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## **Action Plan for a Circular Economy**

**Finland's** objective is to generate internationally competitive solutions for the circular economy, create substantial added value for products and share best practices with other countries. Circular economy solutions make it possible to cut atmospheric emissions by as much as half in certain sectors, promote the sustainable use of natural resources, increase wellbeing and thereby also improved competitiveness.

This action plan presents measures applied by the Government and Sitra, the Finnish Innovation Fund, to promote the realisation of the circular economy during this Government term.

The three priorities of the action plan are platforms for experimenting with and testing the circular economy, sustainable and innovative public procurement, and support for new product and service innovations. The action plan continues the Government's key projects and the Finnish road map to a circular economy, coordinated by Sitra in 2016, which is the first national road map of its kind towards a circular economy in the whole world.

### FINLAND AS AN OPERATING ENVIRONMENT SPURRING RENEWAL

In order to mainstream the circular economy, society needs an operating environment that prompts renewal. This requires legislative incentives, new operating models and sustainable innovative public procurement.

The ministries seek solutions that eliminate the identified barriers and obstacles to the circular economy, while also considering environmental impacts. Waste regulations aim both to accelerate sustainable and safe material cycles and to prevent the dumping of reusable material at landfills. Ministries will implement the one-stop-shop model, where the customer can handle the necessary licencing processes in one place. Alongside regulations, voluntary contractual models will be adopted. These green deals will aim at energy and material efficiency or reduced waste.

The purchasing power of the public sector will be utilised more than at present to facilitate the market access of circular economy solutions. In Finland, the value of public procurement is over EUR 30 billion annually. In order to increase sustainable and innovative public procurement, the ministries will establish a network-based centre of excellence, the purpose being to increase the ambition and know-how of various actors and improve the effectiveness of procurement.

Sitra and the Finnish Environment Institute will launch an accelerator project to promote the realisation of these procurements in the municipal sector. New financial instruments for the risk management of procurement will be taken into use in Finland.

Sitra and the ministries will examine the suitability of impact investing and social impact bonds (EIB model) for attaining the goals set for the circular economy. The aim is to start Europe's first EIB, or environmental impact bond project, in 2019.

# FINLAND AS A PLATFORM FOR DEVELOPING NEW PRODUCT AND SERVICE INNOVATIONS

Revising companies' business models and building growth opportunities, the circular economy is a new way of acting, together with others. We are shifting from value chains to ecosystems that can have actors from many sectors, both private and public. Consumers must also be considered.

In national R&D&I strategies and project entities, the circular economy – alongside digitalisation – is a cross-cutting theme in all programmes. The Team Finland network offers companies services and support for research, development, piloting, demonstration, business development, market entry, acceleration of growth and internationalisation.

Sitra finances cooperation projects where companies, actors in the public and third sectors, and research institutes create, try out and promote new business models and demonstrate new technological solutions, products and services. The planned priorities are synthetic biology, forest ecosystem services, wood products with a high added value, the circular economy of water, regional mobility, and new products with a high added value from fields.

The objective of the programme 'Circular economy transformation and new business models' is to identify and define clear business benefits in the circular economy for the manufacturing technology industry and, among them, to find global competitive advantages for companies and to launch experiments with new business models. In addition, Sitra will collect the 100 most interesting enterprise examples of business models in the circular economy. The intention is to inspire other companies and help to analyse companies' differing modes of operation and the key indicators of the business models.

Finland is attractive innovation and trial environment. Cities are supported in their role of as experimenters of circular economy solutions and as platforms for the national action plan for sustainable urban development. In addition, the ministries support cities' initiatives for the circular economy and clean solutions and forerunner networks, as well as the operating model of industrial symbioses. The rural development programme includes measures to promote the circular economy in primary production and rural areas.

VTT's Bioruukki is an internationally unique trial ecosystem where companies and research organisations can develop their ideas towards industrial scale and exports. The trial programme for nutrient recycling is closely linked, in terms of biogas, with the policy outlines of the energy and climate strategy and the medium-term climate plan. The Ministry of the Environment is assisting with three trial sites for recycling nutrients from a wastewater treatment plant.

Digitalisation plays an important role when the circular economy is being made visible to the general public. Sitra is preparing the launch of the Smooth Services project, which will create a digital platform for linking the personal data of willing citizens and various service providers. The pilot sectors are transport and the food system.

### FINLAND AS AN INTERNATIONAL LEADER IN THE CIRCULAR ECONOMY

The private capital's interest in financing solutions and business that support the Sustainable Development Goals (SDGs) is increasing. We are developing operating models where public financing and actions are used to channel private capital for implementing the most effective measures on the international scale. We are investigating the possibilities of trying out models for responsible investment funds and impact investing, for instance in order both to create water-related circular economy solutions and international projects and to strengthen the mitigation of, and adaptation to, climate change.

Together with its national and international partners, Sitra organises the annual World Circular Economy Forum (WCEF), which serves as the principal yearly assembly for the global circular economy community and promoters of sustainable development. WCEF 2018 will be held in Tokyo, Japan and WCEF 2019 will take place in Finland in conjunction with our EU Presidency.

#### FLEXIBLE EDUCATION AND THE ROLE OF CITIZENS

The education of future experts and raising the knowledge and skills of us all are prerequisites for the breakthrough of the circular economy. Sitra and the Ministry of Education and Culture are working to ensure the availability of future circular economy experts by determining the current status of education at various academic levels, by defining the skills needed and the supply of education. The objective is to introduce circular economy teaching to the courses offered at universities, universities of applied sciences and vocational schools in order to supplement major subject studies in as many orientations as possible. The intention is to train 60,000 future circular economy experts in 2018.

Citizens' attitudes and activities play a key role in promoting the circular economy. Information and easy solutions are provided so that citizens can promote the circular economy in everyday life and work. Sitra will determine citizens' attitudes and current practices with respect to everyday resource wisdom, and will identify the main motivations underlying the changes in citizens' behaviour.