



A full circular economy in Koskenkorva!



Alia's Distillery, a Finnish Bioenergy Beverage Supplier



Objective

Altia aims to make its production carbon-neutral by 2025 and the steps towards such carbon neutrality are based on the development of its own production plants, most importantly the Koskenkorva distillery's bioenergy power plant, and shifting to renewable energy sources.

Description

Koskenkorva distillery is located in the village of Koskenkorva in Southern Ostrobothnia, Finland. Grain spirit produced from pure Finnish barley is the key raw material for the alcoholic beverages.

Altia's distillery uses about 210 million kilos of Finnish barley a year. The distillery produces grain spirit for Altia's alcoholic beverages. The Koskenkorva distillery is based on bio and circular economy: 100% of the grain is utilised. Altia received the Green Company of the Year 2018 award for the circular economy at the Koskenkorva distillery. We are also included on the Finnish future fund Sitra's list of the most interesting companies in circular economy. In addition to grain spirit, the Koskenkorva plant produces several byproducts, such as starch and raw material for animal feed. Even the carbon dioxide generated in the fermentation process is collected and used – for example, in greenhouse cultivation. Barley starch is used in the paper and board industries, as well as the food industry and breweries. A versatile product range enables the Koskenkorva plant's unique material efficiency.

The barley husk that would otherwise not be used in the Koskenkorva plant's production is incinerated in the plant's own bioenergy power plant, which supplies steam energy for the distillery. The 10-megawatt bioenergy power plant has been operating at full capacity since January 2015, and it uses barley husk as its primary fuel. Barley husk is peeled in

Koskenkorva's grain spirit and starch production throughout the year. In terms of technology and fuel mix, the Koskenkorva bioenergy power plant is the first of its kind in Finland.

Partners

Altia

Results

Thanks to the bioenergy power plant and renewable fuel, the Koskenkorva plant has been able to reduce its carbon dioxide emissions by about 58% since 2014. The plant's steam generation fuel self-sufficiency is about 60%. To make the circular economy circle complete, ashes from the bioenergy power plant are used as fertiliser on the fields.

Website

<https://altigroup.com/cases/koskenkorva-distillery-forerunner-circular-economy>

Downloads

Photo gallery

