

Ministry of the Environment Resolution 8 April 2021

MINISTRY OF EMPLOYMENT AND THE ECONOMY

GOVERNMENT RESOLUTION ON THE STRATEGIC PROGRAMME FOR CIRCULAR ECONOMY

1. Introduction

Prime Minister Sanna Marin's Government Programme has set out an objective for strengthening Finland's role as a pioneer in the circular economy. One of the key elements of the European Green Deal is also to encourage industry to transition to a clean circular economy. In March 2020, the Commission adopted the Circular Economy Action Plan, which is one of the means to achieve the objectives of the European Green Deal for a climate neutral, resource-efficient, fair and sustainable Europe.

According to the Government Programme, Finland's role as a pioneer of the circular economy will be strengthened and a cross-administrative, Strategic programme to promote a circular economy and its indicators will be implemented. The programme sets objectives, defines the necessary measures and allocates the necessary resources.

The transition to a circular economy is an important opportunity for Finland. The circular economy offers a way to strengthen Finland's export-driven economy and employment. At the same time, it will reduce the consumption of natural resources and the resulting CO₂ emissions and other environmental impacts. The circular economy is not just about the economy and technological solutions. The transition to a carbon-neutral circular economy will require a comprehensive change both in decision-making and planning by society and in the attitudes and behaviour of companies, households and consumers.

The Strategic programme for the promotion of the circular economy has been prepared in cooperation between key ministries (Ministry of the Environment, Ministry of Economic Affairs and Employment, Ministry of Agriculture and Forestry, Ministry of Finance, Ministry of Transport and Communications, Ministry of Education and Culture and the Ministry of Foreign Affairs) and research institutes (Natural Resources Institute Finland, Finnish Environment Institute, VATT Institute for Economic Research, VTT Technical Research Centre of Finland) as well as Sitra and

Business Finland (BF). The steering group has been led by Professor of Working Life Reijo Karhinen, and the Ministry of the Environment and the Ministry of Economic Affairs and Employment have been responsible for the practical preparation.

This resolution outlines the key measures that the ministries have committed to implementing in their areas of responsibility in 2021-2024 to the extent that this is possible within the framework of their resources. Measures requiring funding are discussed and decided on separately in the budget and General Government Fiscal Plan processes.

The Circular Economy Programme does not address the bioeconomy, as the update of the Bioeconomy Strategy will be completed in 2021. The Strategic programme to promote a circular economy and the Bioeconomy Strategy supplement one another.

2. Central premises

The use of natural resources (fossil fuels, biomass, metals, minerals) is expected to increase globally from around 90 billion tonnes to 190 billion tonnes by 2060. This would mean a massive increase in carbon dioxide emissions related to material management and, on the other hand, a reduction in raw materials needed for high technology. The production and processing of materials, fuels and food account for about half of global carbon dioxide emissions and more than 90% of biodiversity loss.

Despite its leadership in thought, Finland - like most other countries in the world - is, in practice still far from circular economy objectives. In an assessment of Finland's sustainable development policy, climate change, the state of the environment and overconsumption as well as the increasing inequality of society were identified as the greatest challenges in Finland. Finland is a European leader in competitiveness and in the number of eco-innovations that save the environment in new ways, which our demanding environmental legislation acts as an incentive for. We have also traditionally been strong in research, development and innovation funding. In the 2010s, Finland lost its position as a pioneer in innovation activities. Investments are being made in the circular economy, and for example, Business Finland will finance the Bio and Circular Finland programme with 150 million euros in 2018-2022. In addition, the Finnish Innovation Fund Sitra, in cooperation with various actors, has published the world's first Roadmap for the Circular Economy and engaged in internationally award-winning circular economy work.

In recent decades, Finland's different sectors have improved their resource efficiency, but our domestic material consumption per capita is still the largest in Europe. Based on Eurostat's

indicators for the use of natural resources and the recycling rate of materials, Finland is lagging behind many other EU countries in the circular economy - ranking between 12th and 28th depending on the indicators. The circular material use rate (CMU), which describes the share of recycled material of all material use, was around 7 per cent in Finland in 2018. The EU average was around 11%.

Bottlenecks in the progress of the circular economy include attitudes, a shortage of experts, investments in established operating models and a high threshold for the introduction of new business models, as well as the poor steering effect of prices, as harmful external impacts are not sufficiently priced.

