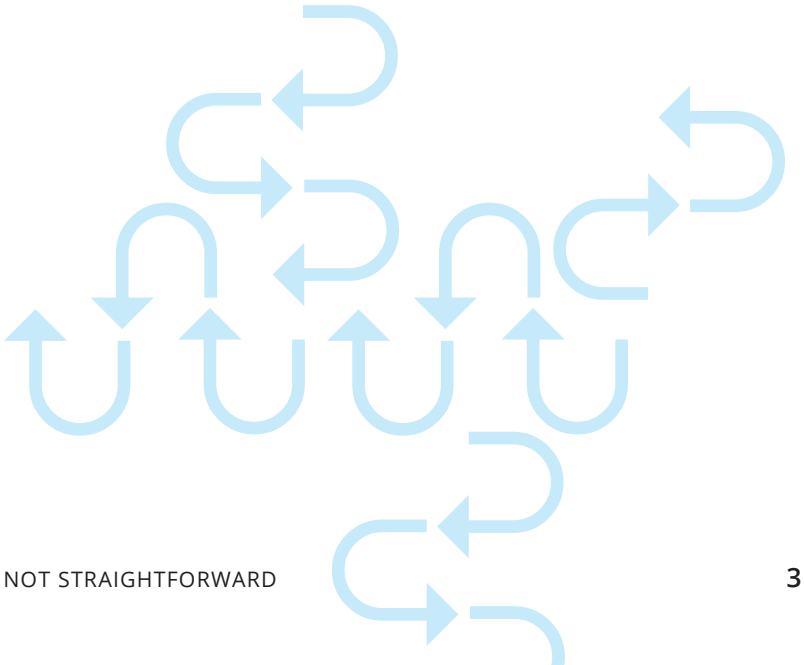
Short version report

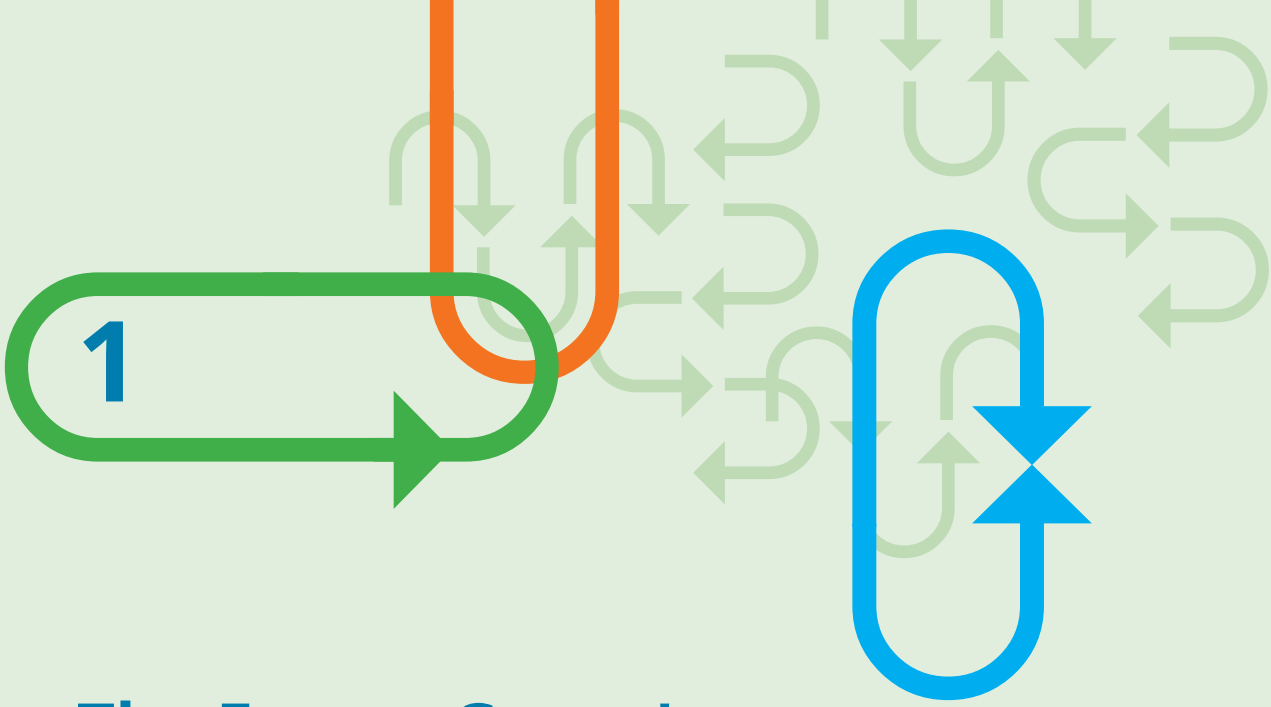
Not Straightforward

EKSPERTGRUPPEN
Virkemidler for sirkulær økonomi

Official report by the Expert Group on policy instruments to promote circular activities

Contents





The Expert Group's appointment, work and interpretation of the mandate

In March 2024, the Government appointed an Expert Group based on an action point in *the Action plan for a circular economy 2024–2025*, where the Government decided to "appoint an Expert Group to conduct a comprehensive assessment of which policy instruments (regulatory, economic and informational) are most effective in promoting a more circular economy".

A study of this issue was recommended and mentioned in several preceding processes, including by the Tax Committee in *the Norwegian Official Report (NOU) 2022: 20 Et helhetlig skattesystem* [A Comprehensive Tax System]. The committee believed there was a need for a broad study of measures to promote circular activities. The need for increased circularity is also a key topic in the Climate Change Committee's report *(NOU 2023: 25 The transition to low emissions – climate policy choices towards 2050).* The Climate Change Committee believed that all policies and decisions must be based on the premise that all resources are limited, and it therefore proposes that all economic activity must take place within planetary boundaries and that the economy must become more circular.

1.1 The mandate

Mandate: Expert Group on policy instruments to promote circular activities
The UN believes that the current global production and consumption will exceed planetary boundaries and resources in the long term. Resource consumption causes environmental challenges in the form of biodiversity loss and greenhouse gas emissions. The International Resource Panel estimates that the current global consumption is responsible for more than 90 per cent of biodiversity loss and loss of water sources, and about 50 per cent

of climate change impacts[1]. To reduce the environmental challenges caused by current consumption, the International Resource Panel recommends a transition to a more circular economy. Circular activities should contribute to the efficient and sustainable utilisation of natural resources and products, in a toxic-free material cycle, where as few resources as possible are lost.

There are several examples of policy instruments Norway has utilised to promote circular activities. In 1999, a tax was levied on the final treatment of waste in order to incentivise increased waste sorting and recycling. The EU is in the process of implementing comprehensive regulatory packages that will contribute to a more circular economy. Much of this legislation will be EEA relevant and thus also relevant for Norway. One key piece of legislation is the proposed new Ecodesign Regulation, which will encompass most products. This legislation is intended to ensure sustainability throughout the products' life cycles. Product design requirements are crucial for creating markets for circular products and for ensuring circular consumption. In addition, legislation is being developed for seven value chains. Examples include the value chains for batteries, plastics, textiles and food.

It will be necessary to assess and utilise additional policy instruments to achieve a comprehensive transition. The Tax Committee (NOU 2022: 20) noted that the circular economy is a relatively new concept in the field of economics and it highlighted a strong need for more knowledge. The Committee recommends a comprehensive assessment of measures to promote circular activities. Furthermore, the Committee recommends that tax initiatives should be assessed with regard to other measures, including direct regulatory and informational measures. The Climate Change Committee (NOU 2023: 25) highlights that all future policies must be based on the premise that all resources are limited. Therefore, the economy must become more circular to ensure that economic activity takes place within planetary boundaries. A number of EU legal acts encourage nations to employ economic instruments to incentivise the transition. Economic instruments can complement the requirements set out in EU/EEA legislation to help reduce the environmental impact of our consumption and production patterns. Appropriately designed policy instruments can provide the incentives for behavioural change, reduce the environmental impact associated with production, use and waste management, and contribute to value creation through innovation and new, sustainable business models.

It is a challenge that the externalities of production largely arise in the major manufacturing economies of the world. In many cases, these are emerging economies with a limited ability or willingness to develop adequate environmental policies within a reasonable timeframe.

