then greater resource efficiency is key. If we are to do this at the same time as increasing prosperity, we need tools that can combine economic growth and resource efficiency. A market-driven development of the circular economy enables just that.

Managing limited resources is the basis for economics and business, while resource efficiency is by no means a new concept. It is embedded in the DNA of the entrepreneur to use resources as efficiently as possible. Thus, circular business models and the efficient management of materials and resources need not be advanced or new; where circular models and management have proved profitable, they have been in use for a long time. However, our global financial system is built on the principles of the linear economy, and it has long-been more profitable to discard resources rather than to reuse, repair, upgrade and recycle.

A circular economy extends the life cycle of materials, substances and products. This is not the result of a single solution; rather, it requires adaptations at all stages of the life cycle of a substance, material or product. Developing a circular economy involves everything from a novel approach to designing products to new ways of producing, consuming and using them. It is not a panacea – circular management does not in itself guarantee increased resource efficiency or reduced emissions – but it is a valuable tool, and one that is yet to realise its full potential.

Swedish companies are currently in the vanguard of developing resource-efficient, renewable and circular materials and products. As a country, Sweden also has abundant natural resources and sustainable primary production of several essential materials for enabling a circular and fossil-free economy. These are value chains that need to be further developed and that are capable of retaining their value for much longer periods through a transition to a circular economy.

The solutions to this triple crisis are to be found in business, but the conditions to encourage them are created by policy. A profitable circular economy must be based on market economy principles that allow companies and circular solutions to build strength and compete globally. Dismantling barriers, creating favourable and long-term market conditions and providing the right kind of incentives to develop the market-driven circular economy can accelerate the efforts of Swedish companies and promote and create sustainable growth in Sweden.

Sweden is not alone in developing of the circular economy, and the country's leadership position is not a foregone conclusion, with competition in many parts of the world. Within the EU, the pace of legislation is high, a positive development provided that it also leads to common rules, competitive companies and a reinforced internal market. However, much remains to be done here in Sweden in order to continue to develop the circular economy and eventually improve the competitiveness of Swedish companies.

This is why the Confederation of Swedish Enterprise has produced this report. It is not a comprehensive picture of everything that required in order to realise the full potential of the circular economy – there is no 'quick fix' for transforming an economic system and mindset from linear to circular. However, were the action list provided at the end of this report were to be implemented, we will have come a long way in Sweden. We will also have laid a foundation for our Swedish companies to lead the transition to a circular and fossil-free future – to the benefit of Swedish society as a whole.

Karin Johansson

Vice President, Confederation of Swedish Enterprise

Introduction

This report consists of three main parts, each with a number of sections. The first describes the basic prerequisites for the circular transition of the business sector. This highlights – among other things – the importance of clear political leadership, the significance of the EU and the need for favourable market conditions. It also provides a concise description of how the circular economy should be viewed and understood.

The second and longest part focuses on the national opportunities for further strengthening the circular economy and what the government needs to do in response. This chapter is divided into several thematic sections, dealing with distinct aspects of further circular development.

The third and final part sets out in – chronological order – a number of concrete proposals for action. It also provides an overview of the bodies responsible and what type of action is required.

The Confederation of Swedish Enterprise's previous report on the industry's circular transition

In November 2022, Swedish Enterprise launched its report entitled '*Creating favourable market conditions for the development of the circular economy*'. This provides a comprehensive and in-depth account of how the Swedish business community views the opportunities offered by the circular transition and what important basic conditions and enablers are required in order for it to be successful. The report focuses on important issues of principle and includes several illustrative business examples and makes a number of policy recommendations at global, European and national level. Readers who wish more detailed knowledge of, and insight into, the potential of the circular economy for business – and what Swedish companies contribute – can find further in-depth information in this report.

Conditions for the circular transition of business and industry

The importance of political leadership

Summary

- Swedish companies possess considerable technical knowhow, innovation skills and financial capital capable of delivering sustainable and circular solutions. However, when combined with political leadership and governance, we can realise much more of the potential of the business community.
- The business community wants to, can and should represent itself. For this, further forms of dialogue and collaboration with the public sector are needed.
- The government is in a strong position to implement a number of reforms and to make the decisions necessary to strengthen the circular transition of businesses – if it had the political courage to do so.

Sweden – as well as the rest of the world – is facing a number of different but inter-connected sustainability challenges and will need all the tools available to overcome them. Sweden's existing climate goals mean that we should have zero net GHG emissions by 2045, while at European level there is a goal of a climate-neutral Europe by 2050. In order for the transition to a fossil-free and sustainable society to become a reality within a 20-year period, a wide range of measures and solutions are required. These can be developed and deployed in parallel and without action in opposition. It also requires long-term rules and – above all – a clear political direction, will and long-term perspective. When the direction and will are explicit and convincing, it becomes simpler and more attractive for the business community to contemplate investments in innovations that will make a difference.

The circular economy and society's circular transition is a complex policy challenge. However, the concept has increasingly become part of the broader debate and political awareness of its relevance has grown over the past decade. As a result, the number of legislative initiatives and regulations have also increased, both in the EU and in Sweden.

At a European level, the Commission's Green Deal has led to extensive policy development in the field of sustainability and has set common rules for the internal market. Its implementation and harmonisation in the coming years will be crucial for the circular transition and the competitiveness of businesses, provided it is undertaken correctly and in close dialogue with the business community. The business community sees it as indisputable that Sweden should remain a strong voice in favour of a well-functioning single market within the EU. Technical expertise, financial capital and entrepreneurship around circularity have emerged at a rapid pace within companies over the past decade. This in turn has given rise to insights and knowledge of those obstacles that need to be overcome in the future.

Circularity is a natural part of business and has the potential for further growth. It has developed differently depending on the sector, industry and company. Some have been working with circular processes for several decades, even if the terminology and concepts have been different, while others have started on their journey in recent years. Further development requires both market conditions favourable for competitive companies to grow and political action to remove barriers and create incentives. There is a great deal of legislation that needs to be modernised and policy instruments that can be optimised. These exist both in environmental policy – the traditional home of the circular economy – and in other sectors of society that are also vital in order for the transition to maintain its momentum.

A major survey of around 5,000 Swedish companies – published by the Swedish Agency for Economic and Regional Growth¹ in December 2023 – concluded that long-term political decisions are an essential prerequisite for companies' transition and for allowing them to risk making the necessary investments. It also showed that there is a pressing need to make it simpler for companies to manage extensive regulatory burdens and to streamline contacts with authorities. Some eight out of ten companies see the sustainable transition as absolutely necessary for their own long-term competitiveness.

The government and its agencies therefore need to step up their work and to do so without delay. The remainder of the current parliamentary term is critical for enabling the business sector's continued journey to circularity and its contribution to Sweden's future growth and prosperity. The Government needs to send out clear political signals that it intends to do its utmost to dismantle barriers, incentivise the transition and make the necessary investments.

While much of the current legislation for a circular economy exists at EU level – and rightly so – there is no doubt that there is a need for national decisions and reforms that the government can take here and now to help overcome the barriers to circularity. This is something that this publication aims to make clear. It identifies a broad set of examples of circular measures that can be implemented with relative ease over the coming years, measures which will have a direct, positive effect on the profitability and competitiveness of Swedish companies, as well as significant climate benefits at a low cost. There is currently a strong consensus among the business community, academia and civil society that a more circular and resource-efficient economy is essential for solving the numerous pressing sustainability challenges.

¹ Swedish Agency for Economic and Regional Growth (Tillväxtverket), 2023.

Consider the circular economy as a tool for solving several parallel challenges

Summary

- In the circular economy of the future, increased production from secondary or biobased materials will be crucial. However, Swedish primary production of sustainable raw materials will continue to play an important role.
- The circular transition depends on continued efforts and investments in expanding energy production, investments in infrastructure, faster electrification, more-efficient authorisation processes and investments in research and innovation.
- The circular economy is a key tool for addressing many national and global sustainability challenges.

In its simplest iteration, the circular economy is about resource efficiency, a key pillar of any competitive business. It is about ensuring that existing and available materials and products remain in circulation, preserving their economic value for as long as possible. While the concept has become increasingly prevalent in the context of sustainability over the last decade, it will only be in 2024 that a common global definition is expected to be presented by the International Organisation for Standardisation (ISO). Such a step could help simplify policy development and make legislation work in practice. The European Commission defines a circular economy as

“An economic system that keeps the value of products, materials and resources in the economy for as long as possible and minimises waste generation.”

However, when the economic system is put into practice, circular solutions and business models – and the applicable legislation – look different depending on the industry or sector and the stage of the product life cycle. Typically, the circular economy involves designing materials and products from the outset to enable long life and high performance. This makes production processes highly resource-efficient, capturing and using residues based on their quality rather than their origin, and using products more efficiently and for longer through repair, upgrading, remanufacturing and sharing, among others. At the end-of-life stage, a used product is recycled and becomes part of the inputs for new products. This means that the various phases of a product’s life cycle become more interdependent, and that the way materials and products are produced and consumed is fundamentally changing. This enables a decoupling of growth from resource consumption, as each unit of material is refined multiple times and – in some cases – infinitely.

As technology advances and industry innovates, new circular business models and more concrete applications are emerging continuously throughout the lifecycle of a product or material. Some businesses work on solutions at a range of stages, while others specialise in a limited area. Some long-established sectors, such as recycling industries, are evolving in line with new technological advances, while others are developing new business models from scratch. A clear example is functional sales, where a service or function is sold instead of a physical product. Some of the more complex material flows and solutions are cross-border or even global in nature,

while others are highly localised or limited to specific products or consumer groups. The common denominator for circularity, regardless of the business model or stage of the lifecycle, is the objective of contributing to the more-efficient use of society's material resources.

Circular solutions also require resources such as energy, transport, water and raw materials, which have their own environmental impacts and can increase emissions. A holistic approach and solid lifecycle analyses based on reliable science are therefore important in the work on the circular economy. This way, different factors are evaluated to obtain information on the most resource-efficient and sustainable approach in each setting.

Even in the more resource-efficient societies of the future, there will be a need for production from both primary and secondary sources, due to a growing world population and to meet the rising demand for metals, minerals and biomass, for example. For many material types, circulated materials will not be able to cover future needs. Already today, virtually all ready-to-use, pure copper that comes onto the market is recycled, but this is still not enough to meet the increased needs of climate change and the electrification of society. At the same time, it needs to be considered that the recycling rate for the vast majority of metals is extremely low or non-existent, which is due to the fact that it is generally cheaper for a producer to buy primary produced metals than recycled ones. In the future, both primary production and recycling of metals and other materials will need to be strengthened in Sweden and Europe.

For biomass, a continuous supply of fresh fibre is needed as the renewable fibre changes its properties after a number of recycling cycles. For example, the fresh fibre exported by Sweden has a high collection rate and is recycled in European wastepaper mills. Sweden as a country has great natural resources and in many cases the world's most sustainable primary production of the materials needed to enable a circular and fossil-free economy. Swedish companies are well placed to continue developing value chains for Swedish natural resources in a sustainable way. Through the transition to a circular economy, we can retain the value of these materials for as long as possible.

