

Six paths towards sustainability: **a toolkit to promote a systemic transformation towards sustainable development in Finland**

It is in the common interest of everyone living in Finland that the viability of the planet is maintained.

Participating in this transformation should be as feasible and financially attractive as possible for the public.

Achieving sustainability transformation needs to be set as the main goal for the government, municipalities and companies.

The Global Sustainable Development Report shows that we are heading towards the sustainable development goals of Agenda 2030, but much too slowly. Inequality is increasing, climate change is advancing, biodiversity is decreasing, and waste volumes are growing. These phenomena are affected by several interconnected factors. However, we can change course if we identify the interlinkages between the aforementioned problems and steer our societies comprehensively in a more sustainable direction.

The Finnish expert panel for sustainable development has identified the following steps which take into account these interlinkages:

IV

Sustainable development must form the basis of all decision making, planning, and budgeting, in both the private and public sectors.

Government structures need to be rearranged, led by the Prime Minister, so that the government can lead a fair and impactful transformation in the sustainability of food, energy, urbanisation, and economic and financial systems. Furthermore, it must be able to actively develop the sustainable management of the global environmental commons. The welfare state must be developed to provide everyone with the capability to participate in sustainability transformation.

III

The use of materials, as well as the use of land in its natural state, must be reduced in all activities, and financial instruments must be adjusted to take sustainability criteria into consideration.

Taxes and subsidies must undergo a stepwise transition towards sustainable business and consumption. Alternative indicators must be introduced alongside GDP to steer financial activities towards fostering the wellbeing of human beings and nature.

II

When planning is based on knowledge and collaborative activities, sustainability will become the new normal for individuals and communities.

The purpose of education, training, and societal activities is to highlight the interdependence between people and nature, enhance systemic thinking in terms of challenges and solutions, increase trust between people, and encourage everyone to try novel and more sustainable routines.

I

Interdisciplinary research brings transparency to material and financial flows, and produces knowledge of the impact of new technologies and experiments.

Sustainability innovations are already being implemented in practice in Finland and other countries.

Development is steered by setting different goals. However, the world evolves through interconnected systems, human activities, and creative solutions. This is why finding interlinkages is the key instrument in the transformations.

The path towards sustainable development requires transformation in six systems:



1. Sustainable and just economies

The current economy is ecologically and socially unsustainable at both national and global levels. Investments erode the environment, and economic growth largely benefits the wealthiest part of the population. Using a combination of taxation and other financial steering mechanisms, financial activities should be directed towards sustainable products and services, and away from material- and energy-intensive consumption. This calls for new business and service models that enable the successive or simultaneous use of goods and buildings, as well as maintenance and repair services that enable long-term use. This trend can be supported by defining a light VAT rate for repair services or by making them tax deductible. Subsidies granted for companies that offer repair services can provide jobs for

the unemployed, encourage consumers to have their products repaired and shift business activities towards new service-based business models aimed at longevity of goods. Sustainability criteria steer the domestic and international investments of Finnish financiers.

Rising GDP no longer measures an increase in wellbeing in Finland. One or several new indicators (GPI, ISEW) to measure wellbeing and sustainability should be introduced alongside GDP. Current cash flows in the global economy are considerably lacking in transparency and sustainability. Some of the added value that might be invested sustainably goes to wealthy investors without producing any financial added value to society. Finland can promote research of the movements of national and global cash flows, and define rules to increase their transparency.



2. Food and nutrition

Currently, food production and consumption are unsustainable in terms of emissions, water consumption, biodiversity, and people's wellbeing. Although the global population is expected to increase to up to 10 billion by 2050, studies show that a transformation towards a sustainable food system is possible.

We often consume food produced on the other side of the globe. As a result, we are part of the problem – but we are also part of a global transformation towards sustainability. By working with the Ministry for Foreign Affairs of Finland, the business sector can help to make food chains more sustainable and define and follow a fair set of rules.

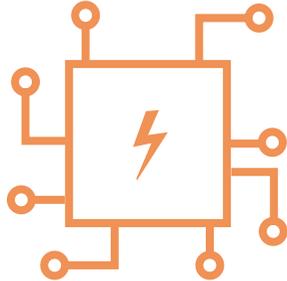
In Finland, public food services in schools, day-care centres, hospitals and workplaces have huge opportunities to make an impact on our ways of consuming food. A transformation in food systems can be promoted through public procurement criteria, recommendations and experiments. Reducing food wastage is the easiest and most rapid and effective way to improve sustainability in food produc-

tion and consumption. The appropriate steering of agricultural subsidies and taxation offers an opportunity to promote the production and consumption of vegetarian food.