The circular economy, which is based on material cycles, is estimated to account for about 5 per cent of Finland's current GDP. Sitra estimates that increasing the efficiency of resource use and cycles will provide Finland's national economy an annual growth potential of 2-3 billion euros by 2030 in just a few sectors (construction, food industry, sharing economy, paper industry, engineering industry, nutrient cycle). The impacts may be considerably greater if the circular economy is turned into the strategic focus that defines the entire Finnish industrial policy.

3. Goals

The most imminent global issues of our time are climate change, loss of biodiversity and overconsumption of natural resources, for which there is no such clear solution. Resolving these will require various steering methods and systemic change in society.

The circular economy offers the opportunity to tackle several of these challenges simultaneously. It is a means for reducing the use of natural resources and, at the same time, producing economic well-being within the limits of the planet's carrying capacity. This will also facilitate economic growth to be disconnected from an increase in the use of natural resources.

Attaining the objectives set out in the Strategic programme to promote a circular economy will require measures and changes in all sectors, companies and municipalities as well as in central government. The programme contains 41 measures and the key parties who will implement these and be partners. The aim is for the measures to be launched as soon as possible and for them to be implemented beyond the government term.

The vision of the programme is that in 2035, a carbon-neutral circular economy society will be the foundation of our successful economy in Finland, in which:

- Sustainable products and services will be part of the mainstream economy and the sharing economy will be a normal part of daily life.
- Our choices will be future-proof and strengthen a fair welfare society.
- More for less: The use of natural resources will be sustainable and materials will remain in circulation for longer and safely.
- The circular economy breakthrough has been made with the help of innovations, digital solutions, smart regulation and responsible investors, companies and consumers.
- Circular Economy Finland will influence the world and provide sustainable solutions in international markets.

The implementation of the vision will require the sustainable and efficient use of natural resources. This is outlined by the following steps and objectives:

- The consumption of non-renewable natural resources will decrease, and the sustainable use of renewable natural resources may increase to the extent that the total consumption of primary raw materials in Finland in 2035 will not exceed what it was in 2015. The natural resources used to manufacture exported products are not covered by the objective.
- The profitability of resources will double by 2035 from what it was in 2015.
- The circular economy rate of materials will double by 2035.

4. Definition of circular economy

In a circular economy, materials are utilised efficiently and sustainably, and they remain in circulation for a long time and safely. Products are also shared, leased, repaired and recycled. Servicification is part of the circular economy.

The circular economy is a new operating method for the economy that produces economic well-being within the limits of the planet's carrying capacity. It utilises digitalisation efficiently and will renew the structures and operating models of society. The circular economy is a means for reducing the use of natural resources.

5. Measures taken by ministries to promote the circular economy

The Circular Economy Programme emphasises the need to highlight the circular economy as the strategic focus of our industrial policy, which aims for sustainable economic growth. At the same time, it invites all actors in society - citizens, businesses, organisations and decision-makers - to reflect on, develop, experiment and also to demand and implement concrete ways and actions that promote a carbon-neutral circular economy society.

In order to achieve a fair transition, the preparation of measures must focus attention on fairness and on increasing opportunities to influence. In addition, both positive and negative impacts on different sectors must be anticipated and the social sustainability of the economy must be promoted.

5.1 Incentives for the circular economy

In the current economic system, the use of natural resources can cause emissions or harm nature's ecosystems without costs being allocated to the source of the damage. Companies and consumers often lack economic incentives to make choices that are favourable to the circular economy.

Achieving the desired impacts also requires significant investment in RDI funding. At its best, public RDI funding steers the focus of innovation activities as well as encourages the private sector to fund trials and investments that will promote the circular economy.

Public procurement can support low-carbon and circular economy solutions. The public sector can make a significant contribution to achieving sustainability targets by using its purchasing power to acquire goods, services and contracts with a lower environmental impact. The public sector can also create new markets for energy and resource efficient solutions.

We will develop economic incentives that support the sparing use of natural resources, reduce carbon dioxide emissions and promote the widespread use of circular economy service models.

As part of the preparation of the Sustainable Taxation Roadmap, we assessed the possibilities of increasing and extending the waste tax, land tax, mining tax, lowering the electricity tax category for the recycling industry and possible other tax models to promote

the circular economy. As part of this work, the impact of the tax structure on the low-carbon circular economy will be assessed from the "do no consolidated harm" perspective.

We promote real-time and user volume-based economic transport guidance that encourages the use of shared transport services. We will explore the prerequisites for accelerating other circular economy service models, such as repair services, leasing of chemicals and similar comprehensive industrial service models with financial incentives, using voluntary agreements and information steering.