[1] International Resource Panel: Global Resource Outlook 2019

This also makes it necessary to consider second-best solutions, including taxes or regulations that do not necessarily address the source of the externalities.

On this basis, the Government has decided to appoint an Expert Group to conduct a comprehensive assessment of which policy instruments are effective in promoting a more circular economy.

The Expert Group's tasks are to:

- Define key concepts related to the circular economy and describe the extent to which the potential for circularity is utilised in the Norwegian economy; determine the share of the Norwegian economy that can be described as circular, and how this positions Norway compared to other countries;
- identify areas of the economy where there is a need to change the use of policy instruments;
- conduct a comprehensive assessment of policy instruments that can promote circular activities and result in a better utilisation of renewable and non-renewable resources, sustainable production and consumption, and increased value creation. This involves identifying instruments that are socio-economically profitable and, on this basis, propose changes, if relevant, to the current use of policy instruments (regulatory, economic and informational). The study shall include assessments of and possible proposals for changes to the tax system.

The Expert Group's assessments must be made in accordance with the requirements of the Instructions for Official Studies and Reports, and they must be made on an independent professional basis. The group is asked to consider relevant EU legislation. The Expert Group will be based on the guide on government committee work issued by the Ministry of Local Government and Regional Development.

Submissions

The group will report to the Ministry of Climate and Environment, as well as to the Ministry of Trade, Industry and Fisheries, the Ministry of Agriculture and Food and the Ministry of Finance. The group will submit a comprehensive report and recommendations by April 2025 at the latest. The group will report on the status midway.

Organisation

The Expert Group will have its own secretariat. The Expert Group will have a reference group comprised of stakeholders and observers from the responsible government ministries. The reference group will be appointed by the ministries based on proposals by the Expert Group.

1.2 Additional assignments

On 5 December 2024, in its consideration of the 2025 National Budget, the Norwegian Parliament (the Storting) passed the following Petition Resolution (No. 94):

"The Storting requests the Government to give the Expert Group for circular activities an additional assignment to assess a textile tax. The assessment must be submitted by April 2025."

Based on the Storting's petition resolution, the Ministry of Climate and Environment commissioned the Expert Group, in a letter dated 8 January 2025, to assess a textile tax within the framework of the current mandate. The Expert Group's assessment of a textile tax is included in Chapter 12 of the report.

1.3 Members of the Expert Group

Table 1.1 The members of the Expert Group were:

Name	Title/current position	Education	Residence
Brita Bye (Chair)	Researcher at Statistics Norway	PhD in economics	Bærum
Marit Aursand	Special advisor for SINTEF Ocean AS, head of the group initiative SINTEF Food and agriculture research	PhD in biotechnology	Trondheim
Thomas Hartnik	Divisional Director for Environment and Natural Resources at NIBIO	PhD in ecotoxicology	Drøbak
Henrik E. Kolderup	Appellate judge, Borgarting Court of Appeal and former lawyer with the Office of the Attorney General	Lawyer	Oslo
Ola Kvaløy	Dean and Professor of Economics at the University of Stavanger School of Business and Law	PhD in economics	Stavanger
Jarle Møen	Head of the department and Professor of Business and Management Science at the NHH Norwegian School of Economics	PhD in economics	Bergen
Kristine Nore	Founder and CEO of Omtre AS, Project manager for SirkTRE	PhD in building and material engineering	Noresund

1.4 Secretariat, reference group and website

The secretariat was established in April 2024 and has been led by the Ministry of Climate and Environment. It has had the following members who have been involved during all or part of the period:

Siri Hals Butenschøn (head of the secretariat, Ministry of Climate and Environment)
Siri Arntzen Bellika (Ministry of Climate and Environment)
Johan Ness Gerhardsen (Ministry of Climate and Environment)
Janicke Anne Giæver (Ministry of Climate and Environment)
Trygve Homme (Ministry of Climate and Environment)
Inga-Malene Huse (Ministry of Finance)
Charlotte Petersen (Ministry of Climate and Environment)
Kjersti Prestrud (Ministry of Climate and Environment)
Lars Hallvard Lind (Ministry of Trade, Industry and Fisheries)
Øystein Bieltvedt Skeie (Ministry of Finance)
Espen Stokke (Ministry of Agriculture and Food)

The Ministry of Climate and Environment established a reference group at the suggestion of the Expert Group, with 37 participants. The intent was for the group to cover the most important affected interests. It has included representatives from labour organisations, the business community, the R&D sector, NGOs, and others. In addition, the reference group has had observers from the responsible government ministries. The Expert Group has held two meetings with the reference group and received written input twice. In a press release, the secretariat also issued an open invitation to the general public to submit input on certain overarching issues. There were 53 written submissions in the first round and 21 in the second round. All input is made public on the group's website: https://nettsteder.regjeringen.no/ekspertsirkulaer/

1.5 The Expert Group's prioritisations and delimitations of the mandate

The Expert Group has had a comprehensive mandate to work with. The chapters in this report broadly follow the points the Expert Group was asked to assess in the mandate. Norway is a small, open economy with a large volume of imported goods. As mentioned in the mandate, many of the external costs of production arise in countries that have a limited ability and willingness to develop adequate environmental policies. In line with the mandate, the Expert Group has considered instruments that could also affect production abroad. Extensive legislation related to circular activities is both in place and being introduced in the EU, and much of this is EEA relevant. The report therefore contains a separate chapter on relevant frameworks within the EU/EEA area.

To assess the potential for circularity and the need for both new and altered policy instruments, the Expert Group has selected seven value chains based on the EU's key product value chains and assessments made in connection with the work on *Nasjonal strategi for ein grøn, sirkulær økonomi* [National Strategy for a Green, Circular Economy] (2021) and *Handlingsplanen for sirkulær økonomi* [Action plan for a circular economy] (2024).

These value chains are: plastics, including plastic packaging (Chapter 9), electronics (Chapter 10), batteries and vehicles (Chapter 11), textiles (Chapter 12), building, construction and property (Chapter 13), bioresources (Chapter 14) and waste (Chapter 15).

Energy is part of all the value chains and will have a central role in the transition to a more circular economy. The green transition requires a transition to renewable energy sources, increased efficiency and maintaining consumption within planetary boundaries. The Expert Group has limited its work in the area of energy with references to the Energy Commission (NOU 2023: 3) and *Strømprisutvalget* [the Electricity Price Committee] (2023) for further analyses of energy production and consumption. However, the Expert Group would like to point out that in the transition to a circular economy, it is essential that all resources are utilised efficiently within planetary boundaries. This means that the price for stakeholders must reflect the scarcity of energy and the costs of increasing capacity. These costs must also take into account the costs for the climate, the environment and nature.

The Expert Group has limited its work on "assessments of and possible proposals for changes to the tax system" to changes in indirect taxes, and ignores income and capital taxation.

