







#### Keynote speech

Bart Strengers, Netherlands Environmental Assessment Agency (PBL)

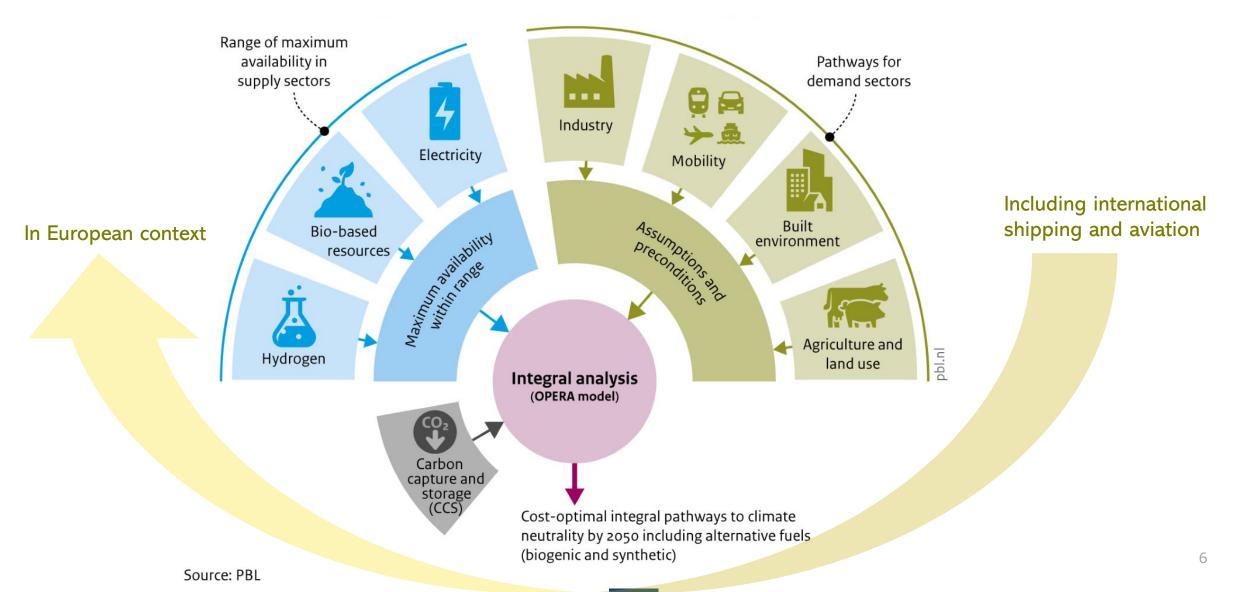


## 'Exploration of Pathways to Climate Neutrality 2050'



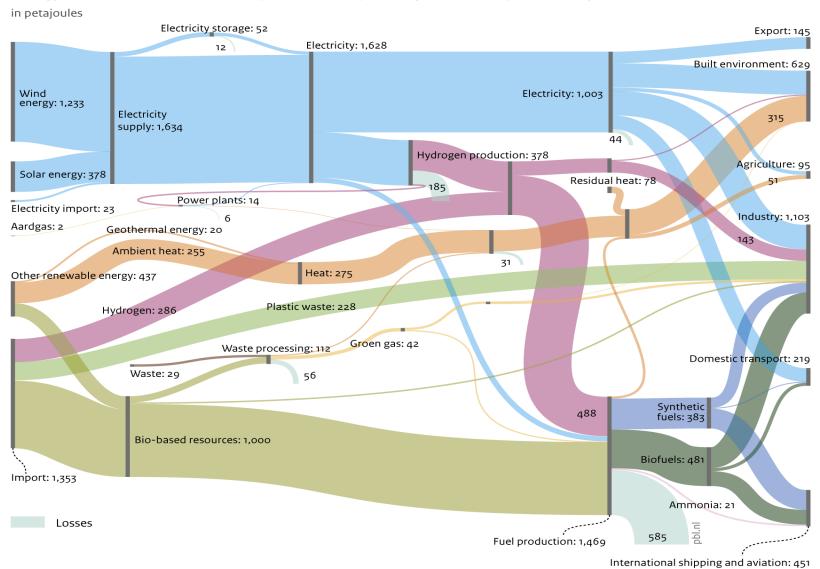


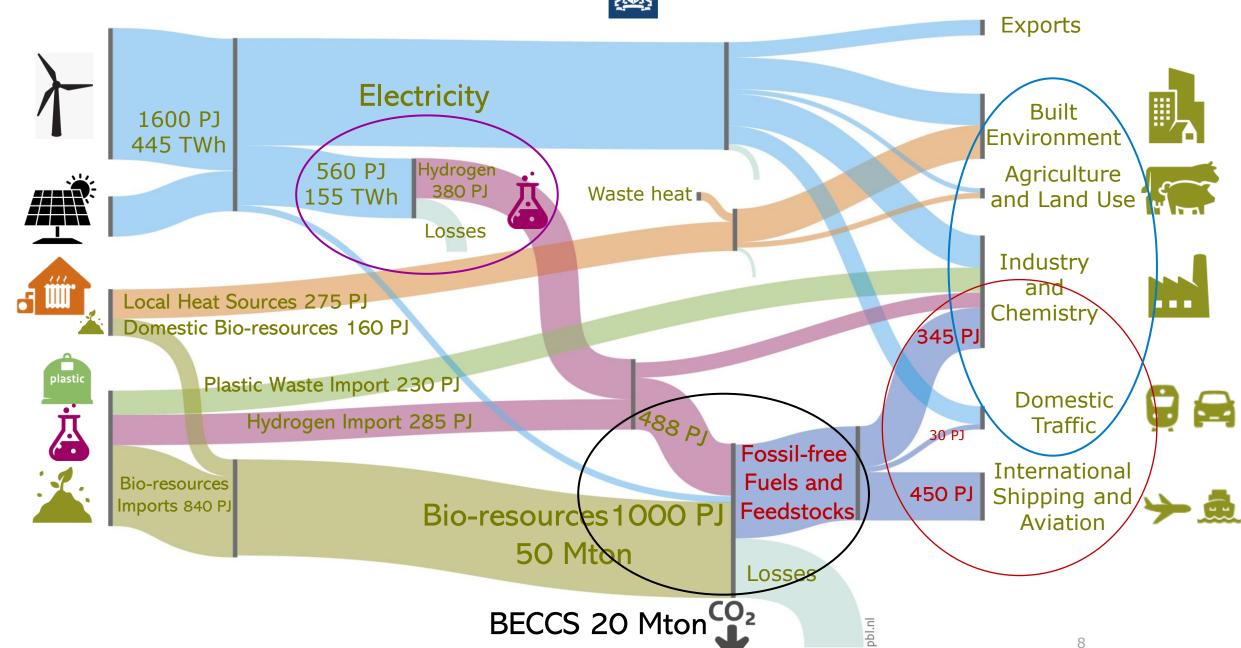
## 'Exploration of Pathways to Climate Neutrality 2050'





#### Energy flows Netherlands 2050, Specific-Wide pathway with CCS up to 20 Mt/yr (SR20)





# BECCS in fuel and feedstock production(?)

- Upscaling of advanced biofuels and biofeedstocks production which enable the potential for BECCS is unrealistic
- BECCS in power plants could be implemented more rapidly and at larger scales
- > But: carbon neutrality by 2050 more difficult or even unattainable
- > Regardless of your position: Substantial investments in advanced biofuel production with BECCS urgently needed!



Place greater emphasis on where and how these negative emissions can be achieved at scale.





# Thank you for your attention! Questions or remarks?

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Exploration of pathways towards climate neutrality 2050 | PBL Netherlands Environmental Assessment Agency

<u>Trajectverkenning klimaatneutraal 2050 | Planbureau voor</u> de Leefomgeving (pbl.nl)