We will further explore the prerequisites for reducing CO2 emissions at construction sites through the pricing of emissions.

Ministries in charge: Ministry of Finance, Ministry of the Environment, Ministry of Transport and Communications and Ministry of Economic Affairs and Employment

We will strengthen funding for RDI and ecosystem activities that promote a low-carbon circular economy and for demonstration and facility investments.

We will target funding in particular to low-carbon and resource saving production and material technologies in industry, such as carbon capture and use. We will also fund radical data economy solutions and investments where many actors utilise and share data across traditional sector boundaries. We will support the reuse and recycling of industrial side streams and in value chains of key materials.

We will strengthen the competence base of circular economy research, funding for the engines and accelerate carbon neutral and circular economy ecosystems in municipalities and regions, for example by directing national and EU funding to research, development and innovation activities.

Ministries in charge: Ministry of Economic Affairs and Employment, Ministry of the Environment, Ministry of Education and Culture

Other actors: BF, ELY Centre, Academy of Finland, the Finnish Climate Fund

We will increase low-carbon circular economy solutions in such areas as public sector construction, energy and infrastructure projects and service procurement.

We will promote low-carbon circular economy solutions, including operating models developed at the network-based competence centre for sustainable and innovative public

procurement (KEINO) with the help of the KEINO-Academy, regional change agents, circular economy development groups, Green Deal agreements and market dialogue.

Starting from 2022, we will include low-carbon building procurement criteria that support the circular economy in all public developer building projects. The inclusion of low-carbon building procurement criteria supporting circular economy in infrastructure construction projects will begin in 2023.

We will explore the possibilities of introducing risk-sharing instruments in sustainable and innovative procurement.

Ministries in charge: Ministry of Employment and the Economy, Ministry of the Environment, Ministry of Transport and Communications

Other actors: Finnish Transport Infrastructure Agency, ELY Centre, Competence Centre KEINO, Association of Finnish Local and Regional Authorities

We will improve the effectiveness of funding.

We will promote circular economy objectives with public funding and will assess the use of the EU's sustainable finance taxonomy to finance projects that support the circular economy.

We will promote impact investment and explore opportunities for piloting this in energy-efficient renovation construction. In addition to reducing greenhouse gas emissions, we will set a goal for extending the useful life of buildings and utilising demolition materials.

Ministries in charge: Ministry of Economic Affairs and Employment, Ministry of Finance, Ministry of the Environment

Other actors: BF, ELY Centre, Regional Councils, Competence Centre KEINO

5.2 Circular economy markets

Estimates on the value of the global market supporting the circular economy are in the hundreds of billions of euros. Together with technological development, the circular economy is seen as an opportunity for Europe alone to improve resource productivity by up to 3% per year and to increase gross domestic product by about 0.5% by 2030.

The strengthening of the circular economy market will also likely have a significant positive impact on Finland's economy in the long term. The strengthening of the circular economy market can be promoted, for example, by means of a suitable combination of steering instruments, such as product design that supports the circular economy, financial incentives and the development of cooperation between authorities related to circular economy projects. From the perspective of the consumer market, the circular economy market can be strengthened by improving the appeal of circular economy services and increasing citizens' awareness of them.

We will actively influence the development of legislation and product policy instruments that support the circular economy in the EU.

Our aim is to extend the lifetime and durability of products, promote the use of recycled materials and support the digitalisation of material flows and product information. We will actively influence the expansion of guidance to the most environmentally relevant product groups.

We will promote the creation of value and markets for recycled materials, for example by increasing the use of recycled materials in products. In addition, the aim is to regulate the sustainability of products, the share of recycled materials and carbon and environmental footprint as part of product policy.

Ministries in charge: Ministry of the Environment, Ministry of Economic Affairs and Employment, the Prime Minister's Office

We will develop cooperation between the authorities in circular economy projects.

We will pilot an operating model in which the local authorities responsible for various permits and other statutory procedures (building permit, planning, environmental permit, EIA, chemical safety permit, etc.) form a network that supports circular economy projects. The network will work

together with the area's circular economy actors in coordinating timetables, sharing information and expertise and supporting the preparation of regional circular economy projects.

Ministries in charge: Ministry of the Environment, Ministry of Economic Affairs and Employment, Ministry of Finance, Ministry of Agriculture and Forestry

Other actors: Regional State Administrative Agencies, ELY Centre, Finnish Safety and Chemicals Agency, Regional Councils, municipalities in the pilot area, Association of Finnish Local and Regional Authorities

We will promote a stronger market for recycled materials.

