



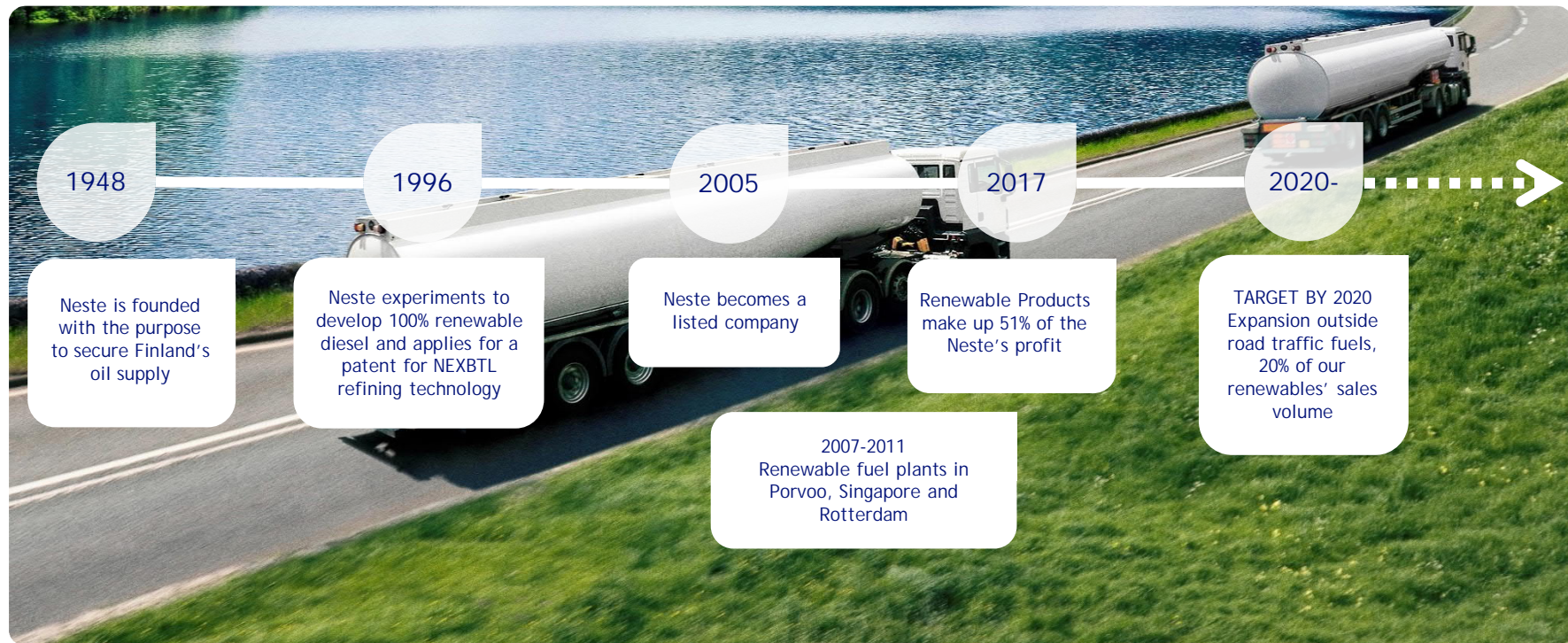
Neste: Refining the future - Lignofuels

Bio4Fuels Days, 11 October 2018, Gardemoen, Norway

Niilo Oikarinen, Program Manager

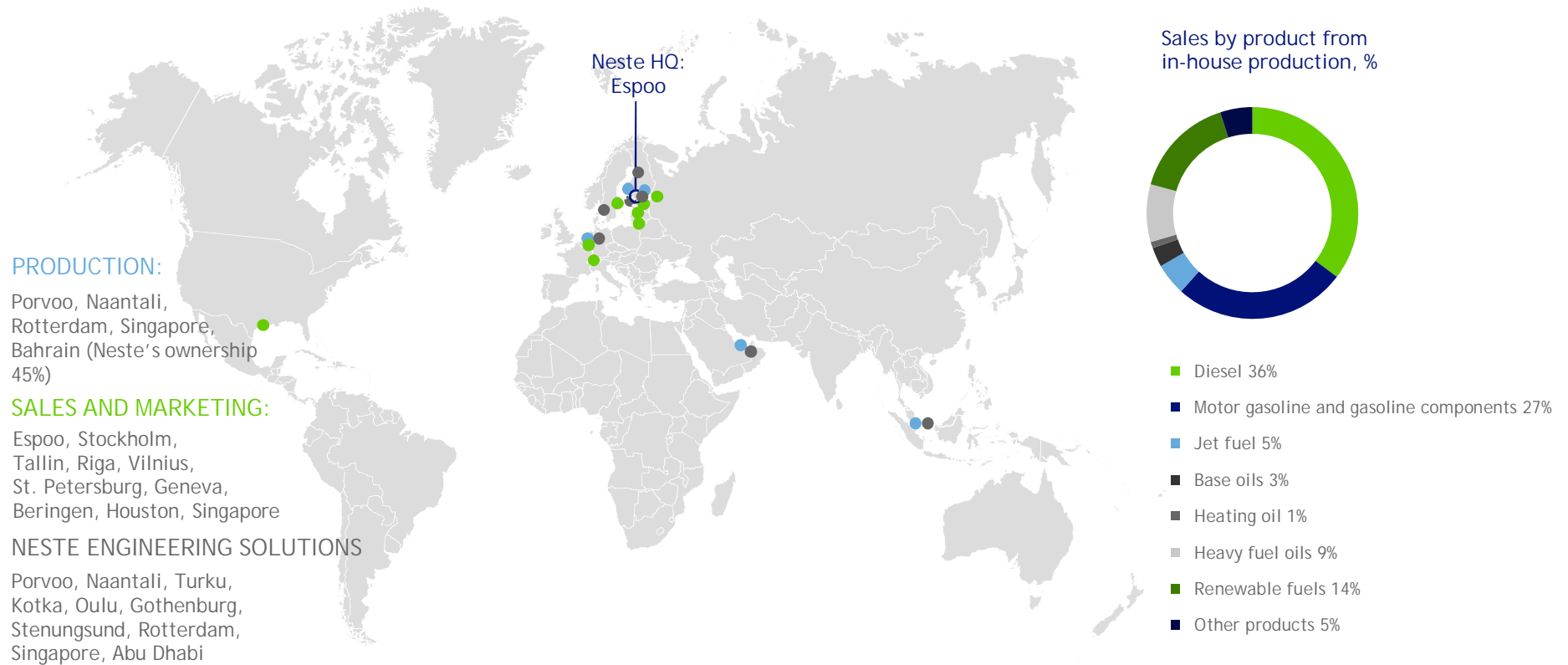
