



# Finland

## 1 Which bioeconomy-related policy strategies exist?

In 2014, Finland published its first comprehensive policy strategy on bioeconomy, **“The Finnish Bioeconomy Strategy – Sustainable growth from bioeconomy”**.

The strategy paper was preceded by three documents published by the Finnish Innovation Fund, Sitra. All three documents can be seen as milestones on the path toward the development of a Finnish bioeconomy strategy. The Natural Resource Strategy of 2009 was developed to promote the sustainable and innovative use of natural resources by addressing six key areas, of which one

is covered by bioeconomy. Alongside economic and ecological aims, the document “Distributed Bio-Based Economy – Driving Sustainable Growth” of 2011 also pursues social aims which are intended to help face the challenges of climate change and the scarcity of natural resources. The paper further presents a vision of a nearly autarkic Finnish society in respect of nutrients, food and energy. Within the report, “Sustainable Bio-economy: Potential, Changes and Opportunities for Finland” (2011), Sitra highlights the importance of bioeconomy in relation to sustainable food production and the replacement of fossil natural resources.

## 2 Is the term “bioeconomy” or “biobased economy” used in the strategy documents?

Yes No

X

The Finnish bioeconomy definition refers to “an economy that relies on renewable natural resources to produce food, energy, products and services”<sup>18</sup>.

<sup>18</sup> Finland. Ministry of Employment and the Economy, 2014, p. 6

### 3 Who is the author of the strategies?

The Finnish bioeconomy strategy of 2014 was developed under the responsibility of the Ministry of Employment and the Economy, and in cooperation with the Prime Minister's Office and other ministries, including the Ministries of Agriculture and Forestry; Environment; Education and Culture;

Social Affairs and Health, and Finance. The public VTT Technical Research Centre and the Finnish Innovation Fund Sitra were also involved in this project. The strategy development was preceded by stakeholder consultations with regional representatives and economic operators.

### 4 What are the key goals of the strategies?

The Finnish bioeconomy strategy has been designed as a growth strategy and therefore envisages sustainable bioeconomy solutions as drivers for Finnish well-being and competitiveness. Given this vision, the document contains four strategic goals. Firstly, the strategy aims to create a competitive operating environment for the bioeconomy by promoting a climate favorable to investment and entrepreneurship. In order to coordinate the various stakeholders in the bioeconomy sector, a national bioeconomy panel should be appointed. Secondly, the strategy targets the generation of new bioeconomy businesses which should be

promoted, for example, by means of new funding solutions, and exemplary pilot and demonstration projects. Thirdly, the creation of a strong bioeconomy competence base should be fostered by means of expanded research and the training of experts. Fourthly, the strategy aims to ensure the accessibility and sustainability of biomass. These key goals were specified by numerous measures which do not, in fact, mention concrete quantitative targets but should contribute to an increased bioeconomy output of up to EUR 100 billion by 2025. Additionally, it should create about 100,000 new jobs.

### 5 What are the priority areas of the strategies?

As Finland is home to a vast number of forests, the core element of the country's bioeconomy is the forestry industry. According to the strategy, the forestry industry has great potential to contribute to economic growth in Finland, such as by strengthening the timber market or the diversification of wood products. Wood is also of particular importance for energy purposes. For example, wood-based transport fuel is increasingly used in Finland.

Another focal area of the Finnish bioeconomy strategy is industrial biotechnology. The strategy highlights the possibilities that arise from Finnish expertise in biotechnology, in the health sector for example, by developing health technologies and pharmaceutical research.

Interestingly, the Finnish bioeconomy strategy underlines the importance of water as the prerequisite for a successful bioeconomy. Clean water

is mentioned as a critical resource which is commonly used within the bioeconomy. Therefore, improved technologies for water efficiency and water recycling are needed. The Finnish forestry industry is already leading by example in this area by developing and using processes with low water consumption.

The Finnish bioeconomy strategy focuses, alongside products, on services and their importance for the value chain. By reflecting emerging trends

related to increasing service intensity, services (such as nature tourism) are seen as new business opportunities.

Based on the assumption that the Finnish bioeconomy will increase in the future and therefore more biomass resources will be needed, the strategy also focuses on evaluation methods. This represents a first attempt to measure bioeconomy activities related to sustainability.

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