We will explore ways to promote the strengthening of the value and market of recycled materials, for example by assessing how recycling targets and digital marketplaces increase sustainable recycling materials in the market. Other opportunities to increase interest in reuse include taxes, mixed obligations, deposits related to different materials, mutual agreements and cooperation with EU countries to create international cooperation networks and alliances.

We can increase the growth of the market for recycled materials by developing practices on how materials classified as waste cease to be waste (EoW, End of Waste). We will set up a working group to monitor case-by-case EoW decision-making, to develop procedures and to propose the necessary legislative changes.

Ministries in charge: **Ministry of the Environment**, Ministry of Economic Affairs and Employment, Ministry of Agriculture and Forestry

Other actors: ELY Centre

We will help citizens find circular economy services and improve their appeal.

We will engage in extensive network cooperation (organisations, companies, central government, municipalities) to develop new inspiring ways to gather information on circular economy services, such as sharing platforms, repair and resale services, and citizens' own circular economy stories. Our aim is to reach numerous citizens and create a continuous operating model.

Ministries in charge: **Ministry of the Environment**, Ministry of Economic Affairs and Employment

5.3 Circular economy in key sectors

The circular economy will only become tangible once different actors in society develop and change their operating methods to support the objectives of a carbon-neutral circular economy

and create innovations. For example, achieving objectives related to the sustainable use of natural resources will require commitment from different sectors and the adaptation of activities to support the objectives. The circular economy potential of the real estate and construction sector is significant, as it is one of the largest consumers of Finnish natural resources.

Municipalities and regions are key players in the circular economy. Municipalities and regions play an important role in the planning and promotion of services and solutions that support the circular economy together with actors and companies in the region. These play an important role in enabling actor networks and ecosystems that support the circular economy and, for example, in enabling the circular economy of the real estate and construction sector.

We will sign an agreement on a low-carbon circular economy.

As part of the agreement, companies and other actors, such as municipalities, may join and voluntarily commit to implementing the Circular Economy Programme's natural resource targets, increasing the use of recycled materials and promoting a carbon-neutral circular economy society. Process participants will flesh out the programme's circular economy and natural resource targets for different sectors and regions.

To support our commitments, we will work together with research institutes to produce scenarios on the impacts of Finland's material footprint on the environment and the economy.

Based on the scenarios, key sectors will prepare carbon neutral circular economy plans.

Ministries in charge: Ministry of the Environment, Ministry of Economic Affairs and Employment, Ministry of Agriculture and Forestry

Other actors: ELY Centre, Association of Finnish Local and Regional Authorities, business organisations

We will establish a 'national competence network' to support the work of municipalities and regional ecosystems in promoting a carbon-neutral circular economy society.

The network will help in finding the right actors, channels, EU and national funding sources, in promoting the dissemination of best practices in the circular economy, seeking solutions to administrative, technical and legislative bottlenecks, and in connecting research institutes to the development of solutions.

The network will bring together different actors and produce added value for material flows,

for example by facilitating industrial symbioses, material reviews and by producing information for digital platforms.

Ministries in charge: Ministry of the Environment, Ministry of Economic Affairs and Employment

Other actors: ELY Centre, Regional Councils, Association of Finnish Local and Regional Authorities

We will increase circular economy awareness and expertise in the real estate and construction sector.

In cooperation with the Real Estate & Construction Forum (KIRA forum), we will establish a network of circular economy change experts, whose aim will be to accelerate the implementation of new technologies and operating models and to reduce the environmental load of the real estate and construction sector. The network will focus on such things as new operating models, the introduction of digital solutions and the development of expertise, RDI activities and cooperation.

Actors: Ministry of the Environment, Ministry of Economic Affairs and Employment

Other actors: KIRA forum, Green Building Council Finland

We will develop the principles of land use planning and the steering of construction and use of facilities to support the circular economy.

We will develop the principles, management and competence of land use planning to support a culture of flexible land use planning and changes in the uses of properties.

In the reform of the state-owned premises strategy, we will take into account the flexible use of facilities across traditional organisational boundaries, such as the state and municipalities.

We will also develop regulation, as well as acceptance and eligibility criteria to support the use of recycled materials in construction.