NESTE

Our journey from an oil refining company to the world's largest provider of renewable diesel



NESTE

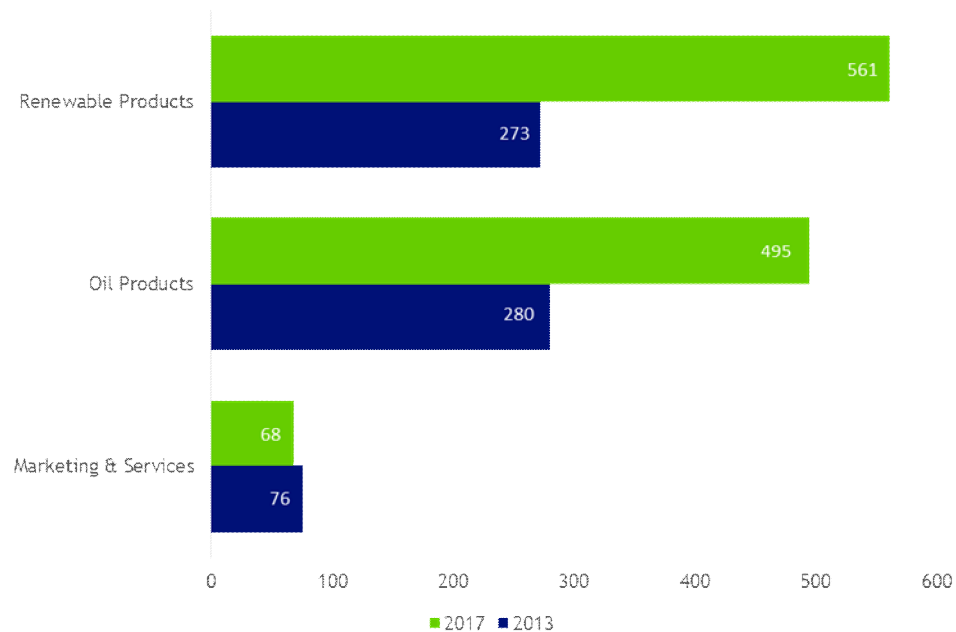
Global leader with a strong presence in the Baltic Sea area