As later parts of this report will explain, an important part of the circular economy is to use the products and materials that have become waste. Swedish companies have world-unique technologies for material recycling for many different waste streams and the transition to a circular economy is dependent on new innovations and investments in increased recycling. Sweden thus has good opportunities to contribute both necessary primary and secondary raw materials to the economy.

A more resource-efficient economy needs to be regarded as a central and necessary tool for solving current and future sustainability challenges. The UN is increasingly talking about a planetary triple crisis, consisting of accelerating climate change, the global loss of species diversity and ecosystem services and the accelerating spread of harmful pollutants. These are three closely linked and self-reinforcing problems that largely are rooted in the unsustainable production and consumption of raw materials, especially fossil fuels. The logical consequence is that they must be addressed in parallel, using solutions that can address several problems simultaneously and offer co-benefits.

The circular economy alone cannot tackle what is known as the triple crisis, but neither can any of the individual challenges be solved without considering what a more resource-efficient and circular system can contribute. At the COP-28 climate summit in Dubai at the end of 2023, the circular economy was mentioned for the first time in the negotiated agreement document.² Paragraph 36 of the agreement encourages the transition to more sustainable consumption and production and several circular measures to address climate change and keep the world within the 1.5-degree Celsius target. This is very promising progress and an unequivocal statement at the highest possible level that the transition to a more circular economy has a key role to play in achieving both the Paris Agreement and the goals of the 2030 Agenda.

Unlike the acute and more widely publicised climate or natural crises, the circular economy is not based on its own specific crisis but should instead be seen as a concrete tool for solving the above problems. But just as the triple crisis is interconnected, the circular transition is also dependent on initiatives and investments in related areas, including a significant increase in fossil-free energy production, faster electrification, investments in socially necessary infrastructure, more efficient and predictable authorisation processes and continued investment in research and innovation.³ In addition – and by far the most important aspect for the business sector’s continued circular transition – investments and measures that ensure favourable market conditions and strong competitiveness are crucial to how successfully the circular economy can be used as a tool.

Favourable market conditions and competitive companies are essential

Executive summary

- A circular economy must be based on market economy principles and developed through favourable market conditions if circular and sustainable businesses are to become competitive.
- It will require close cooperation between business, academia and policymakers, with the latter’s main task being to remove regulatory barriers and provide long-term rules of the game.

A circular economy cannot realise its full potential within the framework of current legislation and societal structures, either in Sweden or the EU. Policy has an important role to play and can remove obstacles for business and create favourable conditions for circular and sustainable businesses to grow.

² UNFCCC, 2023.

³ See Swedish Enterprise’s proposals on related sustainability areas here.: <https://www.svensktnaringsliv.se/sakomraden/hallbarhet-miljo-och-energi/>

Positive market conditions for circular business models, increased resource efficiency and reduced environmental and climate impact can go hand-in-hand with greater competitiveness. This is a key starting point for ensuring that the circular economy in the business sector continues to develop. A functioning market economy must be a given. Only competitive companies will have the capital required for technology development and investment for circular solutions and flows, and only competitive companies will remain in the market to contribute to the transition. Here, the main task of policy is to ensure that as many companies as possible have the opportunity to compete and contribute to the transition by removing barriers, creating favourable conditions, developing long-term rules and providing the right kind of incentives.

Competitive Swedish companies offer dual benefits, in part through innovation and the export of products and services to create global climate and environmental benefits along with their contribution to tax revenues and jobs in Sweden. The European Commission has estimated that as many as 700,000 net jobs will be created in the EU by 2030 related to the circular economy, primarily in waste management and recycling.⁴ However, not everyone will be a winner in the circular economy; some businesses and jobs may also shrink or even disappear. To enable the transition, business, politics and academia need to work together to create opportunities and solve the challenges that arise.

The importance of the EU and a well-functioning Single Market

Summary

- The continued development of the circular economy requires a well-functioning internal market with strong competitiveness and a common regulatory framework; implementation that is as harmonised as possible. Regulation for the circular economy should be created at EU level.
- Sweden needs to continue to both promote circularity in the development and revision of EU regulations and to safeguard the competitiveness of the internal market. Sweden should be more active at an early stage when new regulations are developed. If the regulations are to create opportunities – rather than obstacles – for businesses, this will require a close dialogue between business organisations and the government.
- The continued transition to a circular economy will also require uniform compliance, well-functioning market controls and effective operational supervision.
- The global perspective needs to be considered, and global free trade needs to be reinforced to enable large-scale circular flows and solutions.

For Sweden and the Swedish business community, the EU and the internal market are the single most important arena in which to engage and drive forward develop-

⁴ European Commission, 2020.

ments. Today, export revenues from goods and services are equivalent to 53 percent of Sweden's GDP, and almost 50 percent of that value arises from exports to other countries inside the EU's internal market.

It is therefore of vital importance that the EU's internal market functions well and that legislation is harmonised. Circular flows typically require to be at scale if they are to be cost-effective and competitive, so cross-border transport is often needed. To enable such flows, EU-wide regulations on the circular economy, materials, products and even services are a prerequisite. National regulations that create different requirements in different countries impede – or worse still render impossible – the emergence of resource-efficient business models. They also risk inhibiting innovation; national markets are often too small to make large investments profitable.

For the Swedish business community, it goes without saying that legislation for the circular economy should be formulated at the highest level possible, most often at EU level but in other circumstances at global level. Both in principle and in practice, there is value in attempting to minimise national governance and legislation in this area in favour of better-harmonised EU regulations that set common rules for the internal market. This is why there is reason to welcome the intentions of the current European Commission and the ambitious agenda they have pursued under the Green Deal and through the Circular Economy Action Plan.

At the same time, however, there is another problem that must be recognised. Rather than removing most of the obstacles and setting broad rules that in turn allow market forces to drive the transition, the Commission has – in a number of areas – proposed more-detailed management, extensive reporting requirements and an increasing number of delegated acts. This entails an increased risk of both double regulation and unharmonised regulations. For many companies, particularly SMEs, a clear perspective of all current and future sustainability legislation – and its likely effects – is increasingly difficult to ascertain.

Ensuring that the considerable number of regulations do not hamper competitiveness, as well as strengthening the internal market, will be a key task for the next European Commission. This is not least because much of the sustainability legislation that has been developed over the past five years will be launched and become a reality in the business community. It is of fundamental importance that EU-wide regulations are harmonised, optimised and implemented in the same way in all Member States. There needs to be a balance between high environmental benefits and safeguarding the opportunities for business to contribute to sustainable growth and innovation. This will be crucial for creating the right conditions for the continued development of the circular economy. The Swedish government and authorities have a major responsibility here and need to consider the competitiveness of businesses and maintain a close and frequent dialogue with business organisations.

The transition to a circular economy will be enabled not only by a harmonised legal framework in the EU internal market but also by uniform compliance, well-functioning market surveillance and improved operational supervision. Again, this is the responsibility of national authorities. There is currently a lot of potential for development, as discussed in the next part of this report.

Last, the global perspective needs to be considered; trade in materials and products is now largely global in nature. Policy development linked to the circular economy must also have a global perspective in order to work effectively. This poses a challenge, as Sweden – and other EU countries – import large numbers of products manufactured in countries where sustainability legislation is different. This applies to – among other things – the content of products in terms of chemicals, which can affect and limit the possibilities for recycling within Europe. Well-designed and well-implemented EU legislation, including the new Ecodesign Regulation (ESPR) – which will enter into force in 2024 – will lead to positive spillover effects globally. The logic behind this is that producers in third countries will be less inclined to manufacture one product model for the European market and another for the rest of the world.

In essence, viable free trade is a fundamental condition for the emergence of a circular economy, and thus needs to be continuously safeguarded and strengthened. Further efforts are needed to achieve trade and global agreements that favour the circular transition and to develop international standards for product requirements, digital information sharing and recycling, among others. Trade and circular economy policies need to more mutually supportive in order to optimise conditions for greater resource efficiency globally.

National opportunities to strengthen the circular economy

Summary

- The issue of the circular economy is complex and impacts a number of different authorities' areas of responsibility simultaneously. This places a greater demand for clearer coordination and closer cooperation between more authorities than is currently the case.
- Any proposed measures need to contribute to a long-term and enabling policy for the continued growth of the circular economy.
- The Government is well-placed to implement a number of measures and take political decisions during the remainder of the current parliamentary term in order to increase opportunities for companies to develop the circular economy and develop innovative business models.
- There is political agreement in the Swedish Parliament that the circular economy needs to be developed and become more central to climate and environmental policy. This will provide a good basis for implementing and realising the proposed measures.

The EU is, and will remain, the most important arena for formulating legislation and policy instruments for the circular economy. Both the government and the Swedish business community must be present and involved in that process. If national policy instruments are considered, the basic principle should always be that these are analysed based on their impact on circular flows in a broader geographical perspective, and that they consider the international competitiveness of Swedish companies.

As the remainder of this report will explain, there are a number of important national measures that can be implemented by the government and authorities in the coming years, with relative ease and with political consensus. These measures would have a positive effect on the profitability and competitiveness of Swedish companies while bringing climate and environmental benefits at a low cost.

The measures presented in the following two parts of this report are – to some extent – based on existing instruments and proposals. There are also proposed adjustments and improvements for improving the conditions for the companies concerned. It is also proposed that investigations – or shorter government commissions – be set up to review how to develop the current regulatory framework to improve resource efficiency. In

addition, there is an account of budget investments required for improved functioning and initiatives that offer a good return in terms of the ability of Swedish companies to continue to adapt.

For some years now, Sweden has had both a national strategy and an action plan for the circular economy.^{5,6} While these have seen a handful of government commissions, they have not led to any clear political direction and ambition. The Climate Policy Council⁷ and the National Coordinator for Agenda 2030⁸ have also produced reform proposals which, if implemented correctly, could lead to increased circularity. In addition, the Government's own climate action plan⁹ contains convincing arguments in favour of the circular economy as a tool for fossil-free living. However, it only contains a number of sector-specific proposals, and does not cover the more society-wide challenges that need to be addressed. The Delegation for the Circular Economy, an advisory body to the Government, is tasked with contributing to the business sector's transition to a circular economy and identifying relevant obstacles.¹⁰ It also has the ability to propose measures and has done so for a number of years, although these have led to rather limited policy implementation. There is therefore an argument for reviewing the mandates and tasks of the government's appointed coordinators, councils and delegations, in terms of making circular economy-related proposals to strengthen the actual implementation of what is presented.