Ministries in charge: Ministry of the Environment, Ministry of Finance,

Other actors: Senate Properties, Regional Councils, Association of Finnish Local and Regional Authorities

5.4 Circular economy innovations, digitalisation and competence

New circular economy business and best practices are built on cross-sector cooperation and combinations of new of technology and actor networks. Bringing these together and activities will be largely based on open data and its reliable sharing. Digitalisation will thus create the preconditions - or even a necessity - for the implementation of the circular economy. The digitalisation of the circular economy will require a compatible data architecture to link different sources of information and actors. It is important to orchestrate the interoperability of digital circular economy solutions nationally and to ensure that a secure data sharing infrastructure develops alongside the circular economy market.

In promoting circular economy, it is important to update operating models through cooperation between different actors in ecosystems where actors in the value chain or different sectors find one another for example in order to develop new solutions. Key measures will include ecosystem development and growth accelerators and their internationalisation, as well as the expansion of the FISS operating model focused on industrial symbioses.

According to the Osaamisen ennakointifoorumi (anticipation of competence forum) and the Osaaminen 2035 report (Competence 2035) published in 2019, future working life will require in particular competence in sustainable development, digital skills and continuous learning. Circular economy solutions are often created at the interfaces of different competences and organisations, so cooperation between research institutes, companies and other research, development and innovation actors in the field of circular economy must be strengthened. Competence and research in carbon-neutral circular economy must be increased significantly.

We will promote digital solutions that support the circular economy.

We define, collect and open important data for the circular economy with the support of ongoing platform economy development programmes. We link different sources of information and data important for the circular economy so that by combining data, different actors can lead the circular economy in their own activities, track material data, analyse the impacts of choices, provide circular economy services and create marketplaces. We will open up the authorities' data resources in a safe manner for wider use. We will participate in the Gaia-X project, which aims to create a European data architecture and facilitate the reliable sharing of decentralised data. Finland can be a pioneer by becoming involved in developing and coordinating the architecture applied to the circular economy.

Ministries in charge: Ministry of Economic Affairs and Employment, Ministry of the Environment, Ministry of Transport and Communications, Ministry of Finance

Other actors: Sitra, BF, VTT, ELY Centre, Motiva Oy

We will launch and promote circular economy ecosystems.

We will launch development and growth accelerators in which comprehensive solutions are refined from ideas through joint development and support instruments. In the development of solutions, circular design and the understanding of customer needs as well as joint development by different actors, researchers and companies play a key role.

We will strengthen and grow nationally significant circular economy innovation ecosystems. We will also challenge these to international RDI partnerships and financial cooperation (especially Horizon Europe). We will encourage the more rapid international piloting and commercialisation of circular economy innovation ecosystems by identifying market opportunities and partnerships.

In addition, we will develop the work of the FISS network and extend its industrial symbioses to new areas.

Ministries in charge: Ministry of Economic Affairs and Employment, Ministry of the Environment, Ministry of Education and Culture, Ministry of Transport and Communications

Other actors: Finnish Transport Infrastructure Agency, BF, ELY Centre, Regional Councils, VTT Technical Research Centre of Finland, Motiva Oy

We will create a circular economy design programme.

The Design programme brings together product design tools and databases and networks companies and research projects. With the help of the Ecodesign Database and a shared platform, we will improve the opportunities of companies to find information and tools and increase cooperation between companies in conveying environmental information in the value chain and developing sustainable innovations.

Ministries in charge: Ministry of the Environment, Ministry of Economic Affairs and Employment

Other actors: VTT Oy, Finnish Environment Institute

We will include circular economy competence as part of the education system and working life competence.

Together with educational actors and the labour market, we will anticipate the competence and educational needs of the circular economy.

We will accelerate the inclusion of the circular economy in curricula and qualification and degree requirements and increase the teaching of the circular economy in Finnish schools. We will encourage higher education institutions and vocational institutions to include circular economy as a strategic priority. We will increase continuing education in the circular economy for teachers.

We will accelerate cooperation, partnerships and research between companies, vocational institutions, higher education institutions, research institutes and other RDI actors related to the circular economy.

We will recommend that schools, educational institutions and higher education institutions adhere to the principles of a carbon-neutral circular economy also in their own activities.

We will develop and renew competence at the different stages of working life. We will recommend that companies develop their entire personnel's circular economy competence and take competence into account in their circular economy plans.

Ministries in charge: Ministry of Education and Culture, Ministry of Economic Affairs and Employment

Other actors: Finnish National Agency for Education, ELY Centre, Academy of Finland, Osaamisen ennakointifoorumi (competence anticipation forum), universities and higher education institutions, labour market organisations, companies.

