

## POLYTECHNIK supplies technology for the largest industrial torrefaction plant in Europe

**Finnish company Joensuu Biocoal Oy will use innovative technology from Austria to produce renewable alternatives to fossil coal. The pioneering project demonstrates a potential solution to the industrial push towards carbon neutrality, helping to reduce the environmental impact caused by fossil fuels while providing a renewable energy source.**

(Weissenbach, Lower Austria, May 12, 2023)

Sustainably harvested forest residues are heated in a low-oxygen environment to produce a carbon-rich end-product. Torrefied biomass, or biocoal, has a higher energy density than traditional woody biomass, and is therefore more efficient to transport and easier to apply in existing coal power facilities or cement plants, due to its properties. It can be used in a range of applications including power generation, heating and in industrial processes e.g. in metal industry as a carbon neutral alternative.

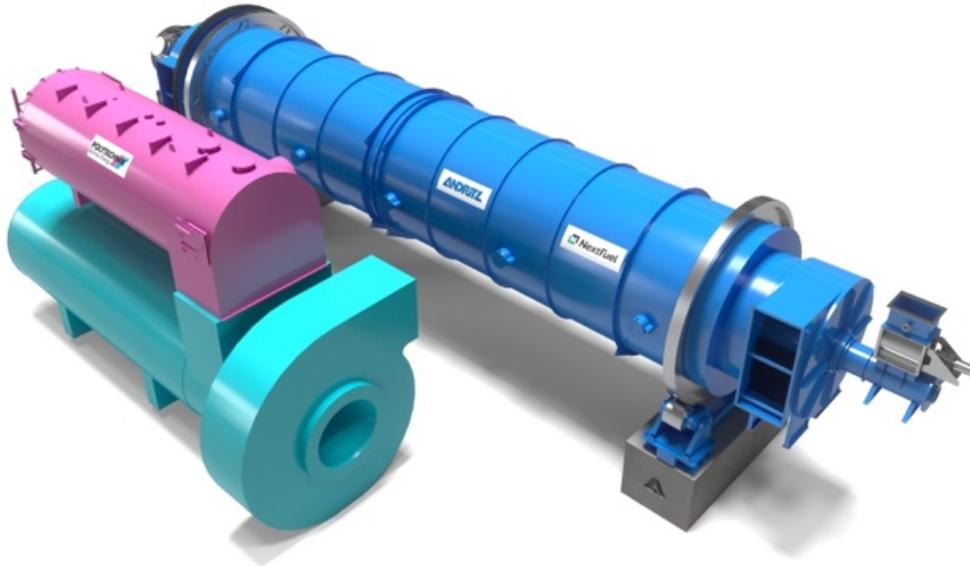
The innovative technology for the torrefaction plant comes from Austria. International technology Group ANDRITZ will design, manufacture, and supply the reactor based on NextFuel AB technology, and POLYTECHNIK will design, manufacture, and supply the lean gas burner and the technology for energy treatment and utilization, which will ensure a cycle-like use of the process energy. Construction is scheduled to start in mid-2023, and production to begin in late 2024.

The new bio-industrial plant will produce up to 60,000 tons of biocoal briquettes per year, which will replace fossil coal in various industrial processes. The plant can utilise sustainably sourced by-products of local forestry, such as bark and low-grade biomass, which show the enormous potential for CO<sub>2</sub> savings of large-scale defossilisation technology.

In addition, there are plans to build a cluster around the plant, which includes e.g. Natural Resources Institute Finland, University of Eastern Finland, Karelia University of Applied Sciences and Business Joensuu. The group's goal is to develop products and refine new uses for torrefied biomass.

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Torrefaction Technology by ANDRITZ, based on NextFuel Technology, and POLYTECHNIK for Joensuu Biocoal  
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