

Bio and Circular Economy Development



Development of Kilpilahti industry park towards circular and bioeconomy (Posintra 2015-2017)

Gaia is building the future of Kilpilahti industry park by developing it towards circular and bioeconomy in collaboration with local companies and Neste Jacobs engineering company. In the next two years, Kilpilahti will get a uniform vision and business model that will help to attract investments. The plan also includes boosting the collaboration of participating companies and improving their business opportunities.

“Neste produces renewable diesel e.g. from waste and leftovers. It is a good example of circular economy, in which one company’s waste is another’s raw material, and materials are reused. Bioeconomy is based on producing food, energy, products and services from renewable natural resources. Kilpilahti has an excellent chance to develop into a significant bioeconomy and circular economy cluster. This could also create new companies that could bring much-needed jobs to the area.”

Fredrick von Schoultz., Deputy Mayor of Porvoo

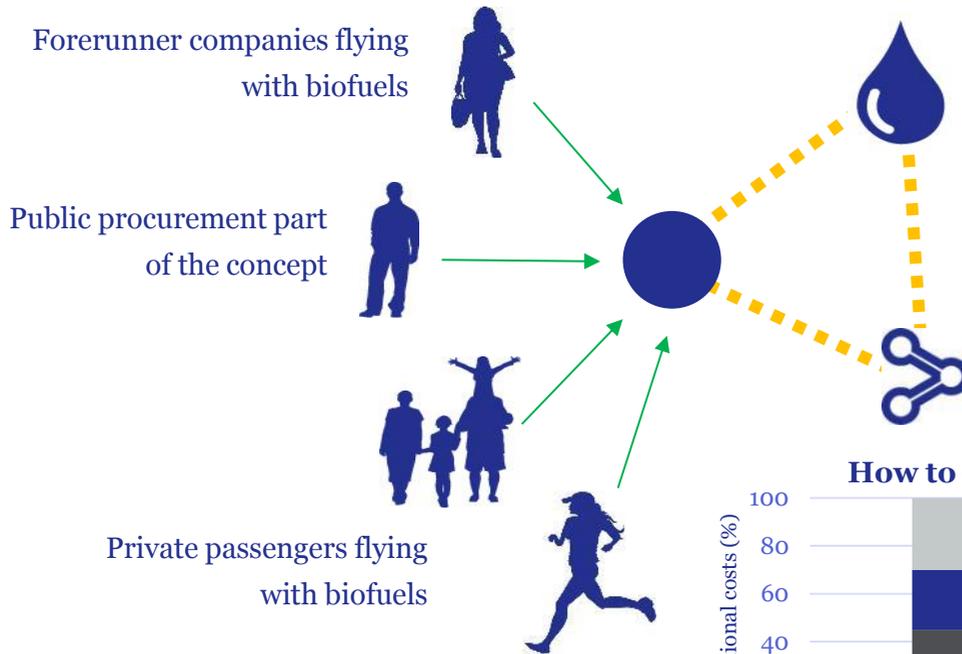
Participating companies include for example:



Kilpilahti is the largest oil refinery and petrochemical cluster in the Nordic countries. There are 10 companies operating in the area, and 3,500 people work there. The companies have a cooperative production chain from crude oil to plastics.

Biofuels in aviation

Finnair, Neste Oil, Finavia and MTC (2014)