It is also particularly important to recognise and highlight the relatively complex nature of circular issues, and not to treat the circular economy as a separate issue within environmental policy; something that has been the approach for a long time. Several different ministries and authorities need to feel that they are responsible for identifying and removing obstacles in their area; elements of work in silos must be reduced. The Environmental Protection Agency is tasked with promoting a circular economy and also with helping other authorities and stakeholders to increase the pace of transition; however, the degree of collaboration between authorities must be developed and reinforced.¹¹ More authorities need to be involved in this work than is currently the case, including the Swedish Agency for Economic and Regional Growth, the Swedish National Board of Housing, Building and Planning and the Swedish Energy Agency. Within government offices, work on the circular economy is coordinated by the CKS unit (circular economy, chemicals and radiation) at the Ministry of Climate and Enterprise, while proposals for measures are jointly prepared before government decisions are made.

The rest of this part of the report sets out a number of examples of subject areas where the policy instruments and measures currently in force are inadequate, incorrectly designed or simply absent altogether. They have been identified and

⁵ Swedish Government Offices (Regeringskansliet), 2020.

⁶ Swedish Government Offices (Regeringskansliet), 2021.

⁷ Swedish Climate Policy Council (Klimatpolitiska rådet), 2023.

⁸ National Coordinator for Agenda 2030 (Nationell samordnare Agenda 2030), 2023.

⁹ Swedish Government Offices (Regeringskansliet), 2023.

¹⁰ Delegation for the Circular Economy (Delegationen för cirkulär ekonomi).

¹¹ Ministry of Climate and Enterprise (Klimat- och näringslivsdepartementet), 2023.

selected in this report because – individually but above all collectively – they can help to improve Swedish businesses in being innovative and competitive as well as to continue to develop new circular and sustainable business models. The proposed measures are not exhaustive and will not provide a comprehensive answer to what is a highly complex issue, but they represent important and necessary steps in the right direction.

Efficient authorisation processes and effective supervision

Authorisation issues

Summary

- The circular transition will require changes to already established activities, in parallel with the emergence of new types of activities. More efficient and predictable authorisation processes that enable sustainable development in parallel with a high level of environmental protection will create better conditions for the circular development of businesses.

In order to enable companies to transition to a more circular economy, established companies will need to change the way they operate. Fresh activities will need to be added and, in many cases, will require a new or modified environmental licence. However, the Environmental Code's authorisation system remains a blunt instrument, although simplification proposals are being implemented and a study is examining a major reform. The current rules to achieve sustainable development do not allow for overall prioritisation or cost/benefit considerations. The gap between environmental policy objectives and regulation needs to be closed. In the circular economy, as in all other areas, it needs to be made easier to reform operations and capitalise on new business opportunities.

One example of what could facilitate the circular economy – as described by Swedish Enterprise in the report *'En miljöprövning för omställning och nya möjligheter'* ('An Environmental Assessment for Conversion and New Opportunities')¹² – is to make change authorisations the principal rule for changes to existing activities. Currently, it is possible to have the changes to an industrial activity alone assessed. However, the principal rule remains that the activity as a whole must be assessed, an inefficient system. In order to increase predictability and the possibility of implementing rapid changes, change authorisations need to become the principal rule. The principle should be that only the change and the additional environmental impact should be assessed. Such an arrangement would be consistent with the EU's Industrial Emissions Directive (IED).

¹² Swedish Enterprise (Svenskt Näringsliv) 2021a.

Another example is to allow notifications of changes to regulatory authorities, rather than requiring a new or amended permit for minor changes. Under EU legislation, only substantial changes require authorisation; these are defined in an annex to the IED. Other changes only require notification to the competent authority. However, Sweden has chosen to subject changes with little or no environmental impact to authorisation. It should therefore be possible to follow the EU rules and allow these types of minor changes to be made following notification, rather than subjecting them to authorisation. This should also apply to adjustments to the authorised production volume, under the same conditions.

Another example is to transfer issues that are currently covered by the authorisation process to the supervisory authority. It must be questioned whether environmental licences should really regulate all the issues that are currently being raised. Often, the outcome of assessments is to submit reports that are delegated to the supervisory authority, which often has insufficient resources. The circular economy relies on resources that are already managed in some way within the framework of various forms of permit assessments. Therefore, a system that focuses more on supervision should be much more effective and would facilitate the development of the circular economy.

Effective supervision and better guidance

Summary

- Well-functioning and effective operational supervision and market surveillance is central to ensuring a level playing field and counteracting rogue traders. Serious operators primarily need developed guidance.
- Developing guidance requires a close dialogue between the public sector and the business community and sufficient resources for the authorities to ensure that the guidance is up to date.
- The authorities need to cooperate to a greater extent and their expertise needs to be reinforced. Efforts to combat organised waste crime must be accelerated and improved.

Effective and efficient supervision is not only important in a wide range of areas of the circular economy but also in other types of activities and industries. It reduces the scope of opportunity for rogue or criminal actors and provides the conditions for legitimate companies to do the right thing. In the area of waste in particular, the consequences of non-compliance are severe. This has led to increased requirements over time. Reporting and traceability are important elements of the supervisory work, but unfortunately the current increased requirements burden serious actors more than they discourage the rogue ones. More-effective measures to tackle the most rogue operators are desirable, such as increased operational supervision.

The importance of supervision increases as policy proposals and new regulations are introduced, and the methods used need to be determined in parallel with the formulation of new requirements. Supervision resources need to be used efficiently and focus

on close dialogue and guidance for the activities concerned. To make this possible, the Government should consider earmarked funding for the Swedish Environmental Protection Agency, the Swedish Chemicals Agency and the county administrative boards, focusing on increased regulatory guidance and enhanced operational supervision. It is also essential that the supervisory authorities have both the skills needed and the up-to-date technical knowledge to undertake supervision. It should be noted, however, that the need for greater operational supervision is partly a consequence of increasingly detailed regulations and requirements. This is why it is so important that authorities continue to simplify regulations.

Under the Environmental Code, responsibility for operational inspection in many cases lies with the municipalities. Supervisory responsibility can be complex and often there is a lack of sufficient and relevant supervisory expertise, not least among smaller and resource-poor municipalities. In these municipalities, it can be common for one official to have supervisory responsibility for several areas, such as the environment as well as food safety. It is therefore of the utmost importance that smaller municipalities cooperate on inspection and that they share knowledge and expertise. A higher degree of inspection coordination is therefore required to facilitate access to and sharing of knowledge about the types of inspection measures that are effective, to create the conditions for equal inspection throughout the country.

A knowledgeable and effective regulator is essential to ensure a level playing field in the market. There is a need for more collaboration in supervision between authorities, locally, regionally and nationally. Greater dialogue between authorities and industry is needed in the development of regulatory guidance. There are good reasons for centralising parts of the supervision – including in the area of waste – to at least county administrative board level, to ensure that supervision is equivalent and effective throughout the country. A single centralised authority could mean better resourcing through combined authority financing and fee financing. It is also important to intensify the existing cooperation between authorities and the Swedish Tax Agency, the Police Authority and Swedish Customs in tackling waste crime.

As well as collaboration between the authorities concerned, supervisory guidance is also needed to harmonise supervision. In an audit report, the Swedish National Audit Office highlighted deficiencies in the Environmental Protection Agency's supervisory guidance.¹³ A well-developed inspection strategy with ringfenced resources is important for realising the aims of the Environmental Code and thus promoting sustainable development in accordance with the environmental objectives.

A number of years ago, the environmental supervision inquiry (SOU 2017:63)¹⁴ presented several proposals for more effective and equal supervision, of which several – but not all – have been implemented. Among other things, a county administrative board can help a municipality that does not have the capacity to exercise supervision in a satisfactory manner. Currently, it is also possible to transfer individual objects

¹³ Swedish National Audit Office (Riksrevisionen), 2018.

¹⁴ Environmental supervision inquiry (Miljötillsynsutredningen), 2017.

or groups of objects subject to supervision to another authority.¹⁵ This is something that could be done more widely and systematically than is currently the case, in order to make it easier for municipalities lacking the specific expertise and to create equal conditions for operators in a sector throughout the country.

Improving resource efficiency through entrepreneurship and innovation

A modernised waste legislation

Summary

- Current waste legislation is largely adapted to linear material and product flows. It needs to be updated and modernised to enable competitive and at-scale circular solutions.
- The ownership of waste generated by businesses must be established and reinforced. Being able to own and manage your own waste opens the possibility for more innovative circular solutions in the business sector. A well-functioning, free choice solution should therefore be introduced.
- In order to achieve large scale and greater profitability in the circular economy, it needs to be easier to store materials and products classified as waste in an environmentally safe manner for longer than is currently the case.
- It is important that waste legislation is applied in the same manner throughout the country and that there are not different assessments and interpretations in different municipalities or between different county administrative boards.

One of the cornerstones of the circular economy is that products and materials are used for as long as possible, with waste being eliminated or minimised as much as possible in order to maximise resource use. The starting point must be that all materials that can be used to achieve societal benefits should be considered a resource, irrespective of whether they are primary, recycled or reused materials. As a guiding principle, a material or raw material should be judged by its quality, not its origin. However, current waste legislation is still designed for linear material and product flows; this needs to change and adapt in order to enable competitive circular solutions and to open up for more business and entrepreneurship in the waste area. For example, the government should investigate incentives for reducing the amount of waste being incinerated in favour of greater material recycling and thereby higher resource efficiency.

As already mentioned, the more-circular societies of the future will require production and resource extraction from both primary and secondary sources. To meet the needs of a growing world population and an increased demand for materials – not least for climate change – requires a long-term and sustainable supply of raw materials. This

¹⁵ Swedish Environmental Protection Agency (Naturvårdsverket), 2020.

applies to a range of materials, but it is particularly important for critical and strategic raw materials. Ensuring access to sustainably produced raw materials – be they for recycling or primary production – requires improved collaboration between public authorities and industry along the entire value chain. An effective way approach is to create a platform for stakeholder collaboration, similar to the recent initiative run by the Swedish Energy Agency, the Swedish Environmental Protection Agency and The Geological Survey of Sweden (SGU) for a sustainable battery value chain.¹⁶

In early 2023, the Swedish Environmental Protection Agency announced that it considers there is a need for a broad review and development of waste legislation and possibly other policy instruments in the waste area – at both national and EU level – to continue the circular transition.¹⁷ The Agency says that the current Swedish regulatory framework has become reactive rather than proactive, which is a prerequisite for a more circular economy. It also lacks a holistic perspective. This is basically a positive message, and it is important that business and industry are included in any future review and investigation assignment. In addition to a broader review and the continued harmonisation and applicability of EU regulations, the government can take a number of measures within the framework of Swedish waste legislation to make it simpler for companies, while at the same time promoting innovation and creating new jobs.

The right to own and manage waste

Currently, Chapter 15, Section 3 of the Environmental Code limits companies' ownership rights for those parts of waste that fall under the classification of municipal waste. The concept of municipal waste was introduced into Swedish legislation in August 2020 as part of the implementation of the revised Waste Directive, replacing the concept of household waste. The was for statistical reasons, with the preparatory work saying it did not change the division of responsibility for different waste flows. Since this concept was introduced, there has been a lack of clarity surrounding the issue of responsibility.