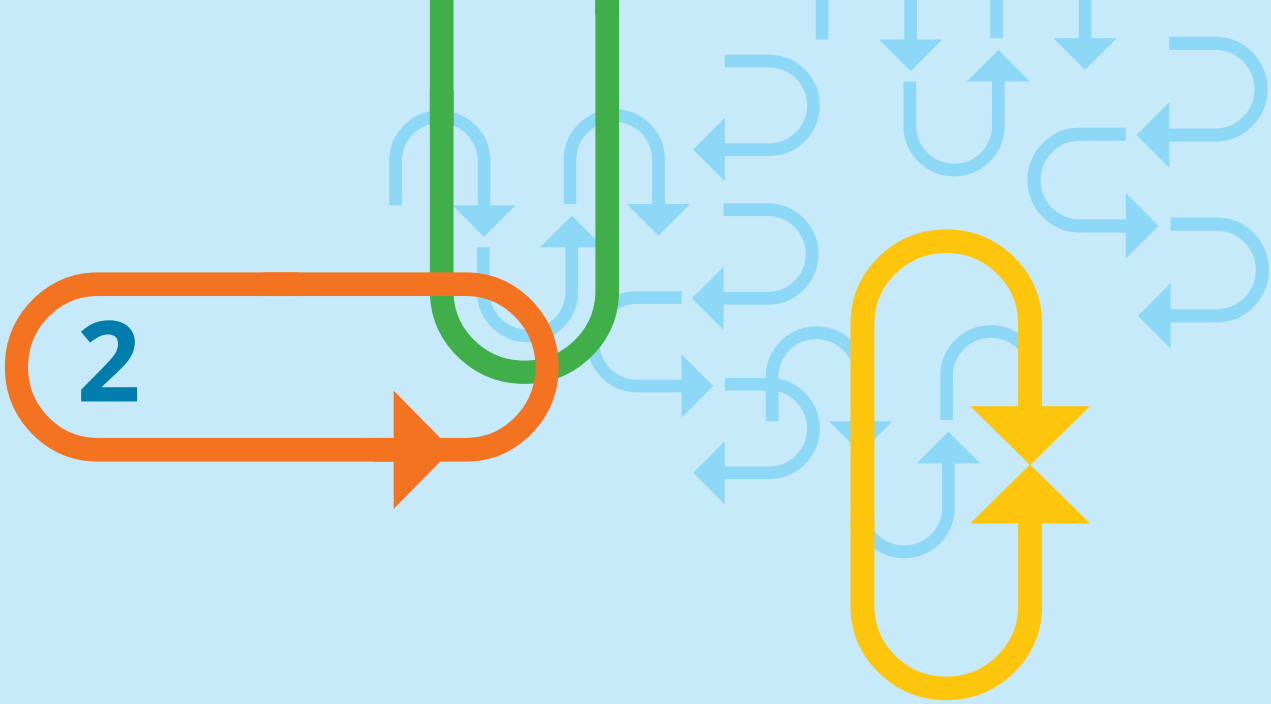
Proposals for new instruments and changes to current instruments are assessed in relation to economic theory regarding the effectiveness of utilising such instruments. However, it has not been possible to conduct any quantitative analyses of economic effects/efficiency within the timeframe for the Expert Group's work. As a result, it has not been possible to make an overall assessment and comparison of the economic effects of the individual instruments.

The Expert Group's recommendations are summarised in Chapter 2.

1.6 The report was submitted on 26 May 2025

The Expert Group concluded its work on 11 April 2025. The report *Not Straightforward* was presented to the Minister for Climate and Environment on 26 May 2025, and is available in digital form at regjeringen.no (in Norwegian only)

The recommendations are summarised in Chapter 2 of the report and are reproduced in full in this short version of the report.



Summary, assessments and recommendations

Overview

This chapter provides an overview of the Expert Group's overall assessments and recommendations. For each chapter, a 'blue box' has been prepared containing a brief background and assessments, followed by the Expert Group's recommendations. The boxes also appear at the beginning of each chapter in the report. References for the text are listed in the bibliography of the main report.

The transition to a circular economy will not be straightforward
A circular economy contributes to the sustainable and efficient management of the planet's resources. To achieve this, a wide range of policy instruments are needed to incentivise behavioural change among both consumers and businesses.

Our consumption must shift towards goods and services with a lower climate and environmental impact. Prices must reflect the socio-economic costs of resource use, such as the costs of pollution and degradation of nature. In addition, knowledge of the consequences of our consumption must be improved.

Fundamentally, it must become more expensive to buy new goods, and easier to repair, reuse and recycle the resources we already have.

For example, the Expert Group proposes a textile tax and a repair scheme for white goods and electronics. This should help to favour the reuse and repair of these products, rather than replacing them. It must be profitable to keep resources in circulation.

Consumption challenges planetary boundaries
The current use of resources is challenging planetary resources and boundaries. According to the UN International Resource Panel, the global consumption of resources accounts for more than 90 per cent of the degradation of nature and pressure on water resources, over 55 per cent of greenhouse gas emissions, and up to 40 per cent of air pollution that is harmful to health.

Circular activities, such as reusing, recycling, repairing and extending the life of products, will help keep resources in circulation. Circular activities reduce the waste of resources in both production and consumption and minimise our need to extract new, non-renewable resources.

Many of the goods we import to Norway today are too cheap. The total global environmental and climate costs have not been included. Products such as textiles and electronics are part of international value chains with significant climate and environmental impacts. These are sources of some of the fastest-growing waste streams globally. At the same time, repairs are labour-intensive and income levels in Norway are high. This means that it is often less expensive to buy new goods from abroad than to repair goods in Norway.

In order to shift consumption away from the purchase of new goods and towards the purchase of second-hand goods and the repair of existing goods, new goods must be made more expensive.

Co-operation with the EU is essential
Circular economy is a key part of the European Green Deal. The EU is leading the way in developing legislation to promote circular solutions. There is already EU legislation in place that is relevant to implement in the EEA Agreement, and more is on its way. A faster implementation into Norwegian legislation is an important measure for accelerating the transition.

Norway is lagging behind the EU in several areas of the transition. Close co-operation with the EU is important for the climate, the environment and nature, and to ensure good framework conditions for Norwegian businesses in the European market.

New goods must be more expensive, while circular solutions must be profitable
The Expert Group recommends several measures across a wide range of value chains, from plastics and textiles to electronics, bioresources and construction.

To incentivise recycling and reduce plastic consumption, the Expert Group proposes introducing a tax on plastic packaging. The tax on plastic packaging should depend on the amount of recycled plastic used in the packaging. A tax on the landfill of waste is also proposed, which would incentivise recycling.

The lifespan of electronics must be increased. The Expert Group proposes to introduce a scheme for the repair of white goods and electronics, partly financed by the industry as a fee for the purchase of new goods, although the authorities can also help ensure a rapid introduction. Industry involvement in financing would incentivise the introduction of more durable products on the market. Such a repair scheme may also be relevant for other products.

To reduce the consumption of new textiles in Norway, the Expert Group suggests introducing a textile tax based on weight and number of units. This could reduce the demand for new garments and thus also emissions and waste from the textile industry.

The warranty period for products should be increased from two to three years, and from five to six years for products with an assumed longer lifespan. Today, between 20 and 50 per cent of goods purchased online are returned and ultimately end up as waste. The legislation governing the return of goods in e-commerce should be assessed with the aim of limiting the scope of returns, possibly in co-operation with the EU.

Support for certain repairs should be provided as direct support, e.g., as a repair bonus. This would be a more effective measure than a value added tax exemption on repairs.

Measures that incentivise markets for used goods should be combined with measures that increase the price of new goods. The textile tax and the industry scheme for electronics repairs are examples of this. Support can be provided through direct subsidies for the sale of used goods or through value added tax exemptions. However, this requires further assessment.

Residual products from the bio-based industries should be better utilised. Fish sludge is a poorly utilised resource and discharges of phosphorus and nitrogen from aquaculture are a source of pollution. Phosphorus is a critical raw material. In order to utilise these resources, a tax on phosphorus and nitrogen emissions in aquaculture should be introduced, combined with a refund for collected sludge. This will incentivise owners of aquaculture facilities to increase their collection of nutrient-rich residual raw materials (sludge). The tax should be combined with measures aimed at developing technology for the collection and utilisation of fish sludge.

A circular economy promotes sustainability, competitiveness and preparedness

A circular economy is not a goal in itself. However, a circular economy *will contribute to achieving the climate, environmental and nature targets and commitments stated in the Paris Agreement, the Kunming-Montreal Global Biodiversity Framework and the UN Sustainable Development Goals, and will contribute to the sustainable and efficient management of the planet's resources.*

A circular economy could also contribute to greater competitiveness for companies and countries that succeed in the green transition. It will also help reduce dependence on other countries for access to critical raw materials. This is important from an emergency preparedness perspective.

It will be necessary to use many different instruments. Consumers and manufacturers must be incentivised to change their behaviour, and circular economy aspects should be integrated into all climate, environmental and resource policies.

Summary Chapter 3: What is a circular economy and how can it be measured?

Background and assessments

Chapter 3 takes a closer look at how the concept of the circular economy can be understood. It defines key concepts, and describes how to measure circularity. The extraction and use of natural resources can give rise to socio-economic costs in the form of negative external impacts on health, the environment and the climate, which are currently challenging planetary resources and boundaries. A circular economy is not a goal in itself, but can be described as follows: *A circular economy should contribute to achieving climate, environmental and nature targets and commitments, and to the sustainable and efficient management of the planet's resources.* Circular activities help keep resources in circulation for as long as possible by, among other things, increasing the lifespan of products, increasing recycling, reducing the waste of resources during production and consumption, and reducing the need for the extraction of new non-renewable resources, thereby reducing the carbon and environmental footprint. A circular economy involves circulating materials of both biological and non-biological origin.

