Renewable fuels
Reducing emissions of the existing fleet

Mobility is changing. Sales of electric vehicles are accelerating, and hydrogen is taking its first steps. The composition of the vehicle fleet is changing, but a more comprehensive shift will take time. More sustainable solutions are also needed for vehicles that are already on the road today and in the foreseeable future.

Road transport in Europe

The average age of the European fleet[1]

11.5 years
Passenger cars

11.6 years
Light goods vehicles

13 years
Medium and heavy goods vehicles

11.7 years
Buses

[1]https://www.acea.auto/figure/average-age-of-eu-vehicle-fleet-by-country/

NESTE

An unequal landscape

The average age of vehicles varies a lot between European countries. The difference can be explained by **average income levels, the number of company cars, as well as local taxes and incentives.**

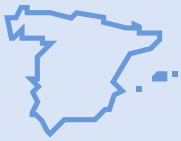
Examples of the average age of fleets

Passenger car fleet

Romania
16.5 years

Austria
8.3 years

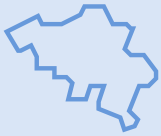
Light goods vehicles



Spain
13 years

Germany
8.1 years

Medium and heavy goods vehicles



Belgium
15.8 years

Austria
6.4 years

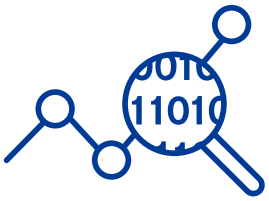
Buses

Greece
19.9 years

Sweden
6.6 years

NESTE

Averages don't provide the full picture



Let's take a closer look at the older fleets in different European countries.

There are many older cars within the European fleets

	Vehicle Fleet	Vehicles older than 10 years	Percentage of vehicles older than 10 years
Poland	24,360,166	19,530,394	80%
Romania	7,274,728	5,812,225	80%
Lithuania	1,285,743	1,006,507	78%

In many Member States, a high proportion of medium and heavy goods are 10 years or older

Greece	226,913	222,374	97%
Estonia	39,848	30,199	75%
Italy	946,393	720,286	76%

NESTE

A substantial percentage of vehicles are more than 15 years old

Within the category of older vehicles; many are **more than 15 or 20 years old.** For example, in Belgium, a substantial percentage of vehicles are over 17 years old[2], despite having one of the youngest average fleets.

Cars **10.8%**

Goods vehicles **12.54%**

Buses **14.8%**

Even assuming greater uptake of electric and hydrogen-powered vehicles, a substantial part of the vehicle fleet **will still be powered by internal combustion engines in 2030 and beyond.**

For example, according to a European Commission Impact Assessment Study[3]

75%

More than 75% of passenger cars will be **diesel or gasoline-powered in 2030**

80%

80% or more of all light goods vehicles will be **diesel-powered in 2030**

90%

90% of all heavy goods vehicles will be **diesel-powered or diesel hybrids** in 2030, and 35-40% of all heavy goods vehicles will be **diesel-powered or diesel hybrids** in 2050

[2]https://statbel.fgov.be/en/themes/mobility/traffic/vehicle-stock
[3]https://ec.europa.eu/clima/sites/clima/files/eu-climate-action/docs/impact_part2_en.pdf

NESTE

Why we need sustainable fuels post-2040

In 2030, the vast majority of vehicles will continue being **powered by internal combustion engines**

The average age of vehicles is increasing[4], and this trend is likely to continue

The majority of the EU fleet in 2040 and a part of the fleet in 2050 will be **diesel- or gasoline-powered**, particularly for heavy goods vehicles

Advantages of Neste MY Renewable Diesel™

Proven technology

Availability of sustainable raw materials

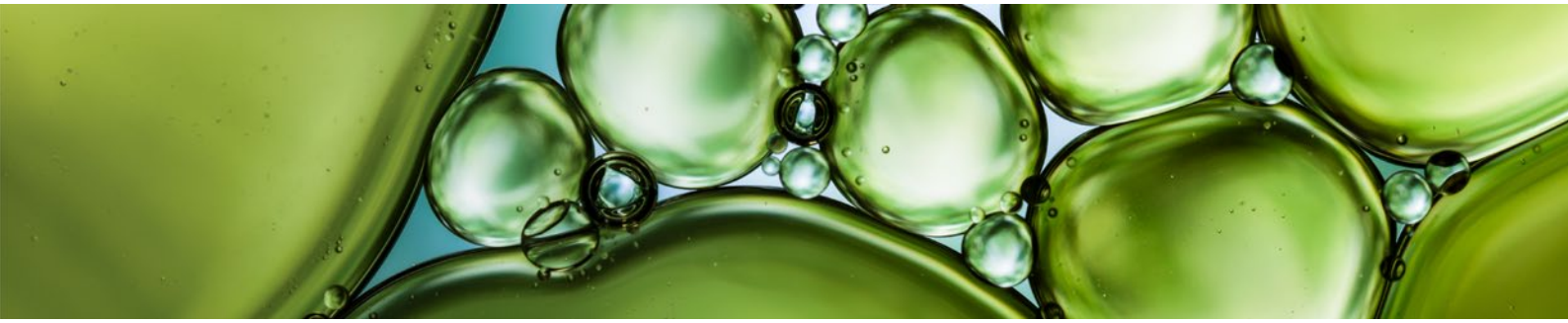
No new infrastructure needed

Up to 90%* reduction

in GHG emissions over the life cycle of the fuel compared to fossil diesel.

Large-scale production

Available now



[4]https://www.eea.europa.eu/data-and-maps/indicators/average-age-of-the-vehicle-fleet/average-age-of-the-vehicle-8t
*Calculation method: EU Renewable Energy Directive II (2018/2001/EU)

NESTE