According to the Environmental Protection Agency's guidance from 2021, the assessment is that – with the amendment to the law – the responsibility for waste covered by the concept of municipal waste has transferred to the municipalities. In addition to household waste, household-like waste from businesses is also covered. Responsibility for waste from, for example, staff canteens has thus been transferred to the municipalities. This restricts companies' efforts to take responsibility for their value chain and ensure circular material flows.

Sweden now appears to be the only country in the Nordic region to have a municipal monopoly on business waste. Denmark, Finland and Norway have already – with positive experiences and outcomes – introduced opportunities for operators to choose who manages the municipal waste generated by companies. Linked to the introduc-

¹⁶ Swedish Energy Agency (Energimyndigheten), 2022.

¹⁷ Swedish Environmental Protection Agency (Naturvårdsverket), 2023.

tion of the concept of ‘municipal waste’ in Swedish law, the introduction of a so-called ‘free choice’ was also proposed. This would enable companies to take control of the waste generated by their operations. This free choice proposal was not introduced, but the issue has subsequently been re-examined (SOU 2021: 24).¹⁸ This investigation showed how research indicates that the conditions for a functioning circular economy – as well as for a linear economy with market economy principles – need to be based on property rights, clear regulations and good competition.

The Swedish Environmental Protection Agency has also proposed that the responsibility for three waste streams should be changed. This would mean limited freedom of choice for waste arising in the retail trade, excavated soil with invasive alien species and exempt used cooking oil from professional food preparation from municipal responsibility. Changing the responsibility for these waste streams (see table of proposed measures) would enable circular solution. However, in order to give businesses control over their waste and promote innovation, will require introducing free choice and is a high priority for Swedish industry.

Under the current Environmental Code, only municipalities are able to offer collection services for bulky waste such as furniture, thus hindering the development of companies’ circular business models around this sector. There are companies that would be happy to offer advanced collection, repair, reuse and recycling services were they to be given the right to access bulky waste from households. Enabling these private entrepreneurs would create more opportunities for circular business models and flows. Currently, collection by private operators only takes place on a small scale, in the form of companies’ various test projects on buyback from consumers and customers and through the takeback of their own products sorted from specific recycling centres. These companies need to conclude agreements with, and obtain approval, from each individual municipality, which is inefficient and administratively burdensome. In addition, there is good reason to investigate incentives and policy instruments for increased takeback of unused products, particularly in sectors where overordering is common, leading to unnecessary loss of resources.

Storage of waste

A significant problem with the current legislation is the ability to store and collect waste with the aim of recycling it for use in new products. Under current regulations, products and materials been classified as waste may be stored for up to three years before requiring final disposal. In some circumstances, a longer period may be required to accrue enough of the waste for recycling to be profitable. In others, it may be that the technology or demand is not yet sufficiently developed or large enough to making recycling viable. Current regulations result in materials being disposed of even where they have the potential to be a valuable resource once recycling technology and demand are in place. In order to ensure that future resources are not wasted but rather are recycled when the conditions exist, there needs to be an extended storage period for materials and products deemed to be recyclable in the future. Such a change needs

¹⁸ Government Official Report 2021: 24 (Betänkande av utredningen om verksamhetens kommunala avfall), 2021.

to be combined with other measures, such as requirements for financial security and increased operational supervision, in order to prevent exploitation by rogue operators.

Equal application and enforcement throughout the country

To ensure greater resource efficiency and more circular material flows, it is important to have clarity about when waste ceases to be waste; in other words, when it transitions from waste legislation to chemicals and product legislation. For a long time, there has been unpredictability over this, discouraging many industries from investing in new circular solutions and facilities. One way to address this is to develop end-of-waste criteria. The preparation and development of these should, as a rule, take place at EU level. Work on this has recently been initiated for plastics and textiles, and there are already criteria in place for iron, steel and aluminium scrap, glass and copper scrap. At present, there are no purely national end-of-waste criteria for any material stream and the Swedish Environmental Protection Agency also advises against developing national criteria.¹⁹

In recent years, the guidance from the Swedish Environmental Protection Agency, among others, has been developed and improved. A decision by the European Court of Justice in 2023 also led to a clarification that excavated soil and excavation material should be classified as a byproduct and not as waste, in the sense of the Waste Directive. This is a positive development, but it is also important that this has an impact on practical supervision and that the interpretation and application of official guidance is equivalent throughout the country, not only in the 290 municipalities but also in the county administrative boards. For example, rubble such as asphalt, concrete and excavation rubble from the building and construction sector are all too often classified as waste, even although they will be used or included as input materials in reproduction processes. Clarity over what is not waste must continue to improve and be reflected in operational inspections. This will require increased common will among industry operators, procurers and regulators to ensure that these materials are managed and assessed in ways that lead to increased resource efficiency in the construction sector.

Realising the potential of the bioeconomy

Summary

- The circular economy needs to be developed in parallel with the bioeconomy, as both provide important added value and share common objectives. Policy development in both areas needs to be interlinked and reinforced.

By definition, a circular economy is based on the resource-efficient use of raw materials and materials regardless of their origin, although in today's society it is increasingly recycled or renewable materials. A bioeconomy differs, in that the raw materials are already part of a circular flow due to their renewable nature; they

¹⁹ Swedish Environmental Protection Agency (Naturvårdsverket), 2021.

thus contribute to reducing the use of fossil inputs in the circular economy. In other words, the two concepts are interlinked and share many common objectives. The circular economy must be developed in parallel with the bioeconomy. The former will contribute to increased resource efficiency and the circulation of residual materials in a material cycle, while the latter will contribute to reducing the fossil inputs in the cycle and reducing carbon dioxide emissions in the longer term.

At the end of 2023, the Bioeconomy Inquiry presented its final report, *‘En hållbar bioekonomistrategi – för ett välmående fossilfritt samhälle’* (*‘A sustainable bioeconomy strategy – for a prosperous fossil-free society’*) (SOU 2023: 84).²⁰ The report stressed the importance of working with the circular economy and the bioeconomy in parallel and emphasised that they should not be separate. It also pointed out that many of the obstacles holding back more circular development also slow down the emergence of a viable bioeconomy in Sweden.

Finland currently has a platform, *‘Materialtorget’*, where companies and organisations can make available waste and residual streams from production. The state-owned company Motiva administers this. The purpose of *‘Materialtorget’* is to promote recycling of waste and residual streams by offering a marketplace for those that need to get rid of residual streams and waste and for those that need corresponding materials for their production. The Bioeconomy Inquiry proposed that the Swedish Environmental Protection Agency, together with the relevant public and private stakeholders, be commissioned to analyse how a database, a material platform or other model for sharing data on residual streams for increased circularity (within the bioeconomy) can be initiated, set up and managed. In addition, it also proposed a time-limited, practical pilot study for establishing such a database or material platform for sharing data on residual streams (within the part of the bioeconomy) that analyses have shown to have the greatest potential for increased resource efficiency and added value. There are good reasons to consider such a platform or similar model, but also to include residual streams other than just biobased ones.

The report also proposes a government commission to analyse how well existing policy instruments are promoting circular, biobased solutions and the recovery of waste residues. The government should consider taking these measures – and others in the longer term – to promote the dynamic development of cycles for even more materials.

²⁰ Government Official Report 2023: 84 (Bioekonomiutredningen), 2023.

A holistic approach to chemicals

Summary

- It is essential that the Government works to ensure that chemicals are primarily managed and regulated under REACH, and that the forthcoming revision of REACH is as accurate as possible and does not impede innovation and the development of new, safe and sustainable chemicals for the circular economy.
- The practical application of the objective of a non-toxic environment needs to be balanced and go hand-in-hand with a circular economy. It is not the absence of all hazardous substances in all materials that is most important, but rather the absence of the substances that can cause harm in the potential areas of use. Further guidance is needed to aid interpretation.
- To accelerate substitution efforts in the field of chemicals needs strategic and long-term innovation initiatives to develop and implement new chemistries throughout the value chain. These should include collaboration between research funding bodies such as Vinnova (Sweden's Innovation Agency) and Formas (Swedish Research Council for Sustainable Development), as well as industry and academia.
- Operational supervision in the chemicals area must be strengthened and made more efficient in the future.

Like energy, chemicals are a fundamental aspect of society and essential for the success of the broader climate transition. Chemical substances also occur naturally in various raw materials. It is essential that legislation on chemical substances does not hinder circular flows and that it is based on risk assessment and risk management and does not impede the possibility of using chemicals safely in new products and innovations. However, it needs to be recognised that some substances can interfere with recycling processes. The most effective way to remove these is to restrict their use and placing on the market. For those substances that are harmful to the environment or human health, well-designed regulation at EU level is often the most effective policy approach.

Swedish chemicals legislation is, to a significant extent, harmonised with the EU through REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals). Chemicals is a sector that is well suited to regulation at the highest possible level, given the extensive trade in products and goods across national borders and enabling companies to operate in an international market. Given the inherent complexity of chemicals legislation, it is particularly important that the rules are long term and predictable for both industry and national authorities. A thorough revision of REACH has been announced by the current European Commission, but no proposal has yet been presented. In the upcoming revision, it is important that the government maintains a close dialogue with the parts of industry most affected and ensures that the responsible authorities do the same. It is also important to avoid and counteract, as far as possible, any double regulation of chemicals in parallel product legislation, primarily regulating chemical safety in REACH. In their work on chemical regulation, legislators also need to consider that value chains and material flows are often global and that increased supervision needs to be ensured, particularly for goods imported from third countries.

Revise the authorities' guidelines and assignments

Achieving a more circular economy requires a holistic perspective, where the environmental and climate impact of the various stages are weighed against each other. Something that is resource-intensive in the manufacturing phase can, for example, save resources in the utilisation phase. A central concept in the context of chemicals in Sweden is 'non-toxic'. This derives from the Swedish environmental objectives (a non-toxic environment) but has come to be used as a political umbrella term for a broader vision. There is no technical or legal definition as to what is meant by the term in a general context either. In the circular economy, chemicals and substances will circulate in material and product flows, with risk assessments acting as a valuable tool for assessing the threat posed by a substance in a given use. Due to the conditions and properties of various materials and products, different ways are needed for managing requirement levels for substance content. For those materials where the constituent substances are tightly bound to each other and the risk of exposure is virtually non-existent, a more holistic approach is needed to use the material or product and enable its continued use in specific applications. It is not the absence of all hazardous substances in all materials that is most important, but rather that the substances included do not pose a risk in the specific applications.

At the beginning of 2023, the Swedish Chemicals Agency reported on the Government's mission '*Giftfritt från början*' ('*Non-toxic from the outset*')²¹. This focused on developing supervision and improving information and guidance is an important step in the right direction and a process that must continue in close dialogue with the relevant sectors and industry. Operational supervision in the chemicals area also needs to be improved and made more efficient. It is therefore important that the Agency has sufficient resources. Such strengthened supervision would make it easier for companies to contribute to minimising the risks posed by hazardous chemicals while strengthening and accelerating innovation, product development and circular flows.