# Towards a carbon neutral world

Opportunities processing and refining waste- and innovative feedstocks

Virpi Amoedo | Director Supply Chain Sustainability & Compliance | 23.01.2025 | Den Haag

#### **Neste in brief**

- We refine waste, residues and innovative raw materials into renewable fuels and sustainable feedstock for polymers and chemicals.
- We are the world's largest producer of renewable products. Our refinery in Rotterdam is currently the largest biorefinery in Europe.
- We are investing significantly in expanding production capacity in the Netherlands to 2.7 million tons in 2026: €1.9 billion in Rotterdam.
- In 2023, we helped our customers achieve a CO<sub>2</sub>
  emission reduction of 11 Mt/a using our
  renewable products. we aim to reach 20 Mt/a by
  2030.





## Neste Rotterdam: Europe's largest biorefinery







#### Solutions for three main markets

Road Transportation

Neste MY Renewable Diesel™, made from 100% renewable raw materials, is a lower-emission solution to replace fossil fuel in all diesel-powered engines.

**Aviation** 

Neste MY Sustainable Aviation
Fuel™, made from sustainably
sourced 100% renewable waste
and residue raw materials, is a
solution for replacing fossil jet fuel
to reduce aviation related

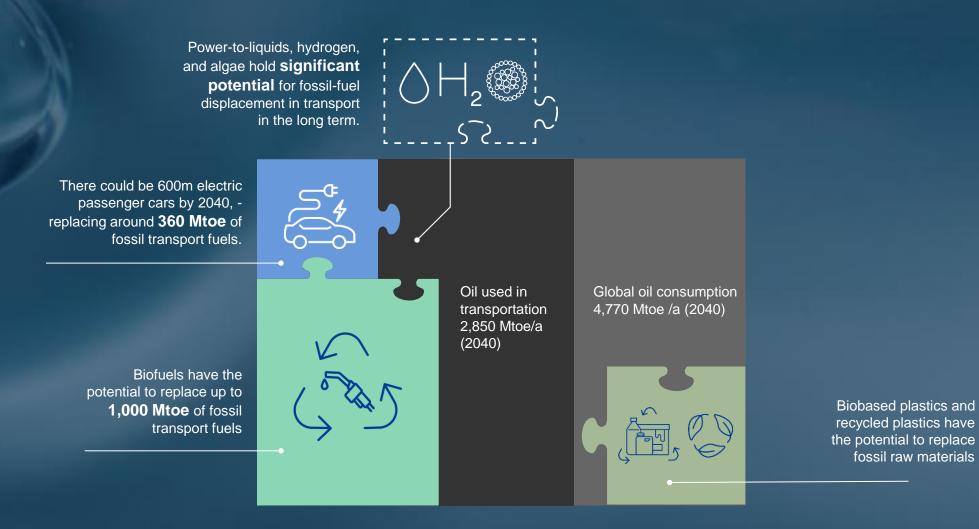
emissions.

