

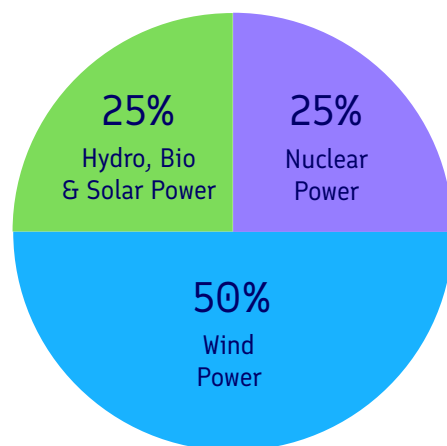
# CARBON-NEUTRAL FUELS FROM FINLAND

Finland is a forerunner in tackling climate change, offering a hub for carbon-neutral fuels development and production for transport.

As a response to the accelerating demand for cleaner solutions, Finland offers unique business opportunities to develop and produce carbon-neutral fuels such as sustainable aviation fuel (SAF), carbon-free methanol for marine, and diesel for heavy traffic. Finland has what it takes: clean energy and bio-based carbon as raw material, combined with scalable technologies and industrial know-how.

Finland is ambitiously and legally committed to carbon neutrality by 2035 – 15 years ahead of EU and US. To accelerate green investments, the Finnish government has agreed on giving green transition projects priority treatment in 2023–2026, including carbon capture, renewable energy production, and hydrogen ventures.

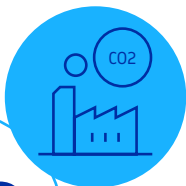
## ENERGY SOURCES IN FINLAND ESTIMATE FOR 2030



Source: Fingrid, Finnish Energy

*“Finland is a very important location for bioproducts’ development and it is Suzano’s intention to deepen its presence in the region in order to identify new opportunities.”*

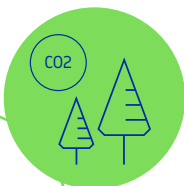
**– Vinicius Nonino, Executive Director, New Business at Suzano A/S**



~28

**MILLION TONS  
OF UNTAPPED  
BIOGENIC CO<sub>2</sub>**

Source: The Finnish Climate  
Change Panel 5/2023



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**MILLION m<sup>3</sup>  
OF SOLID FOREST  
INDUSTRY SIDE  
STREAMS**

\*Volume estimation in the market.

Source: Natural Resources Institute Finland 2023

## **CLEAN ELECTRICITY: STRONG GROWTH ENABLES NEW OPPORTUNITIES**

Energy sources in electricity production in Finland are estimated to be 100% fossil-free by year 2030, totaling to 140 TWh. Estimations indicate that Finland would benefit from an additional 60 TWh of electricity supply – a 70% increase in total electricity production in 2030 compared to year 2022.

The wind power industry is enjoying robust growth, as a solid new project pipeline is being implemented on a purely commercial basis. In 2022 Finland ranked third in Europe and globally sixth in new wind power capacity. Also, solar power is becoming increasingly important. In addition to wind power’s key role in Finnish energy landscape’s future, solar power is set to have a significant role in balancing the Finnish energy system.

The electricity connection network capacity in Finland is empowered by an extremely strong and reliable national electricity grid infrastructure. As a result, Finland has several locations where large, even 1000 MW production sites, are possible. Finland’s transmission system operator Fingrid will invest further 4 billion euros over the next ten years in the development of the already strong grid.

## **CARBON SOURCE FOR SUSTAINABLE FUELS**

Finland has the highest proportion of forest land in Europe, with forests covering over 70 percent of its land area. For Finns, resource-effective forest use and utilization of forestry side streams are of key importance. Due to the strong forestry industry, Finland holds significant biogenic carbon resources distributed across the country which could be used for products such as sustainable traffic fuels.

# INVEST IN FINLAND

## TALENT TO MAKE THE CHANGE

The Finnish workforce is highly educated, skilled and experienced, and known for its high level of productivity and commitment. Finland is home to a deep and wide, cost-competitive engineering pool with specialization in for example in forestry and paper industries. Finnish professionals often possess good technical know-how of other fields such as IT and Cleantech.

## FINNISH ENGINEERING TALENT POOL



● Engineers    ● Annual Graduates

Source: TechSkillsAtlas Finland 2023

## SUSTAINABLE BIOECONOMY ENABLES UNIQUE COLLABORATION OPPORTUNITIES

A long-standing forest industry drives a strong Finnish bioeconomy. The Finnish forest sector is a global frontrunner in driving new innovations, combining bio-based raw materials, wood and fibers into other materials. In bioeconomy, cross-sectoral cooperation is seen in innovative partnerships between start-ups, larger companies, research organizations, universities and the public sector. Another example of collaboration is the VTT Bioruukki pilot center upholding unique expertise and piloting platform for customers of all sizes to develop their products also in low-carbon energy domain.

*In the United States the material is provided by Business Finland USA, Inc. on behalf of Business Finland Oy.*

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