This chapter also describes the share of the Norwegian economy that is circular, conducts comparisons with other countries and explores existing data and indicators for a circular economy. Based on available indicators, Norway is underperforming in several areas than many of the other countries that are natural for comparison, with respect to both circularity and its environmental and carbon footprint. Measuring and comparing performance with other countries is challenging, partly due to different industry structures and varying data sources. The Expert Group has based its work on the EU monitoring framework, which provides a comprehensive basis for measuring the circular economy and enables comparisons with other EU/EEA countries. For Norway, data is most comprehensive for waste management, but data-gaps remain on other important aspects of a circular economy such as consumption, competitiveness and innovation. Compared to other countries, Norway is above average for household waste, plastic packaging and food waste, and below average for recycling in general.

The Expert Group recommends that:

- Norway should reduce its consumption footprint to ensure that it is within planetary boundaries by limiting consumption of, and increasing the reuse of resources.
- Government authorities should prioritise the submission of data and statistics to Eurostat's framework for the circular economy to establish values for all 27 indicators for Norway.
- The authorities should prepare an annual overview of how Norway is doing in terms of achieving its targets and commitments, and how Norway compares to other countries, based on Eurostat's indicator framework.

Summary Chapter 4: Why incentivise a more circular economy?

Background and assessments

Chapter 4 explains why a transition to a circular economy is essential for fulfilling climate, nature and pollution targets and commitments, while promoting competitiveness and security of supply in times of war and crises. A circular economy should contribute to reduce the use of resources that arise in all the different stages of a product's value chain, but not at the expense of a non-toxic environment. A circular economy contributes to increased competitiveness for companies and countries that succeed in transitioning quickly and developing and trading products in line with circular principles. In terms of security, a circular economy can reduce the dependence on other countries for scarce resources in the form of critical raw materials. This chapter explains the selection of value chains, which are in line with the EU's seven prioritised product value chains.

The chapter also describes Norway's national and international objectives for a circular economy. A circular economy should contribute to reaching national targets and commitments for climate, nature and pollution, international targets and commitments under the Paris Agreement, the Kunming-Montreal Global Biodiversity Framework and the UN Sustainable Development Goals, and is also closely linked to regulatory developments in the EU. Furthermore, the Expert Group discusses why public policies and regulations are needed to correct for different types of market failures and externalities. The use of resources in an unregulated market can lead to various forms of market failure, in which case government intervention may be necessary to ensure efficient use of our resources. Recent behavioural theories that challenge traditional economics can also justify government intervention. Possible justifications from behavioural economics for government intervention are discussed in conclusion.

The Expert Group recommends that:

- Circular economy aspects should be integrated in all climate, environmental and resource policies.
- Norway must ensure that it achieves its national climate and environmental targets and commitments and its desired state.
- Norway must ensure that it fulfils its obligations under the Paris Agreement, the Kunming-Montreal Global Biodiversity Framework and the agreement on the UN Sustainable Development Goals (SDGs) and its EEA obligations in the area of climate and environment, as well as other relevant international obligations.

Summary Chapter 5: Policy instruments

Background

Chapter 5 takes a closer look at how policy instruments can be designed to incentivise a more circular economy and a more efficient use of resources and take planetary boundaries into consideration. Through the price mechanism, economic instruments can contribute to more resource-efficient production and consumption patterns. When environmentally harmful activities become more expensive, the willingness to pay for more environmentally and climate-friendly alternatives will increase, which in turn increases the profitability of producing and developing such alternatives. Properly designed taxes or quota systems can help reduce the market failure of negative externalities in an efficient manner. Subsidies can supplement environmental taxes or quotas and can be used to encourage organisations to, for instance, develop and adopt new environmental technology.

Direct regulations, which is one example of a regulatory policy instrument, operate through acts and regulations and is a policy instrument that directly affects behaviour. Examples of such instruments include emission intensity requirements or the use of specific technologies. Extended producer responsibility, public procurement legislation, and voluntary agreements, as well as blending mandates are other examples of regulatory instruments. Certification schemes or information campaigns are examples of informational instruments that can be useful in the transition to a circular economy.

Assessments

In order to reduce environmental problems resulting from current production and consumption, several forms of market failure must be addressed, and interactions between different forms of market failure and instruments must be taken into account. One example is where the production of a product results in negative external environmental and climate impacts, and there is a lack of information, which interferes with the consumer's choice of products. In such cases, a combination of, for example, tax and information requirements that take into account the link between the two forms of market failure may be more effective than a single instrument, or two instruments that address the different forms of market failure independently of one another.

Standard economic theory suggests that taxes should be levied directly on the activities that cause harm to the climate and nature. Today's economic system is characterised by long international value chains across national borders, as well as a lack of the use of policy instruments in the world's major commodity-producing economies, where external costs generally arise. This requires a consideration of so-called second-best solutions, including taxes or regulations that do not necessarily target the source of the external costs directly, but that address the demand for the products that give rise to the environmental damage.

The Expert Group recommends that:

- The full range of economic, regulatory and informational instruments should be utilised.
- Environmental taxes that directly target negative environmental and climate impacts should be chosen first. In certain cases, a quota cap with emission quotas could be an equivalent instrument.
- When negative environmental and climate impacts occur in countries where these are not adequately regulated, second-best instruments such as environmental tariffs, modelled on the EU's Carbon Border Adjustment Mechanism, or domestic excise duties should be used.
- Subsidies should be used to supplement environmental taxes or quotas and to influence actors in a particular direction, e.g., by making environmentally friendly activities and technologies more affordable.
- Direct regulations as technological requirements and bans on certain polluting emissions should be used in cases where it is difficult to introduce policy instruments as taxes or quotas policies, or where it is essential to implement circular technologies and behavioural changes.
- Informational instruments, such as certification schemes and information campaigns should be used to promote circular technology and behavioural changes.
- Combinations of instruments should be used when several types of market failure or objectives are present at the same time.

Summary Chapter 6: The EU/EEA framework for a more circular economy

Background

Chapter 6 provides an overall description of the legislation promoted in the EU's Circular Economy Action Plan, with an emphasis on what was presented in the previous commission period under the European Green Deal, which is the EU's green growth strategy. As an EEA country, Norway is obliged to implement much of the legislation under the European Green Deal. A description of the legislation concerning the specific value chains is provided in chapters 9 through 15. This chapter covers topics such as the Ecodesign Regulation, the Right of Repair and critical raw materials.

This chapter also explains the main features of the EEA Agreement, including state aid and procurement legislation, as well as how the EEA Agreement provides a framework for the design of national policy instruments for a more circular economy.

Assessments

National work on the circular economy is closely linked to regulatory developments in the EU. Norway should accelerate the national implementation of EEA-relevant EU legislation, avoiding backlogs in the implementation of legislation. To achieve this, it is important that Norwegian public administration is well coordinated across sectors, and that there is sufficient capacity and expertise in the administration to quickly carry out the necessary implementation work. This requires prioritised efforts from all parts of the administration. Other Norwegian policy instruments should support the legislation with economic and informational instruments.

The Expert Group recommends that:

- EU/EEA legislation under the European Green Deal that is relevant to the transition to a more circular economy should be implemented continuously and as rapidly as possible in Norway.
- Norwegian authorities should be actively communicating Norwegian input and perspectives in the early phases of regulatory development to the relevant parts of the EU bodies. This applies in particular to the work on the announced EU Circular Economy Act.
- The Norwegian Government should ensure that it has the capacity, expertise and coordinated efforts across government ministries and agencies to keep up with the pace and scope of climate and environmental policies and the transition within the EU, as emphasised by the Climate Change Committee and in the EEA report.

Summary Chapter 7: Value added tax

Background
Value added tax is basically a general tax on the consumption of goods and services, which can help reduce the consumption of goods and services. Consumption is an important contributor to the high consumption footprint and high greenhouse gas emissions apparent in the consumption-based greenhouse gas accounts. Value added tax can help reduce both of these. The primary purpose of value added tax is to generate public revenue. Value added tax is most effective when it encompasses most goods and services at a general rate. This is in line with previous professional recommendations.