However, the broader problem of conflicting objectives between the non-toxicity target and those of recycling and other socio-economic objectives remains, hampering effective policy development. The authorities do not have a sufficiently holistic approach and there is insufficient interaction between them. There is a need for a broader review of the authorities with the aim of revising their guidelines and tasks in order to steer policy development towards resource efficiency and circularity from a life cycle perspective.

Promote the development of new substances and technologies

For those substances not suitable for reuse and circulation, continuous work on substitution is required so that they can be replaced. The quickest and most effective way to encourage substitution is to promote the development of new substances and innovative technologies. Each substance, value chain and use is unique. Therefore, legislation must keep pace with development and innovation. The main threat to effective substitution is that the development of new legislation and restrictions fails to fully recognise both how substances are used in reality and the amount of time

²¹ Swedish Chemicals Agency (Kemikalieinspektionen), 2023.

required to develop and validate alternative technologies. Some substances occur naturally in different raw materials – such as cobalt and other metal trace elements that are strongly bound to metals in mineral deposits or trace elements in biomass – and are therefore difficult to phase out. In order to scale up the substitution work, strategic and long-term innovation initiatives and a focus on the development and implementation of new chemistry throughout the value chain are required. There is good reason to strengthen collaboration between industry, academia and research funding bodies such as Vinnova and Formas.

Developing a new substance and anchoring its use in different value chains can take many years. Serious substitution work must ensure that there are good substitutes and also weigh the use or presence of a hazardous substance against, for example, resource use, climate impact, environmental impact and safety in the use or production stages. The phasing out of substances must also be preceded by thorough impact assessments, to avoid jeopardising essential functions, climate change and energy supply. Consideration must also be given to national, European or global safety requirements and standards. The current proposal from the European Chemicals Agency (ECHA) to ban the broad group of PFAS is an example of a regulation that requires a high level of expertise among decision-makers, solid impact assessments and a carefully constructed timetable to ensure a responsible phase-out.

Policy instruments and incentives for more circular business models

Accurate and effective economic instruments

Summary

- Economic instruments are essential for incentivising more circular business models, as they allow circularity to become economically viable.
- When investigating and designing new economic instruments for promoting circular development, there should be greater focus on effectiveness and efficiency to ensure that appropriate instruments to achieve the intended objectives are developed without undermining the competitiveness of Swedish companies.

A prerequisite for increased resource efficiency is that circular business models become profitable and competitive. Well-designed economic instruments can create the incentives needed. Profitability is an important driver for circular solutions. Economic instruments should make it favourable to produce sustainable circular products, thus rendering the relative cost of continuing with a linear business model more expensive. Similarly, economic instruments can make the relative cost of recycled and biobased inputs, materials and products cheaper than primary or fossil-based inputs. Poorly designed economic instruments, however, risk inhibiting the potential or – in the worst-case scenario – deliver the opposite effect to that originally sought. There are a number of existing excise taxes and VAT rules that give rise to effects running counter to increased circularity or that are designed in such a way that renders them ineffective.

To create the right conditions for the business sector's development of circular business models, several of the economic instruments already introduced need to be reviewed to ensure that they remain appropriate and encourage development. In an ongoing investigation (Dir 2022:67), the investigation committee – which will present its findings in September 2024 – has been given a broad assignment to analyse and map those areas where economic instruments would be valid for stimulating the transition to increased circularity. However, the committee will not submit any legislative proposals, only identifying specific areas and material flows. To ensure that the proposed economic instruments provide the right conditions for the business sector's circular transition, the government needs a dialogue with the business sector on the committee's conclusions. This should take place while proposals are being formulated and before any decisions on new economic instruments are made.

The electronics tax

The Swedish electronics tax, also known as the chemicals tax, is an example of one that has been shown to fail to steer towards reduced hazardous substances in products. Despite the legislative changes, the tax will continue to mean that full deductibility is not possible, even where the chemicals in question have been phased out. Furthermore, the tax will continue to function as an impediment to, for example, the trade in second-hand goods from abroad. This is because the tax then constitutes a larger proportion of the price compared to new products. The Swedish business community's overall assessment is that not only should the tax never have been introduced but also that it should be abolished as a matter of urgency. Restrictions on chemicals should instead be dealt with in chemicals legislation, preferably at EU level through REACH.

The waste tax

The Swedish waste tax, also known as the landfill tax, is another whose environmental control effect can no longer be said to apply. When it was introduced in 2000, its aim was to reduce the amount of waste going to landfill and to make it more profitable to reuse and recycle resources and materials. Since then, the technical conditions and possibilities for recycling have changed significantly. Today it is now possible to reuse materials and substances to a completely different extent. While there is waste that – for various reasons – needs to be removed from the cycle and disposed of in an environmentally safe way, it must also be possible to store and save certain waste – also in an environmentally responsible manner – until recycling and treatment methods are better developed or sufficient volumes have been built up to achieve profitability (see earlier reasoning on the need to be able to store waste for a longer period than today in the section “A modernised waste legislation”). Where storage entails additional costs in the form of the tax, the incentive is reduced, which does not favour society's overall resource efficiency and can inhibit technological development and innovation. In addition, the tax entails significant and time-consuming administration for the companies concerned. The government should abolish the waste tax forthwith.

VAT rules

VAT is one of the most complex regulations and therefore the costliest for businesses to manage, not least for the smallest operators.²² Some of the rules have effects that counteract resource efficiency and circularity. A clear example is the voluntary tax liability for business premises, which means that premises are empty and underutilised. Currently, a landlord cannot charge VAT on rent to associations and companies in areas such as healthcare, schools and care. If the landlord changes from VAT-liable to VAT-free renting, there is no longer a VAT deduction and costs become 25 percent higher. In addition, VAT on new construction and remodelling over the past ten years must be partially recovered if the VAT obligation ceases. There are several reasons to increase the use of existing premises; avoiding unnecessary primary production of new materials is one. The rules are outdated, inflexible and prevent the environmentally sustainable use of premises. The business community, associations and the Swedish Tax Agency have presented proposals on how to modernise VAT on the renting of premises that would also promote more circular development.²³

Another obstacle concerns the resale of second-hand goods by private individuals. Current VAT rules on the sale of second-hand goods are largely inapplicable, which in practice can lead to double VAT. In the case of sales of second-hand goods, the retailer has often purchased from consumers (or other non-taxable persons) and therefore no VAT is charged on the invoice. This means that the retailer cannot deduct the input VAT. The goods have been reintroduced into commercial trade and are subject to an inbound VAT which no party has been able to deduct; when the retailer then resells the goods, he must account for VAT on the full selling price.

Low VAT on second-hand goods is currently not possible because they are not included in the list (Annex III to the EU VAT Directive) of goods and services where reduced VAT may be applied under the EU VAT Directive.²⁴ There are currently rules for profit margin taxation, which means that instead of taxing the sales price, sellers may tax the difference between the purchase price and the sales price. However, the rules and accounting for profit margin taxation are difficult to use and create costs when selling in large volumes. Rules for simplified profit margin taxation should instead be developed along the lines of the Finnish model, which is calculated on all sales and purchases during an accounting period.²⁵

For businesses that have goods that are unsaleable for various reasons, such as being past their expiry date, it is important to be able to donate them to charity, provided there is demand. Goods with a non-negligible value cannot be donated without incurring withdrawal tax, which can see goods being discarded rather than donated. For food donations where the goods are close to their expiry date, the Swedish Tax Agency has clarified that the market value is normally zero, which means that withholding tax does not normally apply. However, further uncertainties remain

²² Swedish Enterprise (Svenskt Näringsliv), 2023a.

²³ Swedish Enterprise (Svenskt Näringsliv), 2018.

²⁴ EU VAT Directive (Europeiska unionens gemensamma system för mervärdesskatt (moms)).

²⁵ Swedish Enterprise (Svenskt Näringsliv), 2022.

over other types of goods considered to have a non-negligible value, such as hygiene products. It is unclear whether the issue can be resolved nationally or through changes to the EU VAT Directive. Given the forthcoming ban on the destruction of goods at EU level under the new Ecodesign Regulation, it is important that the VAT issues are also addressed. In addition to the above, the concluding table proposes that the concept of brokerage be defined and clarified and the prohibition on deduction for permanent residence be removed.

Enable more innovative and digital business models

Summary

- Policy developments for the circular economy and digitalisation need to be synchronised and mutually supportive. Digitalisation and digital data are central to increasing circular flows, providing information on materials and products along the entire value chain.
- There is good reason to review how well the legislation fits the new types of business models, such as functional sales and solutions that enable extended product life.
- Increased dialogue between industry, government lenders and investors is required to develop financing solutions that are adapted to circularity, such as design, functional sales and service-based business models.

Circular solutions open up opportunities for new business models and professions, but they also require a novel approach to what is being sold and bought. This may involve changes to product design, production processes, services and consumption patterns. For many companies, this will lead to a shift from existing traditional business models to more circular business models, many of which are based on a higher degree of services and a focus on delivered function. These approaches often mean that the manufacturer retains ownership and control of the product for longer, instead delivers the desired function by the customer; so-called ‘functional sales’.

To ensure that new regulations and economic instruments do not impede these new business models, there is good reason to thorough review of them, focusing on the consequences of their design on circular development in Sweden. Barriers identified should be removed. This is particularly apt for business models based on, for example, functional sales. If such obstacles exist in regulations at EU level, Sweden should strive to remove them.

At the same time, the opportunities for developing new business models are increasing. In no small part these arise through digitalisation, an important factor for information, for rental services, automatic and micropayments, to facilitate industrial symbiosis and for consumers to buy, sell or share products. Digital solutions can also facilitate functional sales. Businesses can then monitor product performance at the customer’s site and receive information that allows for undertake proactive maintenance or service and updates.

The ability of digitalisation to manage complex contexts and cross-border information flows between actors – for example, through blockchain technology – is an important prerequisite for many circular business models. The new Ecodesign Regulation (ESPR) will require products placed on the internal market to have a digital product passport, a form of information carrier. Designed properly – taking into account business confidentiality and adapted to the conditions of different industries – this has huge potential for facilitating the circular economy. If the sharing and use of data is to bring the desired benefit in the value chain, that data must be available, relevant, reliable and described in a standardised way.

Currently, companies can find it difficult to convince lenders and investors to finance this type of circular business model, as they are often evaluated according to linear principles. Access to workable financing solutions will be of the utmost importance to promote these new business models.

For business models aimed at extending the lifetime of products, there are also ambiguities. For example, when a product has changed so much that it becomes a new product that is ‘placed on the market’, product legislation should then be applied. There may also be confusion about who is responsible for the safety of the product following repair – the original manufacturer or the repairer. To resolve these uncertainties, the regulatory framework at EU level may need to be reviewed. Some countries in the EU single market also have design protection for spares, which can make it difficult to provide repair services in other countries. A harmonised protection of spare parts should therefore be established within the EU to incentivise the creation of repairable products.