NESTE

Neste's transformation is creating profitable results

Comparable EBIT of our business areas,
MEUR



Neste's share performance
2013-2017, EUR



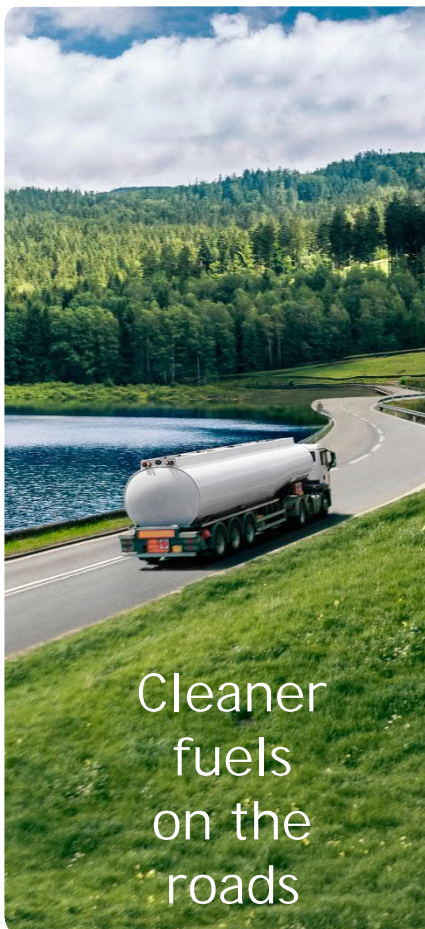
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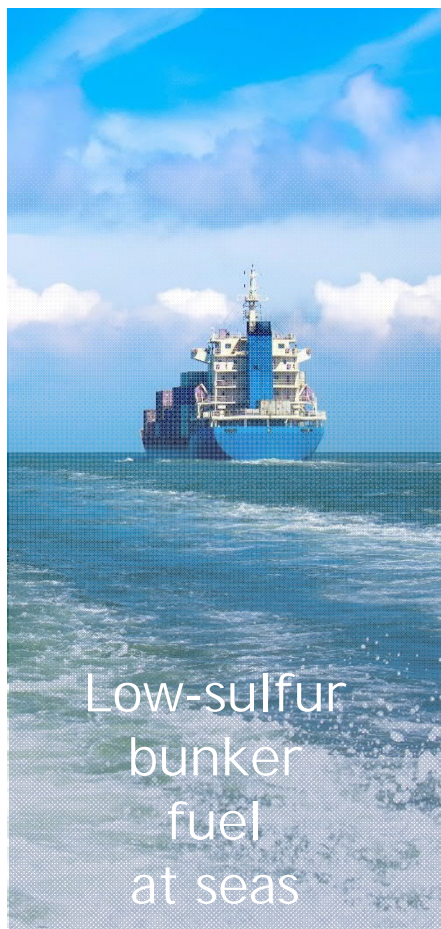
OUR VISION:

 We create
responsible choices
every day.

NESTLÉ



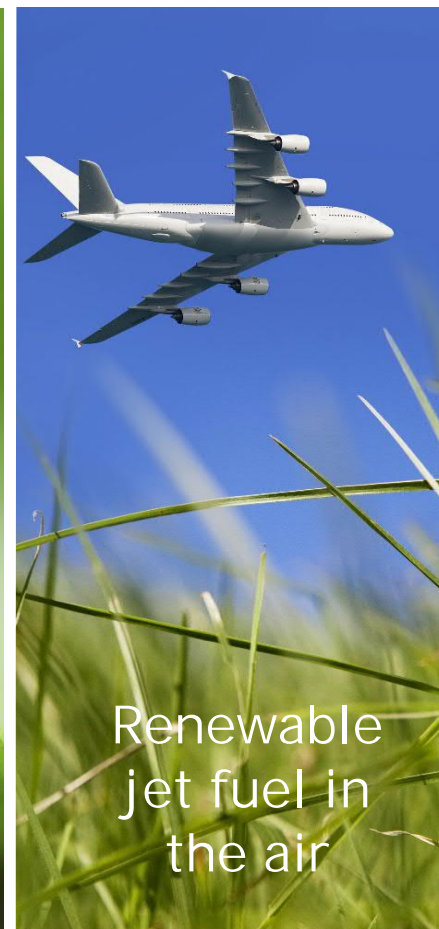
Cleaner
fuels
on the
roads



Low-sulfur
bunker
fuel
at seas



Renewable
solutions
for
chemicals
industry



Renewable
jet fuel in
the air

NESTE



Creating our own path with R&D and technology

44 M€
invested
annually into
R&D, of which
70%
into renewable
raw material
research

Over 1,000
dedicated
experts working
every day to
find responsible
choices

Cooperation
with over 20
research
institutions
around the
world

NESTE

R&D focuses on broadening waste and residue feedstock and the offering of responsible choices