Several public committees have assessed value added tax. In the most recent Tax Committee's report, the majority supports the recommendations of the previous committees and proposes to cancel the current exemptions in the value added tax (zero rate) and reduced rates.

Assessments
The Expert Group emphasises that maintaining a reduced VAT rate on food, electric vehicles and electricity consumption is not in line with a circular economy. Removing the exemptions and reduced rates in the VAT would result in increased costs for households. The Tax Committee states that it is important to protect low-income households and families with children, as well as other groups affected by the reform. It proposes several direct compensatory measures, such as higher child benefits, housing benefits and student grants. The Expert Group supports this and believes that much of the revenue remaining after compensatory revenue measures should be used for environmental and climate policy measures.

Repairs and increased sales of second-hand goods are often highlighted as important measures for achieving a more circular economy. If more products are repaired rather than discarded, this will reduce the consumption of new goods. More well-functioning second-hand markets could also reduce the consumption of new goods.

Many imported goods are too cheap because the full environmental and climate costs of production abroad are not factored in. Repairs are also labour intensive. The high income level in Norway makes it easy to replace used goods with new ones, while also making repairs more expensive.

In order to shift consumption away from the purchase of new goods and towards the purchase of second-hand goods and the repair of existing goods, new goods must be made relatively more expensive. The Expert Group proposes an excise duty on textiles and an industry-financed repair scheme for electronics and white goods, partly financed by a fee for the purchase of new goods. Both of these measures would be a step towards favouring reuse and repair over buying new goods. See chapters 8, 10 and 12.

Since value added tax is a tax on consumption, different value added tax rates on the sale of new and used goods could distort relative prices. Another option is to provide direct subsidies for second-hand trade and repairs. Repairs are described in more detail in Chapter 8. The Expert Group recommends that support for certain types of repairs be provided through direct financial support, for example as a repair bonus. This is considered more effective than a value added tax exemption for repairs.

To stimulate sales of second-hand goods, it is possible to use both direct subsidies and a price subsidy in the form of an exemption from value added tax. The Expert Group notes that only reducing the price of used goods without making new goods more expensive at the same time, would increase the total consumption of goods. Therefore, measures that incentivise the market for used goods must be combined with measures to increase the price of new goods.

Both direct subsidies and value added tax exemptions have delimitation issues and the potential for significant administrative costs. Both forms of support are also likely to raise state aid issues under the EEA Agreement.

In addition to the market failure that leads to an excessive consumption of new goods, there are other characteristics and provisions in the VAT legislation that may have circular economy consequences. The Expert Group has therefore also considered recommendations in other areas within the legislation.

The Expert Group recommends that:

- The current value added tax exemptions (zero rate) and reduced rates should be discontinued. Low-income households and families with children, as well as other groups affected by the reform, should be protected by the introduction of direct compensatory measures such as higher child benefits, housing benefits and student grants.
- The market failure resulting from a lack of environmental regulations for the purchase of new goods should be addressed by providing support for the sale of used goods and support for repairs.
    - For repairs, the Expert Group recommends providing direct financial support, such as a repair scheme, and not support through exemption from value added tax.
    - To incentivise the sale of second-hand goods, the Expert Group recommends providing support in the form of direct subsidies for the sale of second-hand goods by businesses or through exemption from value added tax. Both measures will have delimitation challenges and should be studied further.
    - The selected schemes should have a limited duration, and it should be evaluated whether they work as intended.
- The margin scheme for the sale of second-hand goods should be simplified, partly by removing the requirement for the profit margin to be documented and calculated per item and instead calculating the profit margin in total per term. This would

reduce the administrative costs for businesses and make the sale of second-hand goods more attractive.

- An exemption from value added tax on the distribution of foodstuffs should be changed. The decisive factor should be whether the item has a brief remaining shelf life and whether the recipient is engaged in a charitable activity, such as schools, sports clubs, music bands, flea markets or charities. The requirement for registration in the Central Coordinating Register for Legal Entities should be maintained for control purposes, but should allow for the recipient to be part of the registered entity. More detailed delimitations of this rule should be set out in regulations.
- Consideration should be given to introducing an option to distribute other obsolete goods without triggering an output VAT, although the limitations of this option must be assessed in more detail.
- The special rule for output VAT on the distribution of goods for gift and advertising purposes with a value of up to NOK 200 (*de minimis* value) should be removed. The same applies to the special rule on deductibility for acquisitions of goods of *de minimis* value for such purposes.

Summary Chapter 8: Cross-cutting themes

Background and assessments
The transition to a circular economy will entail extensive changes to society. Chapter 8 addresses the instruments available to the authorities that provide important framework conditions across sectors. Reducing resource consumption in a circular economy requires participation in the transition from the whole of society. An increased use of standards and an appropriate organisation of consumer rights can, for example, help to promote circular activities such as repairs and product sharing. Increasing the lifespan of consumer goods could help reduce resource consumption and waste issues associated with these goods.

This chapter discusses the most important obstacles to increasing the scope of repairs and proposes a targeted scheme to increase the scope of repairs. Certain policy instruments are particularly suitable for promoting circular activities across established value chains and resource flows. One example is collaboration on the use of resources and residual raw materials through industrial symbiosis. Public procurement accounts for a significant share of the Norwegian economy and can also play an important role in prioritising sustainable and circular solutions. Education and research are driving forces for the development of essential knowledge for the transition. Research and innovation contribute to the transition to more sustainable practices that promote a better utilisation of resources in the public sector, businesses and civil society.

Standards: The Expert Group recommends that:
- A number of industry and national standards to promote the advancement of a circular economy should be developed. These may be related to regulatory compliance, scaling up new circular solutions and knowledge development. New standards are needed within specific sectors and material and product categories.

Industrial symbiosis: The Expert Group recommends that:
- Efforts to map and identify resource flows for developing industrial symbiosis and increased circularity should be strengthened, and the data from these efforts should be shared.
- Relevant legislation should be reviewed to identify those that prevent the sustainable utilisation of resources from other production.
- The network of policy instruments must emphasise predictability and facilitate long-term strategies for the business sector to enable the development of new circular value chains and industrial symbioses.

Repairs: The Expert Group recommends that:
- An industry scheme for the repair of electronics and white goods should be introduced. The scheme should be organised through an industry agreement, where the industry itself is responsible for setting a fee for the sale of new products, which will help finance the scheme. Government authorities can also help finance the scheme in its initial phase to ensure rapid implementation. If the scheme succeeds in

increasing the volume of repairs, consideration should be given to including additional types of goods in similar schemes.
- A similar repair scheme should be introduced for textiles, shoes and travel accessories. Government authorities should finance the scheme, provided that a textile tax is introduced.
- Subsidy schemes should be viewed in the context of the study related to waste prevention activities in Chapter 15, and be evaluated after a certain period of time.

Consumer rights: The Expert Group recommends that:
- EU/EEA legislation that is relevant to the transition to a circular economy in the areas of repairs and consumer rights should be implemented continuously and as rapidly as possible in Norway. This applies in particular to the Right to Repair Directive, the Directive on Empowering Consumers for the Green Transition, and the Green Claims Directive.
- Deadlines for submitting complaints in the Act relating to Consumer Purchases should be extended to 3 years for all goods and 6 years for goods that are intended to last significantly longer than 3 years. Furthermore, a provision should be introduced stating that the deadline for submitting complaints should be linked to the expected lifespan of the item under normal use, if the item or parts of it under normal use are intended to last significantly longer than 6 years.
- The seller's right to use a defect-free, used product as a replacement product in the event of defects (redelivery) should be legalised.
- Right of return schemes that are outside the scope of rights stated in the Cancellation Act should be restricted or prohibited.
- The value limit for sales outside the seller's permanent place of business should be increased to NOK 500.
- Norway should address the circularity aspects of existing consumer directives with the EU. Changes should be made to the right of cancellation under the Consumer Rights Directive and how it is exercised. Among other things, it should be possible to exempt distance sales below a certain value from the right of cancellation, and changes should be made to the right to free returns. Furthermore, the Consumer Sales Directive should introduce a general rule on repairs as a remedy for defects.