Harnessing the potential of public procurement

Summary

- The public sector needs a conscious, concerted effort to apply approaches and criteria that promote a circular economy in public procurement.
- Sustainable procurement should be supplemented with other types of policy instruments to provide incentives for sustainability. This will allow the cost of producing sustainable products and services to fall over time relative to those with a high environmental and climate impact. The public sector, through shared tax revenues, cannot pay more for sustainable products over the long term.

Public procurement has strong potential as a strategic tool in the transition to a circular economy. This is because the public sector is a major purchaser of products and services; the volume demand can enable a shift to producing circular solutions and circular business models. The value of all public procurement in Sweden in 2021 totalled SEK 879 billion.²⁶ Moreover, public activities tend to be longer term, meaning that they are often well suited to services that offer products, rather than purchasing them themselves. Many municipalities and regions also have ambitious environmental

²⁶ National Agency for Public Procurement (Upphandlingsmyndigheten), u.å.

and climate targets, providing a driving force for them to procure circular products. However, procurement is difficult and there is often a lack of local expertise and resources to work with sustainable procurement, not least when it comes to smaller municipalities. It also needs to be recognised that often it is more expensive to procure circular goods and services. Requiring municipalities and regions to bear this cost will be difficult, without at the same time driving the development of more products and services towards circular business models. Therefore, all types of sustainable or circular procurement should be supplemented by other policy instruments incentivising circularity and making circular production and business models more profitable.

Effective procurement, based on theories of category management, allows public funds to be used cost-effectively and efficiently. Appropriate procurement has an optimal relationship between investment and outcome, where both objective fulfilment and a sustainable supply of goods and services are important success factors. Sustainable procurement promotes positive long-term social development through economic, environmental and social sustainability. This means that the procuring organisation evaluates both from the benefits arising from its own operations when making purchases and from the impact on society as a whole.

Companies often invest considerable resources into making their solutions competitive by addressing needs in a range of ways. Reputable companies welcome demanding requirements, but at the same time believe that these demands should be recurring in similar procurements. For example, companies have adapted to increased sustainability requirements by investing in solutions, in part to be able to participate in more procurements. Circular requirements should therefore be as uniform as possible among public authorities. Highly specialised requirements are often expensive and difficult to follow up.

Knowledge, expertise and research in the circular economy

Invest in higher education and skills development

Summary

- There is a widespread need for circular economy skills throughout society, including in business. Higher education has a role to play here; it therefore needs to facilitate the supply of skills to the business sector and the needs of the labour market to a greater extent through a modified range of courses.
- There needs to be efforts to improve lifelong learning, with education approaches adapted to those already in working life. A new resource allocation system that promotes lifelong learning in higher education should be investigated.
- Sweden needs to better match supply and demand for skills. The Government should consider introducing a collaboration bonus within the framework of a new resource allocation system, to help promote those education institutions that successfully collaborate with the business community.

The supply of education must – to a greater extent than is currently the case – facilitate the business sector's supply of skills. At the same time, the needs of the labour market must, to a greater extent, shape the courses offered at universities and colleges. Therefore, the Higher Education Act should introduce requirements that education at universities and colleges be tailored and feature content relevant to both student demand and the needs of the labour market. The need for skills development is not limited to young students at the beginning of their careers; is also apparent among those already in the labour market. There is also currently a shortage of courses and programmes for lifelong learning.

Swedish Enterprise believes that a public inquiry needs to be set up with the goal of reforming the higher education resource allocation system. The inquiry should prioritise aspects such as the possibilities of digitalisation, differentiation of higher education and efforts to increase throughput in the time allotted, along with initiatives to increase teacher-led learning. The duration of education is another aspect that should be studied. A new resource allocation system should, where possible, lead to academic higher education that, as a rule, entails three years of full-time study. It should also result in lifelong learning – including at master's level – becoming a separate area of activity for higher education institutions with dedicated funding and a regulatory framework. This will ensure a range of continuing education and training for professionals.

In addition, the Government should consider – within the framework of a new resource allocation system – introducing a bonus to reward universities and colleges that successfully collaborate with society, working life and business on education to achieve a better match between supply and demand for skills. Even before implementing reforms, incentives for higher education institutions to offer flexible programmes for professionals need to be improved. To this end, dedicated, permanent resources should be introduced with a remuneration model that compensates for the lower performance associated with more flexibly available programmes.

Higher vocational education is an example of collaboration with the business community that is currently working well. It would also be possible to set up a certification and/or training programme for circular procurement at the level of the university of applied sciences, for example, to ensure competence among procurers and buyers. Currently, a lack of skills and slow-moving organisations pose a bigger problem than any procurement regulations. Supervisory officers at municipalities and county administrative boards could also benefit from such certification.

Efforts to increase expertise on the circular economy and new business models among company boards and management teams would also encourage a more circular economy. There is much potential profit in value-preserving circular businesses, but often, greater patience is required for the return on investment – patience that does not often exist in today's financial markets. In society as a whole, greater knowledge is needed on what the circular economy will mean concretely in various policy areas. This includes among decision-makers to be able to make the right choices, among authorities to be able to conduct effective supervision and to apply legislation that steers development in the right direction and among clients and purchasers in choosing circular solutions.

The transition to a circular economy will involve changes for every aspect of society to a greater or lesser extent. This creates a pressing need to continue raising knowledge of what the transition entails for politicians, authorities, industry, academia, civil society and consumers. Investments are also needed to meet the need for expertise; there is already a major skills shortage in several areas of the business community. Three out of ten recruitment attempts by Swedish Enterprise's member companies have failed completely because there are no employees with the right skill profiles to recruit. Among Swedish Enterprise's industries, 60 percent state that the skills shortage is already an obstacle to the climate transition.²⁷ This challenge of finding the right skills exist throughout the country, in all sectors and for all types of companies.

A circular transition will place additional demands on a well-functioning skills supply in many areas and on the development of new competences in both vocational and academic education. To strengthen skills across the board and support the supply of skills, initiatives are needed throughout all stages of the education system, from primary and secondary school to higher education. Research, stronger opportunities to attract, recruit and retain international expertise and incentives for companies to work on skills development are needed. To ensure that the in-demand skills are available, education needs to be adapted to the needs of industry, so that the education system supports the supply of skills to industry. This particularly applies to upper secondary schools, vocational education in '*Komvux*' (Municipal adult education) and at universities and colleges. In addition, more courses and course packages should be flexible in terms of the pace and form of study, to allow those already working to develop their skills. Lifelong learning is extremely important. Teaching in both primary and secondary schools needs to address the circular economy and what it means, similar to those initiatives undertaken in Finland.²⁸ Creating favourable conditions for jobs in the circular economy requires general incentives for companies to be able to employ people. The costs of hiring need to be reduced, for example by lowering employer social security contributions.

Strengthening research and creating conditions for innovation

Summary

- When allocating public research funds, the opportunities for higher education institutions' to collaborate and exchange knowledge with business and industry should be taken into account. Long-term research initiatives should also be given higher priority.
- Interdisciplinary research needs to be further developed and strengthened. Research funding bodies should take greater account of the needs of the entire business community and the SME perspective when allocating research funds within the circular economy.
- Testing facilities need to be better utilised, and there is good reason to review how Sweden increase their number and strengthen them.

²⁷ Swedish Enterprise (Svenskt Näringsliv), 2021b.

²⁸ Sitra, n.d.

There is work currently under way in the business sector – often alongside academia – to identify new technologies, processes and working methods for developing circular materials, products and services. In some sectors, circular solutions are already being created, where the technology, funding and conditions exist. For other sectors, challenges remain that require further research and technology development. In many cases, established ways of working, methods and business models in industry will naturally evolve to become more circular. For research to make the greatest possible contribution to the transition, improved collaboration between industry and academia is needed to ensure that the outcomes are used to a greater extent and that the results and knowledge are more widely disseminated.

Continued investment in technology development, innovation and research is needed for the circular transition. In research projects and innovation programmes linked to industry, the focus must be on producing results that can generate commercial solutions and promote circular business models. It is also important that the perspectives of small and medium-sized enterprises (SMEs) are considered in these efforts, even if the SMEs themselves may find it difficult to allocate time and resources. If the funds invested in the circular economy have a clearer link to the business community, and if a ‘needs and user’ perspective is applied from the outset, the impact and exchange could increase through faster scaling up, implementation and commercialisation. Performance-based resource allocation – acting as an innovation premium – could be introduced directly into research funding at universities and colleges to reward research that is most relevant to the circular economy transition in the business sector. There may also be reasons to provide specific financial support to higher education institutions to ensure that those cutting-edge programmes that are in demand by the business community but with few applicants can be implemented. A further problem here is that support systems for innovation are inadequate, particularly when it comes to service innovations. Such systems are often structured according to the conditions that apply to product innovation, such as being patentable. Service innovations cannot be patented, but are commercialised through intellectual property rights such as trademarks. This means that they face completely different intellectual property challenges – as well as opportunities – to those of product innovation, and would benefit from a developed support system.

The business sector accounts for 74 percent of all R&D investments in Sweden and plays a central role in knowledge creation in society. The business sector’s R&D and innovation capacity needs to be strengthened through collaboration with academia and other companies. Well-functioning research collaboration between companies, academia and institutes also gives Sweden an important competitive advantage, as it influences where companies invest. Strategic research initiatives that reflect the knowledge-intensive business sector play a vital role in creating a platform for collaboration between academia, companies and institutes, based on societal challenges and the needs of companies in the transition. They also facilitate needs-based research and collaboration between companies in different sectors, some that is essential in the circular economy. The positive experiences from the strategic innovation programmes (SIP) should be taken further as part of the new programmes to be launched in 2024 under the name ‘Impact Innovation’. There is also a need for more complementary arenas for cooperation between academia and industry, such as centres of excellence.

In terms of research funding, around half of the research money goes directly to universities and institutes, while just over half is distributed by external research funding organisations. The money awarded by research funding bodies is often awarded on a project basis – usually for three years – and the projects are applied for competitively in open calls. One model that has proved to work well for further long-term initiatives is the Knowledge Foundation's initiative on 'profiles' and 'environments', which is based on higher education institutions qualifying step-by-step for larger and longer-term initiatives. Vinnova has also had gradual initiatives such as 'Challenge-driven innovation' or other longer-term initiatives such as 'Vinnväxt' and the above-mentioned competence centres. Another example is the National Research Programmes (NRP), where the government identifies areas of strategic priority. In such a model, it is important that the conditions are clear from the outset, so that higher education institutions can select and focus on profiles. Furthermore, the research should be followed up so that positive initiatives have the opportunity to grow, while the weaker ones have to restart or be discontinued.

Test facilities are an important part of the Swedish innovation ecosystem to enable testing, verification and upscaling of new technologies, processes and services. Test facilities in other countries may also be required if corresponding services are not available nationally. Important criteria for test facilities are that they are open, neutral and permanent, and that they allow participation from different sectors and industries, for example where a complex solution needs to be assessed.

