

A young child with dark hair in pigtails, wearing a white long-sleeved shirt and a black and white checkered skirt, is pointing towards the camera. The background is a blurred cityscape with tall buildings. A white curved line graphic is positioned above the child's head.

# Bio-based and circular feedstocks for the chemical industry

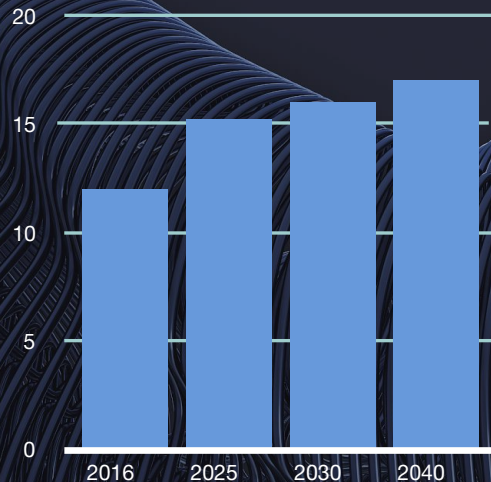
ISCC Global Sustainability Conference 2023

Maria Puustinen  
Sustainability and Regulatory Transformation Lead  
Neste Renewable Polymers and Chemicals

**NESTE**

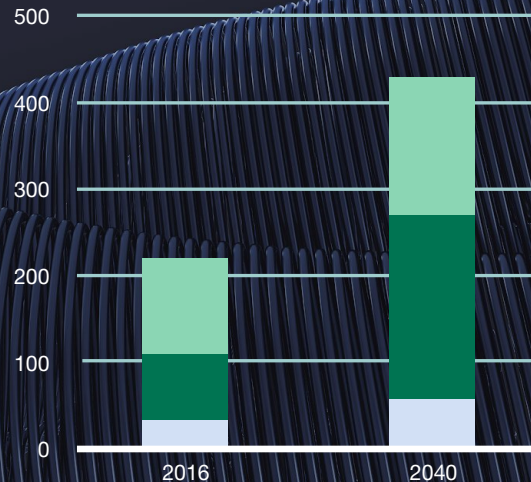
# The chemical industry is in a pivotal position to create a circular economy

Global oil demand for petrochemicals production (Mbbbl/d)



Source: International Energy Agency (2021), World Energy Outlook 2020, IEA, Paris

Plastic waste by treatment today and in business-as-usual scenario in 2040 (Mt/a)



Source: Ellen McArthur Foundation, Breaking the Plastic Wave

The petrochemical industry could account for roughly half of global oil demand growth until 2040.

Oil demand for petrochemicals can be reduced through increasing plastic waste recycling and use of renewable raw materials to produce polymers and chemicals.

- Plastics landfill and leakage elimination potential
- Plastics incineration
- Recycled plastics

# Combining recycling and the use of renewables can decouple plastic production from the use of fossil raw materials



# Neste 2026 and beyond

## Renewables production capacity

increasing from 3.3 Mt to

**6.8 Mt**

in 2026

## Carbon footprint

Helping customers reduce their GHG emissions by 2030 by at least

**20 Mt/a**

## Target of processing

**1 Mt/a**

of waste plastic from 2030 onwards

## Carbon neutrality

Neste's production is carbon neutral by

**2035**

# Our renewable raw materials today



Neste's renewable raw material portfolio consists of a variety of **waste and residue oils and fats as well as vegetable oils**

**Waste and residues** account for **95% of Neste's renewable raw material inputs globally**

All renewable raw materials Neste uses are **sustainably produced\*** and **traceable** to the point of origin

**Independent of renewable raw materials used, our Neste RE™ for polymers and chemicals production has a consistent high quality**

\*Meeting or exceeding e.g EU RED /ISCC PLUS requirements

Our transformation

---

# Strategic study to transform Neste's Porvoo refinery into a world-class site for renewable and circular solutions

# Neste's policy requests in polymers and chemicals value chain

Key pillars of a successful chemical industry transformation include:

- Recognition of the **contribution of renewable and recycled materials** in reducing greenhouse gas emissions, achieving material circularity and helping to solve waste problem.
- Setting clear targets that **promote the use of renewable and recycled materials** and prioritizes their use over conventional fossil resources.
- **Build on existing certification schemes to ensure credible and harmonised claims on sustainability and traceability** in different value chains and end-uses, enabling gradual ramp-up of sustainable material use.





Thank you