Cleaner and safer products

In line with its cleaner traffic strategy, Neste Oil offers its customers a range of traffic fuel solutions with a smaller environmental footprint. Neste Oil's renewable and petroleum products offer consumers and businesses a cleaner way to stay on the move and transport goods. Neste Oil was the first company to launch sulfur-free gasoline and diesel fuel on the Finnish market at the beginning of the new millennium and is the world's largest producer of renewable fuels today. Neste Oil also produces premium-quality base oil, which its customers use to manufacture high-quality lubricants.

The company's products are based on high-quality R&D work, which guarantees safe usage and compatibility with customer requirements.

NExBTL diesel: 40 to 90% less emissions CO_2

Lower level of environmental impact with renewable fuel

Using Neste Oil's NExBTL renewable diesel can reduce greenhouse gas emissions by 40–90% over the fuel's entire life cycle compared to fossil diesel. It has also been shown to reduce the following local emissions:

- particulate matter, by 33%
- nitrogen oxides (NOx), by 9%
- carbon monoxide (CO), by 24%, and
- hydrocarbons (HC), by 30%.

NExBTL renewable diesel offers corporate customers a cost-effective way to meet their biomandates for renewable energy usage. It is fully compatible with all existing distribution and logistics systems and using the fuel does not call for any additional investments.

NExBTL renewable diesel was used to generate electricity for an outdoor event for the first time in 2013, at the Down By The Laituri music festival in Turku and the Tall Ships Race event in Helsinki. It performed excellently and the user experience was positive.

Read more about using NExBTL diesel to generate electricity for an event.

Read more about how NExBTL renewable diesel reduces greenhouse gas emissions.

Neste Pro Diesel meets automotive manufacturers' toughest demands

NExBTL renewable diesel is available to motorists in Finland in the form of Neste Pro Diesel, which contains a minimum of 15% renewable diesel. This is the world's first diesel fuel to comply with the tough WWFC category 5 specification drawn up as part of the Worldwide Fuel Charter (WWFC) by automotive manufacturers. Since 2013, it also has been the first fill fuel for Mercedes-Benz A-Class cars manufactured in Finland.

Joint efforts to promote the uptake of renewable fuel in aviation

Neste Oil is involved in a number of projects aimed at promoting the use of renewable fuel by airlines. Capable of supplying customers with renewable aviation fuel on an industrial scale, Neste Oil was one of the signatories of a Dutch initiative launched in 2013 to promote airline use of biofuels.

Read more about the 'Bioport for jet fuels in the Netherlands' project.

Read more about Neste Oil's renewable aviation fuel.

Extensive field testing in a range of different conditions

Neste Oil has tested its products to ensure their quality and good performance, both in-house and in collaboration with its partners. Neste Pro Diesel, for example, has been tested in collaboration with VTT Technical Research Centre of Finland and the Tampere University of Applied Sciences. In-house testing is concentrated at the Engine Laboratory based at the Porvoo refinery.

NExBTL renewable diesel has been tested in tens of field trials in Finland and overseas involving cars, trucks, and buses. It has also been tested under competition conditions, most recently at the 24-Hour Race at the Nürnburgring circuit in Germany in 2013.

Neste Oil has been involved in a renewable diesel trial in Germany since August 2013. Known as the Diesel R33 project, this is aimed at launching a fuel containing a significantly higher proportion of renewable content than current diesel blends.

Read more about the Diesel R33 project.

Read more about other NExBTL diesel field tests.

Cleaner choices for other industries

In addition to producing fuel, NExBTL technology is also capable of producing renewable solvents and renewable industrial petroleum, naphtha. Renewable solvents, for example, can be used as an alternative with lower impact on the environment in manufacturing paints, adhesives, cleaning agents, and cosmetics; while renewable naphtha can be used as a biocomponent in gasoline blends and for producing bioplastics. Thanks to its renewable base, the carbon footprint of end-products manufactured using NExBTL renewable naphtha is smaller than that of those produced from fossil naphtha.

Neste Oil is currently planning the production of NExBTL renewable propane at its refinery in Rotterdam. Propane can be used for example, in producing plastics and generating energy. In addition, Neste Oil is investigating the commercial potential of renewable isoalkane.

Ensuring that products are safe and providing safety information

As the majority of Neste Oil's products are classified as hazardous, ensuring that they are handled safely throughout their life cycle is extremely important.

Neste Oil has registered all its products in accordance with the requirements of the European Union's REACH chemicals regulatory framework. No recalls of Neste Oil's products took place during 2013. The EU has also introduced the CLP (Classification, Labelling and Packaging) regulation on chemicals, and Neste Oil began changing its product labeling to comply with the new regulation in 2013. The chemical labeling on fuel pumps were changed to comply with the new regulation at all Neste Oil stations in 2013.

Neste Oil always ensures that its customers have the information they need to handle its products safely and that its products comply with all national and international statutory requirements.

Read more about how Neste Oil communicates with its customers.