At present, the degree of utilisation of test facilities varies – as does funding – and fragmentation is high. Within the strategic innovation programmes and the forthcoming Impact Innovation, the development and financing of testbeds for increased collaboration and accessibility in the circular economy could be developed, with a particular focus on SMEs. Smaller companies often have little knowledge of the testbeds and find it difficult to pay for the tests, which means that they need support to find their way in.

To promote innovation projects, it needs to be easier to use and access test facilities abroad. However, this may create other obstacles; current management of cross-border waste shipments is complicated, even for small volumes, making it difficult to use test facilities in other countries. Simplified rules are therefore needed for the transport of small quantities of waste (e.g. less than five tonnes) between countries, something that Sweden should promote at international level.

If resources invested in research are to be properly leveraged, smart management of intellectual property rights is often required. This is something currently lacking in Sweden, not least because knowledge levels are too low. The consequence is what is sometimes referred to as the Swedish Paradox, i.e. that Sweden is successful in the actual research and also in applying for patents, but is less so at actual utilisation. This is due to a lack of knowledge, which leads to the loss of research results and – in the case of incorrect use of patents – to an economic loss.

Finally, it is important that there is a serious evaluation of the various research projects being undertaken, not least with a focus on the possibility of using the results for concrete measures or applications. This is something that can be developed by existing research funding organisations. In addition, evaluating the research projects against their objectives and their contribution to development need to be conducted after the research has been completed, in order to provide a basis for future initiatives.

The way forward

Creating favourable conditions for the circular economy is important for society as a whole. However, it is also a complex issue and one that cannot be dealt with in isolation. Factors that influence the likelihood of moving towards a more circular economy can be found in everything from existing environmental legislation and the exercise of supervision to the design of the education system and current tax rules. A shift in direction is needed at a structural and horizontal level, as well as concrete regulatory change. The political decisions taken – or not – affect the prospects of moving towards more circular systems and leaving the linear, environmentally damaging economy behind.

This report has outlined a number of the challenges that currently exist today and the changes that can be made here and now to accelerate the transition to a more circular Sweden. It spans several topics and summarises conclusions on the current situation and future needs. Many of the measures that need to be put in place can already be started and are summarised in a list of concrete proposals below for decisions that can be implemented during the mandate period. These proposals aim to create the conditions for a more effective waste and chemicals policy that favours entrepreneurship and innovation. They offer stronger incentives and lowered thresholds for the development of circular business models and a labour market and academia capable of creating a solid basis for a more circular economy.

A clear and consistent conclusion that covers all areas is the clear need for coordination and greater responsibility among all relevant authorities. Another is that it is crucial that the instruments adopted are long term and that they contribute to the genuine objective. This applies above all to economic instruments that risk being judged on the basis of their fiscal impact on the public purse, rather than on their ability to achieve the goal of a circular economy.

If the transition to a fossil-free and sustainable society is to become a reality within the next 20 years or so, then a variety of solutions must be developed and deployed in parallel in ways that do not counteract each other. It also requires long-term rules and, above all, clear political direction and courage.

Chronological account of proposed decisions and measures in table form

The government has a responsibility to take a position on various conflicting objectives and to create long-term rules of engagement for the business community. This section describes those decisions and measures that need to be implemented in connection with the circular economy. The approaches proposed here are designed for implementation during the mandate period and with short decision paths. They are listed in chronological order. The proposals are justified in the previous text.

Concerns	Type of Action	Area	Proposal
Spring 2024			
Government	Political Leadership	At EU and global level	Be active in the work on the EU regulatory framework linked to the circular economy through, among other things: <ul style="list-style-type: none"> – Striving for common regulation, harmonised implementation in the internal market and increased competitiveness for a more circular EU. – Driving the development of international standards and ensuring that Swedish interests are met in their design. – Ensure that chemicals are primarily managed and regulated under REACH to avoid double regulation and that the revision of REACH is accurate and does not hinder innovation and the development of new, safe and sustainable chemicals. – When legislating and restricting substances – individually or in groups – consider the opportunities for substitution in value chains as well as how restrictions impact circularity as well as societal functions and preparedness, climate change and industrial processes. – Working to ensure that trade and circular economy policies are mutually supportive, in order to create favourable conditions for developing the circular economy globally.
Government, relevant authorities	Government commission ('Regeringsuppdrag')	Supervision	Further strengthen and deepen cooperation between authorities in the fight against organised crime in the field of waste.
Government	Bill to implement proposals in the ongoing investigation.	Permitting	Make change authorisations the principal rule when changing existing activities, in order to increase predictability and the ability to make rapid changes.
Government	Budget Bill 2025 ('Budgetpropositionen')	Supervision	Provide dedicated funding for the Environmental Protection Agency, the Chemicals Agency and the county administrative boards to facilitate the circular transition through increased supervisory guidance and operational supervision.
Government	Budget Bill 2025	Economic instruments	Abolish the electronics tax.
Government	Budget Bill 2025	Economic instruments	Abolish the waste tax.
Government	Budget Bill 2025	Research, skills and higher education.	Before a new resource allocation system can be introduced (see proposals below in the table): <ul style="list-style-type: none"> Introduce dedicated resources for training programmes aimed at professionals – in addition to the existing maximum – to provide incentives for skills development in areas such as the circular economy and to better meet the changing skills needs of the business community.

Concerns	Type of Action	Area	Proposal
Spring 2024			
Government	Budget Bill 2025	Research, skills management and higher education	Provide dedicated financial support to higher education institutions to ensure that those cutting-edge programmes that are in demand by business – but have few applicants – can be implemented.
Government	Budget Bill 2025	Innovative and digital circular business models	Increase funding for research, development, innovation and ecosystem activities as well as demonstration and plant investments.
Government	Government mandate for coordination	Supervision	<p>Increase national inspection coordination and the collaboration between inspection authorities, as well as the follow-up and evaluation of the work. The Government is recommended to advance selected proposals presented in the Environmental Supervision Inquiry (SOU 2017:63). In particular, the proposals concerning:</p> <ul style="list-style-type: none"> – Increased competence and status for inspection work. The business community should be included in this work. – That the Swedish Environmental Protection Agency and 'Miljösamverkan Sverige' coordinate their efforts to develop the dialogue with industry.
Government	Government Official Report ('SOU') or departmental enquiry	Waste	Review how Chapter 15 of the Environmental Code and the Waste Ordinance (2020:614) should be amended to enable private contractors to collect bulky waste from households in order that the business community can create more circular flows.
Government	Government commission	Waste	Government assignment to investigate incentives to move away from waste incineration in order to boost material recycling.
Government, Swedish Environmental Protection Agency	Government commission Regulatory dialogue ('Myndighetsdialog')	Supervision	<p>Better regulatory guidance:</p> <ul style="list-style-type: none"> – Develop clearer guidance on how inspections are conducted. The inspections must be equal and predictable for both the inspector and the operator in all parts of the country as well as at different administrative levels. Ensure that there are sufficient resources and expertise for the inspections.
Swedish Tax Agency	Guidance	Economic instruments	The concept of intermediation in the VAT Act needs to be simplified and clarified. The VAT Act contains 13 imprecise intermediary situations but lacks a definition. This causes considerable ambiguity for ecommerce. Until the law is changed, the Swedish Tax Agency must provide further practical information about its view to facilitate handling.
Government	Ministry Publications Series ('DS')	Economic instruments	Enable gifts and donations to charitable organisations without VAT. Learn from the models in Belgium, Italy, France and Finland.
Government, Swedish Agency for Economic and Regional Growth, Business Sweden, Almi	Government commission	Innovative and digital circular business models	Improve the dialogue between industry, government lenders and investors to develop financing solutions adapted to the conditions of service-based business models.

Concerns	Type of Action	Area	Proposal
Autumn 2024			
Government	Ministry Publications Series	Economic instruments	Avoid double VAT on second-hand goods. Introduce Finnish rules on simplified profit margin taxation calculated on all sales and purchases during an accounting period.
Government	Government Bill	Economic instruments	Modernise voluntary rental VAT. Current rules mean that associations and companies with VAT-free activities are excluded, even although there are empty premises. Both the business community and the Swedish Tax Agency have made proposals to address the current problem.
Government	Bill for the implementation of proposals in a finalised study	Waste	Allow companies to make a so-called 'free choice', as proposed in the SOU 2021:24.
Government	Amendment of regulation	Waste	Deregulate the following waste streams from municipal responsibility, in addition to introducing free choice: <ul style="list-style-type: none"> – Retail waste (including waste not arising from sales activities, such as staff rooms) when the waste predominantly arises from sales activities, office paper, park and garden waste – Waste from healthcare activities, cooking fat and frying oil. – The national derogation possibility should also be extended, based on clear criteria for justifying derogations, such as increased resource efficiency.
Government	Research bill ('Forskningspropositionen')	Research, skills and higher education	Establish an innovation premium to encourage higher education institutions' opportunities for collaboration and utilisation. Conditions for collaboration should be considered in research applications, for example by basing awards on predetermined criteria that also give weight to collaboration.
Government	Research proposal	Chemicals	Strengthen strategic innovation initiatives on developing and implementing new chemistry throughout the value chain to accelerate substitution efforts.
Swedish National Agency for Higher Vocational Education	Assignment by government, appropriation directions ('Regleringsbrev')	Research, skills and higher education	Increase the range of short courses and regular training places at the university of applied sciences in order to meet increased demand from the business community. Increase the business community's influence over upper secondary vocational education to better meet the needs of the labour market.
Government	Government Official Report or ministerial enquiry	Waste	Review the current rules in Section 5a, Chapter 15 of the Environmental Code on how long waste may be stored. Enable longer storage periods, together with measures to counteract dishonest activities.
Spring 2025			
Government, County administrative boards	Government Official Report or departmental enquiry	Supervision	Transfer more of the supervision – including in the area of waste – to a central authority, such as the county administrative board. This will ensure equal and effective supervision throughout the country.
Government	Government Official Report	Waste	Conduct a wide-ranging review of Swedish waste legislation and possibly other policy instruments in the waste area in order to strengthen the continued development towards a circular economy. Business and industry should be part of the review and the development of any new measures and instruments.

