



# veturi

program  
for tackling  
climate crisis

Neste Veturi Public Roadmap  
10/2022

# Replacing fossil resources with renewable and circular solutions is a huge opportunity

There could be 600m electric passenger cars by 2040, replacing around **360 Mtoe** of fossil transport fuels.


Power-to-liquids, hydrogen, and algae hold **significant potential** for fossil-fuel displacement in transport in the long term.

Biofuels have the potential to replace up to **1,000 Mtoe** of fossil transport fuels

Oil used in transportation  
2,850 Mtoe/a  
(2040)

Global oil consumption  
**4,770 Mtoe /a**  
(2040)

# We are making Finland a global forerunner in sustainable fuels, polymers and chemicals

A horizontal timeline diagram consisting of three segments. Each segment is defined by a horizontal line with a vertical tick mark at its right end. The segments are separated by vertical lines that extend upwards and downwards from the horizontal line, forming a cross-like shape.


Scalable global solutions to tackle climate change

Billion EUR scale new businesses beyond 2030

A world class competence ecosystem in Finland


# Our value proposition to our partners: Co-create healthier planet for our children

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We have ambition, commitment and courage to develop globally scalable sustainable solutions.


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We have strong technology development and scale-up capabilities.



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We have a solid track record in developing profitable, sustainable businesses in global scale.

# Neste Veturi develops globally scalable sustainable solutions

## Sustainable renewable and circular raw materials

Ligno-  
cellulosics

Algae

Novel  
vegetable oils

Waste  
plastics

Municipal  
solid waste

Renewable H<sub>2</sub>  
& Power-to-X

## Novel technology platforms

## Sustainable products

Road transportation

Aviation

Polymers and chemicals

# Neste Veturi focus areas to build new, scalable business by 2030

## Lignocellulosics

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How to commercialize new technologies to convert forestry, forest industry and agricultural waste into fuels and chemicals.

## Algae

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How to develop algal technologies with the aim to expand renewable raw material pool to support future growth of renewables production.

## Novel vegetable oils

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How to develop sustainable cultivation methods that don't require replacement of any existing crop cultivation, minimize indirect land use change, and reduce GHG emissions along the downstream value chain.

# Neste Veturi focus areas to build new, scalable business by 2030

## Waste plastics

How to develop technologies and capabilities to chemically recycle otherwise hard-to-recycle waste plastic through liquefaction and refinery upgrading to drop-in petrochemical feeds for manufacturing of new plastics and chemicals.

## Municipal solid waste

How to utilize currently not recycled or hard-to-recycle municipal solid waste fractions into sustainable aviation fuels, other sustainable fuels and chemicals.

## Renewable H<sub>2</sub> & Power-to-X

How to deliver sustainable products from CO<sub>2</sub> and clean electricity.

How to develop renewable hydrogen solutions for existing use and beyond.

# Join us on a journey to create a healthier planet for our children

**We are constantly looking for partners to build competences and solutions. Joint R&D could include topics like:**

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Game changing, novel technologies and value chains for sustainable fuels, polymers and chemicals

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Efficient forest industry waste and residue supply chain, mechanical processing as well as refining to fuels and chemicals

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Scalable and energy-efficient methods for algae biomass processing to fuels and chemicals

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Sustainable multicropping systems and sustainable intensification of crop production in marginal lands

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Alternative technologies for chemical recycling and the recyclability of plastic materials to expand the pool of waste plastics that can be recycled

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Separation of the hard-to-recycle fractions from municipal solid waste for processing into sustainable fuels and chemicals

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Hydrogen storages and logistics, and energy management models for green hydrogen production

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Flexible synthesis PtX technologies, efuel synthesis, and novel CO<sub>2</sub> utilization technologies

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For more information on  
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A person with long hair, wearing a grey sweater and black leggings, is walking away from the camera on a long wooden pier that extends into a body of water. The background shows rolling mountains under a clear sky. A large green graphic element, consisting of a diagonal line and a shaded area, is overlaid on the right side of the image. The text "Thank you" is centered over the pier.

Thank you