Education: The Expert Group recommends that:
- Expertise on the circular economy and sustainable management of resources in existing educational programmes should be strengthened, and sufficient expertise in traditional crafts must be ensured.

Research, innovation and transitions in businesses: The Expert Group recommends that:
- Efforts and co-ordination of the network of policy instruments' cross-cutting work on the circular economy should be strengthened and viewed in the context of the international work being done in this area. Policy instruments should be predictable and facilitate the business sector's ability to develop long-term strategies for transitioning towards more sustainable and circular practices.
- Research efforts in the social sciences and technology related to the societal transition should be strengthened. This must be coordinated with the objectives of the new national mission for the circular economy.

Summary Chapter 9: Plastics

Background
Targets set for plastics and packaging include a reduction in the consumption of certain products, a reduction in the amount of packaging waste, increased reuse, increased recycling and a greater inclusion of secondary raw materials (recycled plastic). According to the ESA Early Warning Report, Norway is unlikely to meet the 50 per cent recycling target for plastic packaging by 2025. This level was at 30 per cent in 2023. The volume of plastic packaging has consistently increased in recent years, and there is a need to reduce these quantities. Norway is also unlikely to reach its target of 40 plastic shopping bags per person by the end of 2025.

Assessments
There is a further need for the use of policy instruments to reduce the amount of plastic and plastic packaging being placed on the Norwegian market, to increase the recycling of plastic packaging and to increase access to secondary raw materials. This can be done through changes to existing policy instruments and by introducing new instruments, such as a differentiated tax on plastic packaging.

A reduced tax on plastic packaging containing recycled plastic would help increase the use of secondary raw materials, which in turn could reduce the use of primary raw materials. The ongoing efforts of the EU can be used as a starting point for identifying good methods of verifying the proportion of recycled plastics.

The Expert Group recommends that:
- EU/EEA legislation that is relevant to the transition to a circular economy in the area of plastics should be implemented continuously and as rapidly as possible in Norway. This particularly applies to the Packaging Directive, the Single-Use Plastics Directive, and the revised Cross Border Directive.
- A tax on plastic packaging should be introduced. This tax should be differentiated according to the proportion of recycled plastic.
- The tax system on beverage packaging should be continued, and beverage packaging should not be covered by a new tax on plastic packaging. Consideration should be given to introducing a reduced basic tax on beverage packaging for beverage packaging made from recycled raw materials.

Summary Chapter 10: Electronics

Background
Electrical and electronic equipment (EEE) is one of the fastest growing waste streams both within and outside the EU. EE products utilise many rare earths and metals where the environmental impact of extraction primarily occurs outside Norway. The actual production phase for EE products also primarily takes place outside Norway. There is a strong need for the recycling of critical raw materials.

Norway has ambitions to use circular initiatives for achieving adopted climate and environmental targets and commitments that also include EE products. Increased reparability and a longer lifespan of EE products will reduce both waste streams and the need for extraction of new raw materials.

The latest reports for Norway on its collection obligations under the Waste from Electrical and Electronic Equipment (WEEE) Directive indicate that Norway is not meeting its annual targets for its collection of WEEE. With regard to its obligations regarding recycling of EE waste, Norway has fulfilled its obligations for the recycling of WEEE for the product groups specified in the directive.

Assessments
EU directives that have yet to be transposed into Norwegian law will entail new requirements and frameworks for Norway's use of policy instruments to make the electronics industry more circular. It is important for Norway to closely follow developments in the EU with regard to the implementation of legislation that increases the requirement for reparability of EE products and that strengthen consumer rights for repair, cf. the EU Ecodesign Regulation and the EU Right to Repair Directive.

The reuse and recycling of critical raw materials is one of the pillars of the European Critical Raw Materials Act (CRM Act). The future incorporation of such legislation will impose new obligations on Norway to increase its recycling of such raw materials.

Longer lifespans for EE products in Norway will contribute to reduced extractions of critical raw materials for the production of new products. More repairs of EE products will reduce both the use of resources and the environmental impact from the production of goods. It will also reduce environmental harm from waste management.

The Expert Group recommends that:

- EU/EEA legislation that is relevant to the transition to a circular economy in the electronics sector should be implemented continuously and as rapidly as possible in Norway. This particularly applies to new legislation resulting from the European Commission's evaluation of the Waste Electrical and Electronic Equipment (WEEE) Directive and new legislation resulting from the EU's forthcoming Circular Economy Act, the Ecodesign Regulation and the EU Right to Repair Directive, as well as the Critical Raw Materials Act (CRM Act).
- An industry scheme for the repair of electronics and white goods should be introduced. This scheme should be organised through an industry agreement, where the industry itself is responsible for setting a fee for the sale of new products, which will help finance the scheme. Government authorities can also help finance the scheme in its initial phase to ensure rapid implementation. The scheme is described in more detail in Chapter 8.

Summary Chapter 11: Batteries and vehicles

Background

The value chains of lithium batteries and vehicles, and associated components, have negative externalities in other countries where the extraction and processing of raw materials and composition is carried out. The magnitude of these effects is related to the amount of materials extracted from nature and used in the subsequent production of lithium batteries and vehicles.

Assessments

Norwegian authorities have limited opportunities to regulate these negative externalities since the activity mainly takes place outside Norway's borders. Nevertheless, the use of policy instruments in Norway can, to a greater extent than today, take into account the negative external impacts on other countries resulting from consumption in Norway. The current tax system can be changed to make Norwegian buyers of EV batteries and vehicles more aware of the external costs associated with these value chains. Another example is the introduction of new regulations that promote the increased reuse of used car parts, which would help reduce the demand for newly produced alternatives with associated negative externalities from the sourcing of raw materials and production abroad.

The EU Battery Regulation, which is expected to be introduced in Norway in 2025, will set high standards for the proportion of recycled content in new batteries. Implementing the Battery Regulation in Norway will in the long term help reduce the negative externalities that may be associated with both the production and waste management of electric vehicle batteries used in Norway.

The Expert Group recommends the following:

- EU/EEA legislation that is relevant to promoting a circular economy with regard to batteries and vehicles should be implemented continuously and as rapidly as possible in Norway. This particularly applies to the Battery Regulation and the Vehicles Regulation.
- The value added tax exemption for electric cars should be phased out in line with the Tax Committee's recommendations. See the Expert Group's detailed assessments of the VAT exemption for electric cars in Chapter 7.
- The weight component for the one-off registration tax should be increased to incentivise the purchase of fewer and lighter vehicles. The CO_2 and NO_x components will ensure that the one-off tax still provides an incentive to choose zero- or low-emission vehicles. The Expert Group emphasises that the composition and levels of the total taxes must still support a transition to zero-emission vehicles.
- A scheme should be introduced whereby auto repair shops are obliged to offer used car parts when repairing vehicles that have exceeded their warranty period.

Summary Chapter 12: Textiles

Background

There are no specific national targets related to textiles. However, Norway has national waste targets stating that the development in the amount of waste should be significantly lower than that of economic growth, and that recycling of waste should increase. Textiles are also one of the seven prioritised value chains in the EU. This means that there will be measures for more sustainable and circular textiles in the EU, and thus also in Norway through the EEA Agreement. Of particular importance is the revision of the Waste Framework Directive, with requirements for extended producer responsibility for textiles, and the upcoming ecodesign requirements for textiles under the Ecodesign Regulation.

The international textile industry has a significant negative environmental footprint. Much of the climate and environmental impact associated with textiles occurs during the production phase, which often takes place in economies with limited regulations regarding negative climate and environmental impacts. Norway imports 99.5 per cent of all textiles consumed in Norway, and production largely takes place in countries where climate and environmental impacts are unregulated.

Assessments

The EU strategy for textiles contains several measures that will apply in Norway (product requirements, requirements for extended producer responsibility for textiles, etc.). However, the EU strategy does not address the challenges of rapidly increasing global production. This means that there will be a need for other types of policy instruments in Norway in addition to those set out in the EU/EEA legislation in this area.

Extended producer responsibility for textiles will be introduced as a result of the revised EU Waste Framework Directive. This will place the cost of managing textile waste on textile producers and importers. However, this will not regulate climate, pollution and nature challenges in other countries, and it will only regulate some of the waste challenges in Norway and the EU. There is therefore a need for additional instruments to achieve a more sustainable value chain for textiles. An environmental tariff, such as the EU's Carbon Border Adjustment Mechanism (CBAM), could in principle address environmental and climate challenges in unregulated countries, although such a tariff would be very difficult to impose. Nor would it address waste challenges in Norway and the EU.