5.5 Circular economy foreign policy to support sustainable development goals

In addition to measures at national and EU level, Finland must act in a goal-oriented and coherent manner in several areas of foreign policy in order to attain the status of Europe's circular economy pioneer: including work on its country image, trade policy, development policy, export promotion and multilateral environmental policy forums. A comprehensive and coherent 'circular economy foreign policy' as part of climate and innovation policy will strengthen Finland's role in the international implementation of the sustainable development goals and increase opportunities for

offering Finnish and European solutions and innovations that support the circular economy to international markets.

This will require, for example, active EU influence, influence in international negotiations concerning the natural resources agreement, a commitment to the continuation of the World Circular Economy (WCEF) process, and the development of an orchestration model that will bring together the solutions of different companies aimed at strengthening exports.

We will promote a global transition to the circular economy.

We will integrate the transition to a circular economy into development policy and further strengthen the mainstreaming of the circular economy and the sustainable use of natural resources in UN processes and other multilateral forums for international cooperation. We will contribute to making sure that the circular economy objectives are part of the EU's trade agreements and multilateral trade policy.

We will promote the circular economy transition of developing countries through funding and active cooperation in networks and partnerships that strengthen sustainable consumption and production, such as the One Planet Network under the UN Framework Programme for Sustainable Consumption and Production and the UN Green Economy Partnership.

We will be actively involved in the establishment and operation of the Intergovernmental Global Circular Economy Alliance under the auspices of the European Commission, as well as in the debate on the Global Convention on Natural Resources.

We will develop the World Circular Economy Forum (WCEF) - a collaborative platform and process in cooperation with international actors, a circular economy competence hub that shares best practices, networks and inspires.

Ministries in charge: Ministry for Foreign Affairs, Ministry of the Environment, Ministry of Economic Affairs and Employment, Ministry of Agriculture and Forestry)

Other actors: Sitra, BF

We will develop an orchestration model to accelerate the export of Finnish circular economy solutions.

The integrator or orchestrator will assemble the products and innovations of several companies and operators into comprehensive solutions for customers. It is essential to identify

Finnish or international integrators who can create comprehensive solutions and assume business responsibility for them. The Circular Finland brand is needed to support country image work and export promotion.

Ministries in charge: Ministry for Foreign Affairs, Ministry of Economic Affairs and Employment

Other actors: BF, Team Finland

6. Programme monitoring and resourcing

The soon to be established steering group for the Circular Economy Programme, which will report to the Ministerial Working Group on Climate and Energy Policy, will be responsible for and coordinate the implementation of the programme. With regard to the programme's measures, the key stakeholder forums and their own responsibilities are closely linked to the work of the management group and the implementation of the programme.

The indicators require further development. At this stage, the following indicators will be selected to support the monitoring of the programme:

- Domestic material consumption DMC (Eurostat)
- Material input required for domestic end-use material-specifically RMC (Statistics Finland and Finnish Environment Institute)
- Resource profitability (GDP/RMC)
- Circular material use rate CMU (Statistics Finland)
- Turnover of circular economy sectors and number of enterprises (Statistics Finland)
- Eco-innovations (Eurostat)
- Innovative public procurements (Eurostat)
- Municipal, packaging and construction waste and recycling rate
- Circular Economy Barometer: A survey and interview-based study for companies and consumers on attitudes and operating models that support the circular economy (commissioned survey for example, every four years)

A total of 2.3 million euros has been allocated to the promotion of the circular economy by the Ministry of the Environment and 3 million euros to the Ministry of Economic Affairs and Employment in 2020-2022. In addition, 38 million euros has been allocated to the Ministry of Economic Affairs and Employment as future investments in aid for the circular economy and sustainable growth in 2020-2021.

In addition to the current resources, the implementation of the programme would be supported by the following additional resources allocated to the items of the responsible ministries:

- 200-250 million euros for RDI and ecosystem activities promoting a low-carbon circular economy and for investments in demonstrations and facilities predominantly paid from the EU recovery instrument's funding in 2021-2026.
- 9.2 million euros in appropriations to finance operating models supporting public procurement, industrial symbioses, ecosystem development, regional circular economy work and product design in 2022, 14 million euros in appropriations a year in 2023 and 2024, and 12 million euros in appropriations in 2025.
- a total of 1.7 million euros for the implementation of one-off measures (scenario work, drawing up sectors plans, promotion of the recycling markets and reports related to financial steering) in 2022, and 0.5 million euros in 2023.

Measures requiring funding are discussed and decided on separately in the budget and General Government Fiscal Plan processes.

Appendices

Appendix 1: [New directions: The strategic programme to promote a circular economy \(in Finnish\)](#)