

Finland is a pioneer and the center of global growth in bioeconomy. New bioeconomy business opportunities in Finland are based on the smart exploitation of our plentiful renewable resources, biomasses and water resources, the innovative development of related technologies, and high-added value products and services. With strong support from the government, Finland continues to invest heavily in bioeconomy research and development.

# NEW BUSINESS OPPORTUNITIES FOR A MORE SUSTAINABLE FUTURE

Major global companies interact with startups, universities and research institutes in an ecosystem where R&D funding and top-quality education have formed the basis of it all for decades. The industrial exploitation of wood-based biomass is in transformation, creating compelling new business opportunities and possibilities. In addition to traditional forest products like mechanical wood products, pulp and paper, wood is now increasingly used in new added value products. Textile fibers, pharmaceutical products and interior design surfaces are examples of the already existing new generation products.

On a global scale, Finland has firmly set the course for a low-carbon and resource-efficient society and a sustainable circular economy. A key role in reaching this goal is played by bioeconomy.

KEY FIGURES

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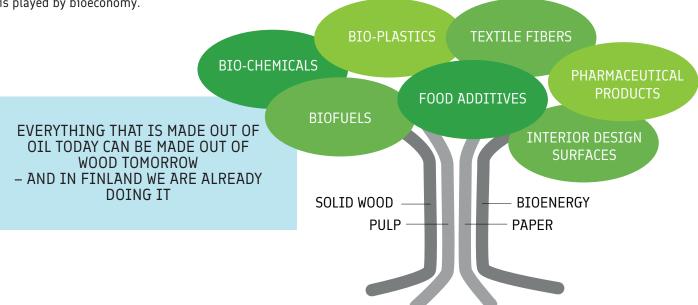
NEW JOBS EXPECTED TO BE CREATED IN THE PROCESS

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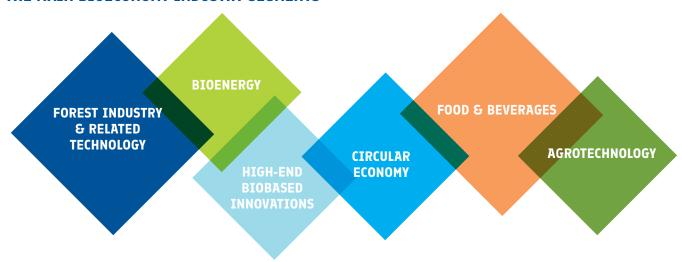
SEEKS TO DOUBLE INDUSTRY TURNOVER BY 2025

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### THE MAIN BIOECONOMY INDUSTRY SEGMENTS



The Forest Industry is a major contributor to wellbeing in Finland. The sector accounts for over 20 per cent of Finland's export revenue and products and technologies are distributed around the world. Today, there are 50 pulp and paper mills and over 240 wood production sites in Finland. At the same time Finland is home to world's leading forest machinery providers.

As the world's population continues to grow, the global need for energy, food and water will increase significantly in the upcoming decades. Concerns about energy security, climate change and urbanization further emphasize the need for developing renewable energy, such as Bioenergy. Finland has been stated as the "model for the world" by IEA (The International Energy Agency) in its combined heat and power electricity and is a pioneer in developing new technologies to turn various biomasses into biofuels.

Finland has world class research in both biomaterials and biochemicals. New Biobased Innovations are developed to decrease the dependency from fossil-based raw materials. The business potential of biobased materials is enormous - if 1 percent of fossil-based products is converted to biobased alternatives the amount of business opportunity is 20 billion euros. When it comes to making the most of materials and minimizing waste, Finland already has plenty of expertise on how innovative technologies can be used in crucial sectors. The Finnish Government has prioritized investments promoting the circular economy among its new spearhead projects. The world's first road map to Circular Economy was published by The Finnish Innovation Fund Sitra in 2016, with concrete steps and actions to achieve sustainable future. Finland also has a high amount of food-related patents and outstanding innovations in the field of healthy nutrition.

# **EXAMPLES OF COMPANIES IN THE INDUSTRY** CATEGORIZED BY THEIR FIELD

Forest Industry & Related Technologies: Andritz, Metsä Group, Outotec, Ponsse, Sappi, SCA, Stora Enso, Valtra, Valmet, UPM

Bioenergy: Neste Oil, ST1 Biofuels, UPM, Watrec

Biobased Innovations: Paptic, Spinnova, Sulapac, VTT

Technical Research Centre of Finland Circular Economy: Honkajoki, Tracegrow

#### **MORE INFORMATION**

#### **BUSINESS FINLAND**

https://www.businessfinland.fi/en/do-business-withfinland/explore-finland/biobased-products-andtechnologies/

## **INVEST IN FINLAND**

https://www.investinfinland.fi/bioeconomy

#### WHAT IS CIRCULAR ECONOMY

https://www.sitra.fi/en/topics/a-circular-economy/

#### **FOOD & BEVERAGE**

https://www.businessfinland.fi/en/do-business-withfinland/explore-finland/food-beverage/

#### **SETTING THE NEW STANDARD**

The Finnish government is committed to almost doubling the current EUR 60 billion turnover of the bioeconomy sector by 2025. Finland continues to invest heavily in bioeconomy and the government has earmarked funding for bioindustry development, including research, pilot projects and investment support. Over the next 5 to 10 years Finland aims at developing the areas in which our country has traditionally been strongest: the use of forests, food production, industry, transport and administration. These new operating models will become the prevailing practices.