An excise duty on textiles would reduce the demand for textiles in Norway and affect the production of new textiles. Thus, an excise duty would limit the negative climate and environmental impacts of the extraction of raw materials and production of textiles in other countries, while also reducing the climate and environmental impact from the use and waste phase.

The tax should encompass clothing, shoes and household textiles and be calculated on the basis of both weight and quantity. Furthermore, the tax rate should be differentiated according to the climate and environmental impact of the textiles in order to shift the consumption of textiles in a more environmentally friendly direction. However, this assumes that there is available data that can provide a basis for such differentiation. Over time, consideration may be given to EU requirements established in a legal act underpinning the Ecodesign Regulation. It should also be possible to impose an excise duty on textiles through the VOEC scheme.

A textile tax in Norway would factor in the climate and environmental impact of Norwegian consumption and reduce this. Reduced consumption would also help reduce the amount of textile waste and used textiles sent out of the country.

The Expert Group recommends that:

- EU/EEA legislation that is relevant to promoting the circular economy in the textile sector should be implemented continuously and as rapidly as possible in Norway. This applies in particular to the revised Waste Framework Directive and the Ecodesign Regulation.
- An excise duty on textiles should be introduced. The tax should encompass clothing, shoes and household textiles and be calculated on the basis of both weight and quantity.
- A customs duty should be levied in the VOEC scheme. A simplified system for collecting customs duty should be introduced to facilitate the efficient flow of goods with low administrative costs.
- Norway should support proposals to introduce stricter international rules under the Basel Convention for cross-border shipments of textile waste, as proposed by several European environment ministers. These rules should also apply to shipments of used textiles for reuse.
- Rapid progress is being made in the incorporation of the revised Waste Framework Directive, which requires producers to cover the costs of information to consumers as part of their producer responsibility for textiles. There are a number of requirements for what this information should contain. Among other things, there is a requirement to provide information about sustainable consumption, waste prevention, and reuse and repair options for textiles.
- Norway should monitor further work in EU countries on a producer responsibility scheme for mattresses and should consider the introduction of a similar scheme in Norway.

Summary Chapter 13: Building, construction, and property

Background

Norway has ambitions to use circular measures to achieve adopted climate and environmental targets and commitments that also include the building, construction, and property sector. Through the EEA Agreement, Norway has made a commitment to ensure that 70 per cent of non-hazardous building and construction waste is sent for reuse and recycling. In Norway, 53.7 per cent of construction waste was recycled in 2023. Norway is therefore far from fulfilling this requirement. There are requirements in the regulations that apply to other circular considerations, such as the reuse of building materials and the lifespan of buildings, but there are no official targets or indicators to assess the current status.

The building, construction, and property sector contributes to greenhouse gas emissions, pollution and land degradation. This industry is resource-intensive, occupies large areas, has a high consumption of building materials and produces large amounts of waste, which combined contribute to a significant footprint. Circular solutions such as a reduced or more efficient land use, the reuse and recycling of building materials and designs for dismantling, in addition to less demolition can help reduce the overall carbon and environmental footprint. An increased reuse of land, materials and existing buildings, facilities and property would make a significant contribution to reducing the building, construction, and property sector's footprint.

Assessments

Norway has strong potential for improvement in the use of circular solutions in the building, construction, and property sector. One key challenge today is that the financial incentives for circular solutions are too weak. The market for used and recycled building materials is still very immature and it is usually less expensive to use new land, goods and materials than existing ones. Governments must work with the industry on a clear strategy to address challenges such as profitability and logistics to create a market for building and construction products, and to actively use public procurement to shift the demand towards circular solutions and to promote innovation.

The current legislation has several shortcomings and do not adequately commit the industry to utilising circular solutions and reducing its footprint. Upcoming EU legislation, such as the revised Construction Products Regulation, will help, but TEK17 can still be improved and compliance with it can be strengthened with regard to circularity. The Planning and Building Act should be reviewed, and the Regulations relating to Impact Assessments should be amended to facilitate land use that has greater consideration for climate and nature.

The tax system does not adequately address circular solutions, and changes in this area can help reduce the industry's footprint and stimulate increased reuse and recycling. A landfill tax, in conjunction with a tax on certain types of primary raw materials, could make recycling of construction products and surplus materials more profitable. A nature tax could help reduce the industry's impact on nature and primary raw materials, and changes to the stamp duty could suppress incentives to demolish and build new structures rather than renovate.

The Expert Group recommends that:

1. EU/EEA legislation that is relevant to the transition to a circular economy in the building, construction, and property sector should be implemented continuously and as rapidly as possible in Norway. This particularly applies to the revised Construction Products Regulation and the Ecodesign Regulation.
2. Government authorities should develop a strategy in co-operation with the industry, in accordance with relevant EU legislation, aimed at increasing the reuse of used and recycled construction products. The strategy should particularly focus on measures to solve challenges related to profitability, logistics and reprocessing in order to create robust circular market solutions. One specific measure is for the municipalities, in co-operation with the industry, to take responsibility for establishing and operating warehouses for reused goods.
3. Public procurement should set requirements for circular solutions in all building and construction projects and a gradual escalation plan should be drawn up for the requirements. The group also recommends that public procurement criteria should emphasise circularity to a greater extent, so that construction projects that use circular solutions are rewarded to a significantly larger extent than today.
4. Changes should be made to the requirements in the Norwegian Regulations on technical requirements for construction works (TEK17) and how they are practised:
   a. The requirements in TEK17 that involve circular considerations, such as reuse mapping and design for dismantling, should be followed more strictly than they are today. Government authorities should draw up specific guidelines on how to meet the requirements and how municipalities should follow these up.
   b. A requirement should be introduced in TEK17 for a maximum carbon footprint per square metre for new buildings, inspired by the requirement in Denmark.
   c. Clearer guidance should be provided on the application of the option in section 31-4 of the Planning and Building Act to grant exemptions from the requirements of TEK17 when existing buildings are converted to other purposes, such as from commercial premises to housing. Guidelines should include specific examples of when exemptions can and cannot be granted.
   d. Reuse surveys and waste plans must be digitised and made available.
   e. The requirement for the dismantling design should be strengthened by narrowing the proviso for execution within a practical and financially justifiable framework. There should also be clearer guidelines or standards for how the dismantling design can be implemented in construction projects.
5. An excise duty on primary raw materials such as sand, gravel and crushed stone etc. should be introduced. The intent of the tax is to incentivise increased recycling and the use of recycled materials in building and construction projects. This should be combined with a tax on the landfill of waste, as proposed in Chapter 15.
6. The Planning and Building Act should be reviewed with the aim of strengthening climate and environmental considerations in land use planning. The national expectations and the state planning guidelines should be strengthened to ensure climate and environmental considerations to a greater extent. Stronger guidelines should be developed for regional planning to better address climate and environmental considerations in land management. A clarification should be made for how local self-

government is to be weighted against national and significant regional climate and environmental considerations in objection cases.

7. The Norwegian Environment Agency's proposed amendments to the current Regulations on Impact Assessments (the Impact Assessment Regulations) should be followed up. Among other things, this includes the following:
   a. Introducing an expanded requirement for a planning or assessment programme so that this applies to all plans and measures/projects encompassed by the regulations, as well as the opportunity to require an independent control of impact assessments.
   b. Establishing new provisions requiring an assessment of the consequences of current land use in the municipal land use plan, requirements for land use accounts, and requirements for the documentation of relevant expertise, as well as expanded requirements for the involvement of relevant regional authorities.
8. Proposals in the report "Cross-sectoral project on the disposal of uncontaminated soil and rock" should be followed up.
9. An obligation to register slightly contaminated masses should be introduced to avoid such masses ending up in unregulated dumps or being used for filling purposes.
10. A nature tax should be introduced, as previously proposed by the Green Tax Commission and the Tax Committee.
11. New buildings and renovated buildings should be treated equally with respect to the stamp duty, by discontinuing the special scheme for new buildings.

