

Success Stories of Advanced Biofuels for Transport

NESTE: THE WORLD'S LARGEST PRODUCER OF RENEWABLE DIESEL

Year of plant start-up:	2007, 2009, 2010, 2011
Location:	Porvoo, Finland Rotterdam, the Netherlands Singapore
Technology:	HVO
Plant capacity:	Combined: 2.9 Million tons/year (after Singapore expansion 2022: 4.5 Million tons/year)
Operational experience achieved:	Commercial production
Total Capital Expenditure:	1420 million euros (+ Singapore expansion 1.4 Billion euros)
Principle feedstocks:	Vegetable oils, waste and residues
Feedstock Capacity:	Global feedstock sourcing
Products/markets:	HVO Renewable diesel, renewable propane, renewable aviation fuels, renewable chemicals
Technology Readiness Level (TRL):	TRL 9

DESCRIPTION

Neste (NESTE, Nasdaq Helsinki) creates sustainable solutions for transport, business, and consumer needs. Our wide range of renewable products enable our customers to reduce climate emissions. We are the world's largest producer of renewable diesel refined from waste and residues, introducing renewable solutions also to the aviation and plastics industries. We are also a technologically advanced refiner of high-quality oil products. We want to be a reliable partner with widely valued expertise, research, and sustainable operations.

In 2018, Neste's revenue stood at EUR 14.9 billion. In 2019, Neste placed 3rd on the Global 100 list of the most sustainable companies in the world.

Our renewable diesel production is based on unique and proprietary NEXBTL technology. We have state-of-the-art renewable diesel production facilities in Singapore and Rotterdam, and our annual renewable diesel production capacity is currently 2.9 Mton/a. The capacity expansion of our renewable products in Singapore will bring the total renewable product capacity close to 4.5 million tons annually in 2022.



Neste Rotterdam refinery

Stakeholders involved:	Proprietary NEXBTL technology, intensive R&D with global network of universities and partnerships
Financing Support:	Neste customers may use the renewable diesel to fulfil their renewable energy mandates and obligations.
Contribution to Sustainable Development Goals:	Neste has several focus areas in regards to Sustainability: Our business is built on a sustainable supply chain with traceability, human rights, combating deforestation, environmental monitoring, carbon footprint calculation over the whole life cycle.
Contribution to GHG emission reduction in transport:	<p>Neste has customers globally, Europe being an important market area.</p> <p>In 2018, Neste renewable fuels helped our customers reduce global climate emissions by 7.9 million tons. This equals the annual emissions of 3 million passenger cars. Our target is to help our customers reduce their GHG emissions by at least 20 million tons every year by 2030. The share of waste and residues is over 80% of our renewable raw materials. We are innovating and exploring new lower quality renewable raw materials.</p>
Employment:	Neste is a direct employer for ca 5500 persons. In addition, the feedstock supply chain employs thousands of people.
Replicability and scale-up potential:	The refining facilities are replicable.
Success factors:	Stable, long term renewable fuel policies are needed to motivate additional investments.
Constraints:	Regulative uncertainties.

Info provided by: Harri Heiskanen

More information: www.neste.com

Please find photos in: <https://www.neste.com/corporate-info/news-inspiration/material-uploads>. Neste photo gallery features printable high quality images and Neste-logos. You can find pictures of our refineries and station network.



The ART Fuels Forum brings together 100 experts and leaders representing the alternative transportation fuels Industry to facilitate discussions, elaborate common positions on policy issues and identify market penetration opportunities and barriers for these fuels. The Forum is established and financed by the European Commission under the project name “Support for alternative and renewable liquid and gaseous fuels forum (policy and market issues)”.

www.artfuelsforum.eu



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