In agricultural production, the vitality of the soil and insect pollination are important factors. These should be protected through organic production and carbon farming to determinedly continue the reduction of adverse environmental impacts. Locally produced seasonal food improves the sustainability of food production better than the importing of food over long distances. At the same time, it supports employment and strengthens the local food culture, as well as the relationship between consumers, producers, food, and the environment.

Through innovative experiments involving both the public sector and non-governmental organisations, we can increase the public's awareness of sustainable and healthy diets, develop new habits and make them the new normal. Comprehensive impact assessments help to identify the most effective measures in production and consumption.

3. Energy



To mitigate climate change, we should find pathways towards more sustainable energy systems. Finland aims to be a pioneer in this energy transition, yet our carbon footprint is among the heaviest. This is due to the high energy consumption and the significant proportion of energy produced by burning fossil fuels or bio-fuels. By changing energy production subsidies and other steering mechanisms in a controlled manner, we can have an impact on people's behaviour, and shift companies and investment towards clean energy services.

It is necessary to remove obstacles and build subsidy mechanisms for decentralised energy systems to enable municipalities and regions to shift their practices in a more sustainable direction. Cooperation helps to find energy solutions that identify and predict any opportunities and injustices directed at different parties and regions.

Finland is a wealthy and knowledge-based country. It needs to be part of the international efforts in finding long-term solutions, for example, for carbon capture through biological processes and technology. Wood construction should be strengthened through comprehensive and decisive policies supported by interdisciplinary research.

4. Urban and peri-urban areas

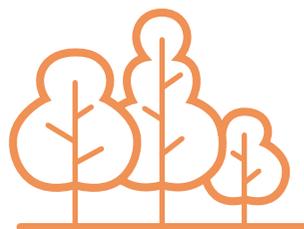


Urbanisation is proceeding rapidly all over the world. Also the Finnish population is increasingly moving into cities and towns. Growing urban regions call for a new structure, logistics, planning, and way of life. Finland's cities and towns can lead the way in transformation towards sustainability in other parts of the world.

To support sustainability transformation in urban areas, we need to rethink the use of urban space. A compact urban structure offers opportunities for public transport and a dense network of public services. Compactness needs to be achieved without compromising safety and pleasantness. Densification should be made with sustainable building materials and by thinking also about multi-purpose use of buildings. Space should be reserved for nature experiences and social activities.

An enjoyable urban environment encourages people to exercise and be active, and to focus on social activities instead of material consumption. The transition from consumption of materials towards the circular economy and a culture of sharing builds resource-smart cities and towns. Libraries and museums are home to immaterial experiences and wellbeing, and their role in promoting sustainable and socially just cities should be strengthened. From enjoyable and experience-rich urban environments people are in no hurry to travel away. Cities and towns are hubs of innovation and consumption. Any changes in sustainability practices spread extensively from urban environments.

5. Global environmental commons



Finland, like all other industrial countries, uses natural resources excessively. If the global environmental commons – water, land, air, and biodiversity – are destabilised, people’s wellbeing will be at risk, making transformation harder to achieve. Securing the global environmental commons must be prioritised in all activities.

Our current economic system is unable to force those who benefit to pay for the environmental damage or costs arising from production and consumption. The consequences of the loss of natural capital concern everyone, and these costs are not divided evenly. Through international trade, Finland has outsourced a large part of its adverse environmental impact to other countries. For example, 40% of the land area needed to produce all the food Finnish people consume is located elsewhere. Finland needs to take an active role, both nationally and internationally, in developing corrective mecha-

nisms. To save as many areas that are still in their natural state as possible land use should mainly be directed at areas which have a history as built environment. If environmental damage is caused by financial activities, this should be compensated. Following a successful test period this should also be set as a legal obligation with consequences. Obliging companies to pay compensation encourages them to minimise their adverse impact. Furthermore, it minimises the effects of outsourcing by shifting the costs of adverse environmental impact to product prices. By adopting an incentive scheme for landowners, this compensation mechanism will produce positive financial activities. Regional analyses of land use changes provide valuable information for decision-making processes. Activities can thus be steered away from natural environments based on the best available information.

6. Human wellbeing and capabilities



The capability and opportunities to be sustainable are requirements for all other transformations in sustainability, both nationally and globally. Society and communities support people’s wellbeing and provide them with knowledge, skills, and opportunities to have an influence. A relatively even-handed distribution of assets in society improves trust between the public sector and citizens, and the employment and social inclusion of the vulnerable.