FINNAIR

Finnair uses the biofuel

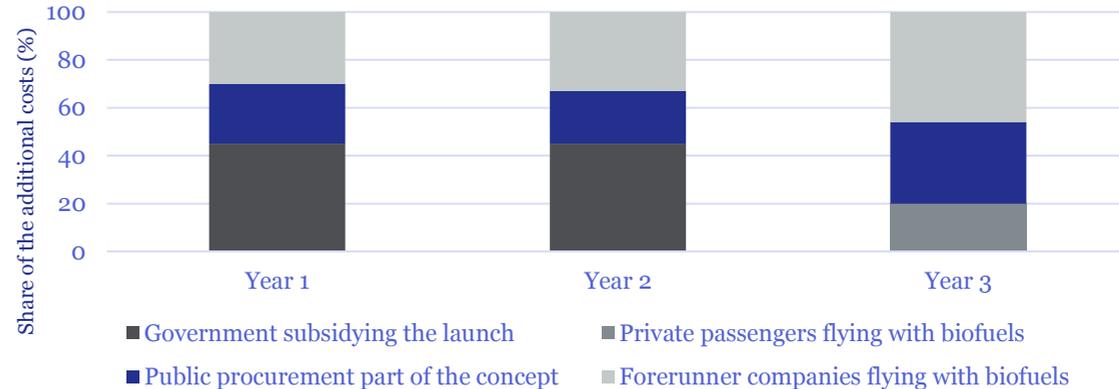
NESTE OIL

Neste Oil produces the biofuel

FINAVIA

Biofuels are part of the Helsinki Green Hub

How to cover the extra costs?



Study on the possibilities of using biofuels in aviation (Finnish Ministry of Transport and Communications, Finnair, Neste Oil, Finavia, Ministry of Employment and Economy, 2014)

Market, economical, regulatory and feedstock analysis for bioeconomy value chains

180 million euros worth of end-products per year

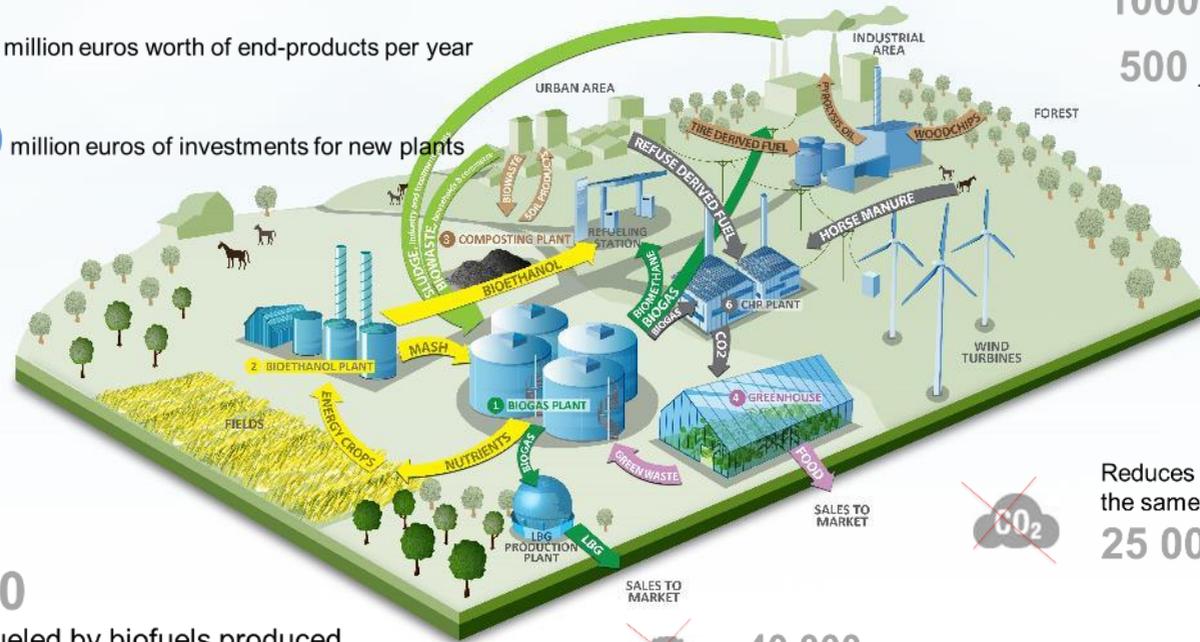
250 million euros of investments for new plants



200 jobs in the plant operation

1000 jobs in the supply chains

500 jobs at the construction stage



80 000

vehicles fueled by biofuels produced

Replaces fossil fuels by over **600 000** barrels which equals the volume of about **3 000** tank trucks

Reduces greenhouse gas emissions by the same amount as

25 000 Finnish cause on average

40 000 tons less waste to the landfills equals

80 000 people's annual amount of municipal waste