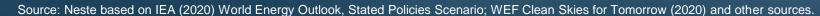


Neste RE™ is Neste's solution for the plastics and chemicals sectors to help them reduce crude oil dependency, combat climate change and tackle the plastic waste challenge.

NESTE

#### Renewable solutions provide a significant contribution







# Extensive portfolio of globally-sourced renewable raw materials



Animal fat from food industry waste



Used cooking oil



Vegetable oil processing waste and residues (e.g. PFAD, POME, SBEO)



Fish fat from fish processing waste



Technical corn oil



Tall oil based raw materials





Rapeseed oil



Soybean oil

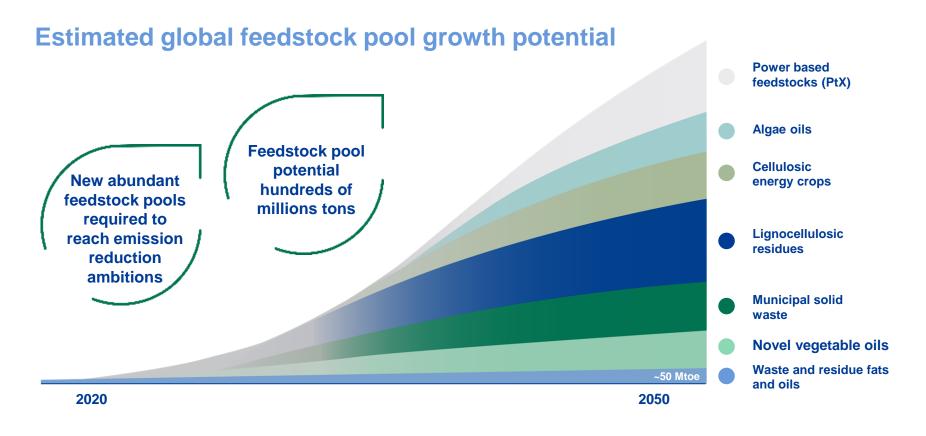




Camelina oil in specific projects only



# Significant long-term growth potential of global feedstock pool via scale up of new technologies



# Innovation on several fronts



Chemical recycling



Power-to-X solutions



Renewable hydrogen



Lignocellulosic feedstocks



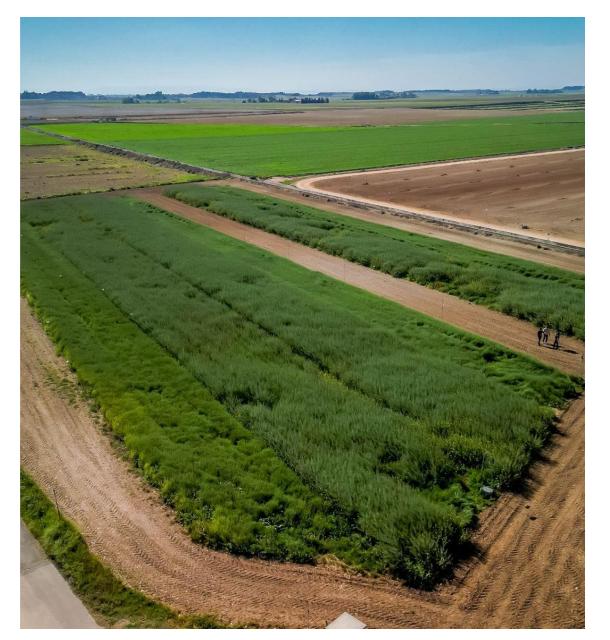
Algae oils





#### **Novel Vegetable Oils (NVO)**

- Innovative regenerative agricultural concepts resulting in:
  - Additional sustainability benefits;
  - Additional raw material volumes;
  - Additional economic benefits for the agricultural sector.
- Pilots and trials with focus on: water, emissions, soil health, biodiversity, social.
- ISCC EU certificate with actual values





#### Policy instruments are needed

- 1. Ambitious climate policy is crucial, and an opportunity for European/Dutch industry
- Market creation: mandates (norms) and incentives to make sustainable solutions competitive and scalable.
- 3. Optimally use all available waste and residue streams. Unlock new innovative raw materials. Remove outdated regulatory obstacles