16 March 2007

NESTE OIL AND STORA ENSO TO JOIN FORCES IN BIOFUEL DEVELOPMENT

Published in Releases and news

Neste Oil signed an agreement today with Stora Enso, an integrated paper, packaging, and forest products company, to join forces to develop technology for producing new-generation biofuels from wood residues to replace fossil fuels and cut greenhouse gases. The first step will be to design and build a demonstration plant at Stora Enso's Varkaus Mill in Finland. The plant, owned on a 50/50 basis by the two companies, is expected to start up in 2008 and will produce heat and electricity for use locally and crude biodiesel to be refined into commercial fuel at Neste Oil's refinery in Porvoo.

17 January 2017

Neste and Bioenergy La Tuque to start R&D cooperation on utilizing forest residues in biofuel production

Published in Releases and news

Neste Corporation
Press Release
17 January 2017 at 6 pm. (EET)

Neste and Bioenergy La Tuque to start R&D cooperation on utilizing forest residues in biofuel production



18 July 2018

Neste aiming to use waste plastic as a raw material for fuels and plastics

Published in Releases and news under Renewable solutions, Circular economy, Climate change, Sustainability
Plastics, Waste plastics



24 June 2014

Neste Oil strengthens its algae oil procurement program with a new off-take agreement

Published in Releases and news

Neste Oil Corporation

Press release

24 June 2014 at 9 a.m. (EET)

Neste Oil strengthens its algae oil procurement program with a new off-take agreement

09 June 2015

Neste and Total Fluides to cooperate on bio-based solvents and technical fluids

Published in Releases and news

Neste Corporation
Press release
9 June 2015 at 11:30 a.m. (EET)

Neste and Total Fluides to cooperate on bio-based solvents and technical fluids

22 January 2016

Oslo Airport the first in the world to offer Neste's renewable aviation fuel

Published in Releases and news

Neste Corporation
Press Release
22 January 2016 at 1:00 pm (EET)

Oslo Airport the first in the world to offer Neste's renewable aviation fuel



06 September 2016

Neste and Ikea of Sweden announce partnership to deliver renewable, bio-based plastics

Published in Releases and news

Neste Corporation
Press Release
6 September 2016 at 10 am. (EET)

Neste and Ikea of Sweden announce partnership to deliver renewable, bio-based plastics

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DECARBONIZING TRANSPORT

REQUIRES MULTIPLE SOLUTIONS

NESTE



CONFIDENTIAL

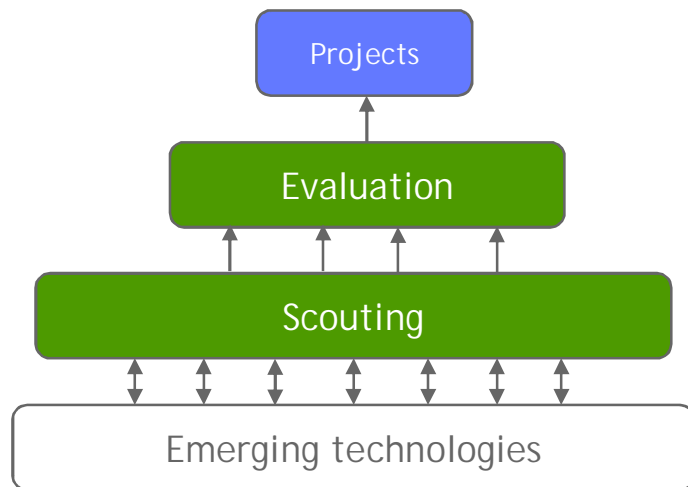


What's needed to make lignofuels profitable?

- Market demand for lignofuels by new regulation
 - REDII directive and others
 - Incentives
- Other preconditions for successful business
 - Competitive technology
 - Integration with existing infrastructure
 - Low-cost sustainable feeds

Neste has been very active with lignofuel technologies over 10 years

Scouting and evaluation



Projects

- Over 10 years continuous history
- Standalone concepts
 - Gasification + FT
 - Microbial oil
 - Catalytic thermochemical routes
- Co-processing of biocrude



NESTE

A close-up photograph of green leaves with prominent veins, serving as a background. A white rounded rectangle is centered on the left side, containing text and a bulleted list.

Neste's expectations for Bio4Fuels

- Partnering and networking
- High quality R&D
- Innovations in technology development

Questions and Answers

Thank you very much!