Concerns	Type of Action	Area	Proposal
Spring 2025			
Government, Environmental Protection Agency	Government commission	Waste	Develop regulatory proposals for increased separate sorting of certain waste streams (such as shrink and stretch film, EPS plastic and rigid plastic) to increase recycling.
Government, relevant authorities	Government commission	Waste	Mandate the appropriate authorities to investigate incentives for taking back unused products, with a particular focus on those sectors where overordering is common.
Government, SGU, Energy Authority, Swedish Environmental Protection Agency	Government commission	Waste	A government commission should be given to The Geological Survey of Sweden (SGU), the Swedish Energy Agency and the Swedish Environmental Protection Agency to develop a platform for collaboration between authorities and companies in the value chain, with the task of securing a sustainable supply of raw materials for both increased primary production and increased reuse and recycling.
Government, Swedish Environmental Protection Agency, other relevant authorities	Government commission	Bioeconomy	Commission the Swedish Environmental Protection Agency – together with relevant public and private stakeholders – to: <ol style="list-style-type: none"> 1. Analyse how a database, material platform or other model for sharing data on residual streams to aid increased circularity in the bioeconomy can be initiated, established and managed. The analysis should include an assessment of whether any individual part of the bioeconomy has greater potential for increased resource efficiency and increased added, as well as an assessment of the extent to which current legislation is an obstacle to the sharing of data and, by extension, increased circularity of residual streams. 2. Conduct a time-limited, practical pilot study for establishing such a database, material platform or other model for sharing data on residual streams in the part of the bioeconomy, which analysis has shown has the greatest potential for increasing resource efficiency and adding value.
Government, Swedish Chemicals Agency	Government commission	Chemicals	Review and revise specific national legislation on chemicals to harmonise the regulatory framework with EU legislation (and REACH in particular).
Government, Swedish Chemicals Agency	Guidance	Chemicals	Continue to work – in close cooperation with industry and business – on guidance and specifications for how safe chemicals management can be based on enhanced risk assessment to improve resource efficiency.
Government	Government Official Report or Ministry Publications Series	Economic instruments	Remove the 'permanent residence' deduction ban from VAT law and investigate VAT exemption for housing. This will enable the conversion of premises into housing.
Government	Government Official Report	Economic instruments	Review tax legislation to make it as equitable as possible for the sale of goods and services.
Government	Government Bill	Research, skills and higher education	Introduce a requirement in the Higher Education Act that courses at universities and colleges should be tailored and have relevant content that meets both to student demand and the needs of the labour market. The legal requirement is a clarification, as the wording in the joint higher education institution's letter of appropriation is not sufficient.

Concerns	Type of Action	Area	Proposal
Spring 2025			
Government	Government Official Report	Research, skills and higher education	Investigate the higher education resource allocation system: – A new resource allocation system should result in lifelong learning becoming a separate activity for higher education institutions. This should have dedicated funding and a revised regulatory framework, and should ensure a range of continuing education and further training for professionals. This should result in a collaboration bonus aimed at rewarding those universities and colleges that successfully collaborate with society, working life and industry on education and training, thereby better matching supply and demand for skills.
Government	Government Official Report	Innovative and digital circular business models	Explore the need for interpretation or adaptation of the current regulatory framework that business models based on functional sales to emerge, as well as those that extend the life of products.
Government, Swedish Environmental Protection Agency, Swedish Energy Agency, The Swedish Agency for Growth Policy Analysis	Government commission	Bioeconomy	Policy instruments to promote biobased solutions. The Swedish Energy Agency, the Environmental Protection Agency and The Swedish Agency for Growth Policy Analysis should be tasked with analysing how well existing policy instruments are promoting circular, biobased solutions in achieving the objectives of the bioeconomy strategy. This analysis should pay particular attention to the need and potential for increasing use of residual streams from the blue economy, which are not used for food. There is also the need for policy instruments for biobased solutions that strengthen the supply capacity in food production. If the analysis shows a need for additional or modified instruments, these should be proposed.
Autumn 2025			
Government, tax authorities	Appropriation directions	Economic instruments	The Swedish Tax Agency should develop proposals on how different tax rules can facilitate circular, sustainable transactions.
Government	Appropriation directions, instructions	Coordination of circular policy development	Review the relevant authorities' instructions and/or government commissions, with the aim of increasing collaboration between authorities and deepening that with industry and business.
Government	Bill to implement proposals in an ongoing investigation.	Permitting	Allow for notification of changes to authorities rather than of authorisation for minor changes.
Government	Bill to implement proposals in an ongoing investigation.	Permitting, supervision	Move areas studied in the authorisation procedure to the supervisory authority, in order to streamline the authorisation process.
Government	Bill to implement proposals in an ongoing investigation.	Permitting	Harmonise Swedish legislation with EU legislation – such as the IED – in order to streamline the permit process.

Bibliography

Betänkandet av utredningen om verksamheters kommunala avfall, 2021. *Äga avfall – en del av den cirkulära ekonomin*. SOU 2021: 24. <https://www.regeringen.se/rattsliga-dokument/statens-offentliga-utredningar/2021/04/sou-202124/>

Bioekonomiutredningen, 2023. *En hållbar bioekonomistrategi – för ett välmående fossilfritt samhälle*. SOU 2023: 84. <https://www.regeringen.se/rattsliga-dokument/statens-offentliga-utredningar/2023/12/sou-202384/>

Delegationen för cirkulär ekonomi.
<https://www.delegationcirkularekonomi.se/rapporter/>

Energimyndigheten, Naturvårdsverket och SGU, 2022. *Utveckla myndighetssamverkan för Sveriges delar av en hållbar europeisk värdekedja för batterier*.
<https://energimyndigheten.a-w2m.se/Home.mvc?ResourceId=211561>

Europeiska kommissionen, 2020. *A new Circular Economy Action Plan for a cleaner and more competitive Europe*. https://eur-lex.europa.eu/resource.html?uri=cellar:9903b325-6388-11ea-b735-01aa75ed71a1.0017.02/DOC_1&format=PDF

Europeiska unionens gemensamma system för mervärdesskatt (moms),
Direktiv 2006/112/EG, <https://eur-lex.europa.eu/legal-content/SV/TXT/?uri=celex%3A32006L0112>

Kemikalieinspektionen, 2023. *Giftfritt från början*. <https://www.kemi.se/om-kemikalieinspektionen/vart-uppdrag/regeringsuppdrag/avslutade-regeringsuppdrag/giftfritt-fran-borjan>

Klimat- och näringslivsdepartementet, 2023. *Regleringsbrev för budgetåret 2024 avseende Naturvårdsverket*. <https://www.esv.se/statsliggaren/regleringsbrev/Index?rbId=24153>

Klimatpolitiska rådet, 2023. *Klimatpolitiska rådets rapport*. <https://www.klimatpolitiskaradet.se/wp-content/uploads/2023/03/klimatpolitiskaradetrappport2023.pdf>

Miljötillsynsutredningen, 2017. *Miljötillsyn och sanktioner – en tillsyn präglad av ansvar, respekt och enkelhet*. SOU 2017: 63. <https://www.regeringen.se/rattsliga-dokument/statens-offentliga-utredningar/2017/06/sou-201763/>

Nationell samordnare Agenda 2030, 2023. *Färdplan för omställning till hållbar ekonomisk utveckling*. <https://agenda2030samordnaren.se/wp-content/uploads/2023/05/fardplan-hallbar-ekonomi-del-2.pdf>

Naturvårdsverket, 2020. *Vägledning om överlåtelse av tillsyn.*

www.naturvardsverket.se/4ac572/globalassets/vagledning/miljobalken/tillsyn/vagledning-om-overlatelse-av-tillsyn.pdf

Naturvårdsverket, 2021. *Avfall som resurs. Redovisning av ett regeringsuppdrag.*

<https://www.naturvardsverket.se/om-oss/regeringsuppdrag/slutredovisade-regeringsuppdrag/avfall-som-resurs/>

Naturvårdsverket, 2023. *Fördjupad utvärdering av Sveriges miljömål 2023.*

<https://www.naturvardsverket.se/publikationer/7000/978-91-620-7088-5/>

Regeringskansliet, 2020. *Cirkulär ekonomi – strategi för omställningen i Sverige.*

<https://www.regeringen.se/rapporter/2023/01/strategi-for-cirkular-ekonomi/>

Regeringskansliet, 2021. *Cirkulär ekonomi – handlingsplan för omställning*

av Sverige. <https://www.regeringen.se/informationsmaterial/2021/01/cirkular-ekonomi---handlingsplan-for-omstallning-av-sverige/>

Regeringskansliet, 2023. *Regeringens klimathandlingsplan – hela vägen till nettonoll.*

<https://www.regeringen.se/rattsliga-dokument/skrivelse/2023/12/skr.-20232459>

Riksrevisionen, 2018. *Bädda för bättre tillsyn – statens vägledning av kommunal*

tillsyn (RiR 2018:31). <https://www.riksrevisionen.se/rapporter/granskningsrapporter/2018/badda-for-battre-tillsyn---statens-vagledning-av-kommunal-tillsyn.html>

Sitra, n.d. *Undervisning i cirkulär ekonomi till alla utbildningsstadier.*

<https://www.sitra.fi/sv/projekt/undervisning-cirkular-ekonomi-till-alla-utbildningsstadier/#vad-handlar-det-om> [2024-01-30]

Svenskt Näringsliv, 2018. *Modernisera hyresmomsen för verksamhetslokaler.*

https://www.svensktnaringsliv.se/material/skrivelser/modernisera-hyresmomsen-for-verksamhetslokaler_1141120.html

Svenskt Näringsliv, 2021a. *En miljöprovning för omställning och nya möjligheter.*

https://www.svensktnaringsliv.se/bilder_och_dokument/rapporter/46qjyf_rapport_en_miljoprovning_webbpdf_1178698.html/Rapport_En_miljoprovning_webb.pdf

Svenskt Näringsliv, 2021b. *Kompetensförsörjning för klimatomställningen.*

https://www.svensktnaringsliv.se/sakomraden/utbildning/kompetensforsorjning-for-klimatomstallningen_1175404.html

Svenskt Näringsliv, 2022. *Många möjliga momsreformer.* https://www.svensktnaringsliv.se/blogg/fokus-pa-skatteerna/manga-mojliga-momsreformer_1190547.html

Svenskt Näringsliv, 2023a. *Momsadministration kostar företagen 14 miljarder*

kronor. https://www.svensktnaringsliv.se/blogg/fokus-pa-skatteerna/momsadministration-kostar-foretagen-14-miljarder-kronor_1201435.html

Svenskt Näringsliv, 2023b. *Upphandling.* https://www.svensktnaringsliv.se/bilder_och_dokument/rapporter/vi2c1r_guide_upphandling_2023_webbpdf_1204284.html

[html](https://www.svensktnaringsliv.se/bilder_och_dokument/rapporter/vi2c1r_guide_upphandling_2023_webbpdf_1204284.html)/Guide_Upphandling_2023_Webb.pdf

Tillväxtverket, 2023. *Företagens gröna omställning*. <https://tillvaxtverket.se/tillvaxtverket/publikationer/publikationer2023/foretagensgronaomställning.6046.html>

UNFCCC, 2023. *Outcome of the first global stocktake*. https://unfccc.int/sites/default/files/resource/cma2023_L17_adv.pdf

Upphandlingsmyndigheten, u.å. *Upphandlingspliktiga inköp för 879 miljarder kronor*. <https://www.upphandlingsmyndigheten.se/statistik/annan-statistik/upphandlingspliktiga-inkop-for-879-miljarder-kronor/> [2024-01-30]

www.svensktnaringsliv.se

Storgatan 19, 114 82 Stockholm

Phone 08-553 430 00

Print: Arkitektkopia AB, Bromma, 2024