Transformation towards sustainability arises from new knowledge and skills, and shifts in the worldview. They call for a stronger systemic thinking which builds on evidence-based information, a dialogue on values, and a strengthening of future literacy and imaginative thinking.

Sustainable development needs to be taught and independently developed

at all educational levels, in all working communities, and in adult education. Experience-based learning taking place in the natural environment connects us to nature. In turn, this strengthens our physical, psychological, and social wellbeing. Teachers in day-care centres and schools need to be provided with more training in sustainable development.

Individuals need other people and communities to strengthen their relationship with nature, mutual trust, and the sustainability of their activities. Libraries, museums, and art institutions, along with the independent arts sector and non-governmental organisations and media, can offer information and forums for co-creating new activities, and new ways of understanding and empathy. An innovative and engaging economy benefits from joint activities and supports social sustainability.

How can research respond to these challenges?

In Finland, funding and research organisations have started to support research in the quest for transformation towards sustainable development. Educational institutions offer studies in sustainable development and sustainability science. However, sustainable development is still only regarded as one theme among many. Given the urgency, sustainability needs to be integrated into all research. There needs to be an increase in sustainability science that brings together different views, both scientific and practical.

Finland has much to contribute in the interaction between countries – and especially developing countries

– science, and decision makers, and investing in this interaction would be a significant step at this point. We already have models and structures for cooperation between researchers and decision makers. Our panel is working specifically to strengthen this area.

We need to increase new forms of dialogue and learning through experiments: the co-design and co-creation of new governance and operating mechanisms and creative solutions bring together not only researchers and decision makers but children and young people, companies, and minority groups.

ABOUT THIS PUBLICATION

This summary is based on the most recent national and international reports on and assessments of sustainable development, as well as current policy documents, of which the Finnish government programme is the most important. The central frame of reference was the UN Global Sustainable Development Report 2019 and its levers of transformation in sustainable development. Blogs and podcasts that present the background to this summary are available in Finnish on the panel's website at www.kestavyyspaneeli.fi/en.

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	GOVERNANCE	ECONOMY AND BUSINESS	INDIVIDUAL AND COLLECTIVE ACTION	SCIENCE AND TECHNOLOGY
1. Sustainable and just economy 	lower taxes and subsidies for circulating and repairing services; new indicators for measuring wellbeing	sustainability criteria for investments; new business models	decreasing material intensive consumption	research into transparency of cash flows
2. Food and nutrition 	refocusing public procurement, agricultural subsidies and taxation	vegetarian-based business models; health as a marketing aspect	promotion of everyday food culture and seasonal diets; decreasing food waste	research into multiple impacts of food and food production; food consumption behaviour and culture
3. Energy 	subsidies for sustainable energy; solutions and removal of barriers for decentralised energy systems	pricing of energy services	decreasing the carbon footprint of individuals (consumption, and transport)	technologies for carbon storage; promotion of wood construction
4. Urban and peri-urban areas 	densification of the urban space and activities; better integration of sustainability principles in Land use and Building Act	multi-purpose use of existing resources, efficiency; sharing economy and circular economy	solutions for community-based living, transport and spare time	knowledge-based urban planning and land use
5. Global natural commons 	land use planning and governance safeguarding natural areas; implementation of compensation mechanisms	inclusion of externalities in market prices	landowners providing compensation services	regional analysis of land use changes
6. Wellbeing and capabilities 	developing systemic thinking and imaginary skills; libraries, museums and non-governmental organisations as forums for sustainability	innovative and engaging economy; media supporting wellbeing	co-creating a more sustainable connection with nature; trust building through community-based activities	interdisciplinary research to support cultural transformation and well-being in broad terms

Information about the panel

The expert panel for sustainable development is an independent body which helps to lead Finland towards sustainable development by adding scientific and ethical views to decision-making processes and societal dialogue. The ten expert members of the panel represent a broad range of scientific fields, universities, and research institutions. They bring together the cultural, ecological, social, political, technical, and financial, as well as health- and climate-related, views of sustainability. The panel helps to identify systemic problems associated with sustainability and potential ways to solve them. Furthermore, the panel aims to accelerate and predict societal changes that will enhance human wellbeing, while safeguarding the environment. Become more familiar with the panel's activities and the thoughts of its members www.kestavyyspaneeli.fi/en.

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