Summary Chapter 14: Bioresources

Background

The bioeconomy is based on the production and processing of renewable biological resources into food, feed, chemicals, building materials and bioenergy. After use, such products can be returned to nature, thereby contributing to the regeneration of nature or to the production of new renewable materials.

The utilisation of bioresources in the Norwegian economy also has negative externalities and should become more circular. The sector has several greenhouse gas emissions that are poorly regulated, which have a negative impact on many different types of nature. The sector also has residual resources that could have been recycled and utilised further in the cycle but that are currently being treated as waste and released into the environment. These emissions lead to pollution in certain situations.

Food waste is a waste of resources and contributes to greenhouse gas emissions. Food waste occurs at all stages of the value chain, including the consumer stage. Norway has a target of halving food waste by 2030, compared to 2015. The interim target of a 15 per cent reduction in 2020 was not achieved. The Food Waste Committee has investigated measures and policy instruments to ensure that the target of halving food waste in Norway is achieved by 2030.

Assessments

The large volume of phosphorus and nitrogen from livestock manure and fish sludge currently being released into the environment in Norway has potential value in other value chains. Inadequate regulation and the pricing of several of the socio-economic costs in the bio-industries' value chains are some of the reasons why raw materials are not being utilised to a greater extent. Policy instruments that make market actors more aware of these costs will provide incentives to improve the utilisation of residual raw materials and stimulate markets and technology development in the production of products based on recycled raw materials.

Strict requirements for the treatment of residual raw materials (related to removing the risk of infection), as well as an insufficient overview of where, when and with what quality different types of residual raw materials occur are also key barriers to increased utilisation. A review of current legislation and a coordinated effort to improve the sharing of information about residual raw materials are among the measures that should be considered.

Norwegian wild fish stocks are being threatened by the spread of salmon lice and the introduction of farmed fish. The current regulation of aquaculture has a significantly negative impact on wild fish stocks, and the Expert Group refers to the assessments of the Aquaculture Committee in this area. The large volume of phosphorus and nitrogen

currently being discharged into the sea from aquaculture represents both an untapped resource and a potential negative external effect in that these discharges can also affect the seabed if the discharges are sufficiently large and concentrated. A tax on phosphorus and nitrogen emissions, combined with a reimbursement for collected sludge, will encourage owners of aquaculture facilities to increase their collection of nutrient-rich residual raw materials (sludge).

Agriculture accounts for nearly ten per cent of Norwegian greenhouse gas emissions, and these emissions are largely unregulated today. In addition, the use of mineral fertilisers leads to emissions of nitrogen and phosphorus that contribute to over-fertilisation and overgrowth, and these emissions are not adequately regulated. A restructuring of the current production subsidies in a more climate-friendly direction, the pricing of methane emissions from livestock production and fertiliser, and the pricing of the nitrogen content and phosphorus in mineral fertiliser, will all contribute to holding agriculture more accountable for the external costs the industry imposes on society.

Policy instruments for reducing barriers to circularity: The Expert Group recommends that:

- A national resource overview of residual products and side streams from the bio-industries should be established. The overview must contain information about the chemical and physical composition of residual raw material fractions, as well as environmentally and health hazardous compounds. Reference is made to the recommendation on industrial symbiosis in Chapter 8.
- It should be assessed whether the current regulations for the labelling and marketing of feed products and regulations on animal by-products create unnecessary barriers to the use of biological waste from the marine and agricultural sectors.

Policy instruments to reduce the impact on nature: The Expert Group recommends that:

- Assessments and recommendations by the Aquaculture Committee related to reducing the aquaculture industry's contribution to the spread of salmon lice should be followed up.
- A blending mandate for recycled phosphorus in fertilisers for fertiliser retailers should be introduced to promote the use of recycled phosphorus rather than primary phosphorus extracted from phosphate rock.

Policy instruments to reduce pollution: The Expert Group recommends that:

- A tax on phosphorus and nitrogen emissions in aquaculture should be introduced, where the tax base is reduced by the documented collected amount of phosphorus and nitrogen. Fish sludge is a poorly utilised resource and discharges of phosphorus and nitrogen from aquaculture are a source of pollution. The tax should be combined with measures aimed at developing technology for the collection and utilisation of fish sludge.
- A tax on the phosphorus and nitrogen content of mineral fertilisers should be introduced in line with the recommendations of the Green Tax Commission. The purpose is to price the external costs associated with over-fertilisation and overgrowth that can be attributed to the use of mineral fertilisers.

Policy instruments to reduce the impact of climate change: The Expert Group recommends that:

- Production subsidies in agricultural policies should be reorganised in a more climate-friendly direction, in line with the recommendations of the Tax Committee and the Green Tax Commission.
- Based on the recommendations of the Green Tax Commission and the Tax Committee, the proposed tax on the phosphorous and nitrogen content of mineral fertilisers should include an additional element to account for the greenhouse gas effect as a result of adding nitrogen to the soil through the use of mineral fertilisers, which leads to increased emissions of nitrous oxide into the atmosphere.
- A tax on methane gases from livestock production in Norwegian agriculture should be assessed, based on the model in Denmark.

Policy instruments to reduce food waste: The Expert Group recommends that:

- The Food Waste Committee's recommendations for more binding requirements to reduce food waste in Norway should be followed up. On the subject of food waste in households, which accounts for a large proportion of total food waste, the Expert Group recommends implementing more informational measures aimed at consumers in order to reduce this.

Summary Chapter 15: Waste

Background

The objectives of the waste policy include an overall reduction in the volume of waste, increased preparation for reuse and increased recycling. Norway has a large volume of waste per capita compared to other countries. The target of bringing waste growth to a significantly lower level than economic growth has not been achieved, although in recent years, the trend has been heading in the right direction. Norway also has a national target to increase recycling. In recent years, however, the overall recycling rate for certain types of waste has declined, and Norway is unlikely to achieve its targets of 55 per cent, 60 per cent and 65 per cent recycling of household waste and household-like commercial waste for 2025, 2030 and 2035 respectively. In 2022, Norway had a recycling rate of 37.7 per cent for this type of waste. There's also a sizeable gap between the current level of recycling of plastic packaging (28 per cent in 2021) and the targets of 50 per cent in 2025 and 55 per cent in 2030. The EU Waste Framework Directive and Waste Shipments Regulation are two key pieces of waste legislation.

Changes in the use of policy instruments both to reduce the climate and environmental impact of waste in Norway and to ensure increased access to secondary raw materials and a functioning market for these should be considered. This is also key to fulfilling Norway's obligations in the area of waste through the EEA Agreement.

Assessments

Waste volumes must be reduced, and reuse and recycling must increase. It must become more expensive to deliver waste for final treatment. This will reduce the amount of waste. Furthermore, it is important that government authorities continually assess whether changes can be made to the use of policy instruments to ensure that more waste is sorted and prepared for reuse and recycling. There is also a need for stronger measures and policy instruments that contribute to waste prevention, and for manufacturers to contribute to this to a greater extent than they do today.

The Expert Group recommends that:

- EU/EEA legislation that is relevant to promoting the circular economy in the area of waste should be implemented continuously and as rapidly as possible in Norway. This applies in particular to the revised Waste Framework Directive and the new Waste Shipments Regulation.
- Producers must make a greater contribution to waste prevention, and government authorities should therefore study how this can be ensured. Among other things, such studies should assess:
  - which waste prevention activities producers should contribute to,
  - which types of products such activities are most relevant for, and
  - how the scheme should be managed and financed, including whether it can be incorporated into the existing extended producer responsibility schemes.
- A landfill tax on waste should be introduced. The tax should be aimed at incentivising less waste for landfills and more recycling. It should be combined with an excise

duty on primary raw materials such as sand, gravel and crushed stone, etc. as proposed in Chapter 13.

- The authorities should draw up guidelines or regulations on when and how different waste fractions can be utilised. This would increase the amount of waste that is prepared for reuse or recycling and give industry actors greater predictability.
- Reinforced instruments to contribute to increase waste sorting should be introduced. This could involve increasing the use of differentiated waste fees in municipalities that contribute to waste reduction and increased recycling and reuse, as well as strengthened informative instruments such as increased information about source sorting aimed at both residents and businesses. This can be done, for example, by emphasising the obligation to provide information in the extended producer responsibility schemes.

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