

---

## CO2 emissions from cars: facts and figures (infographics)

**Ever wondered how much CO2 is emitted by cars or whether electric vehicles really are a cleaner alternative? Check out our infographics to find out.**

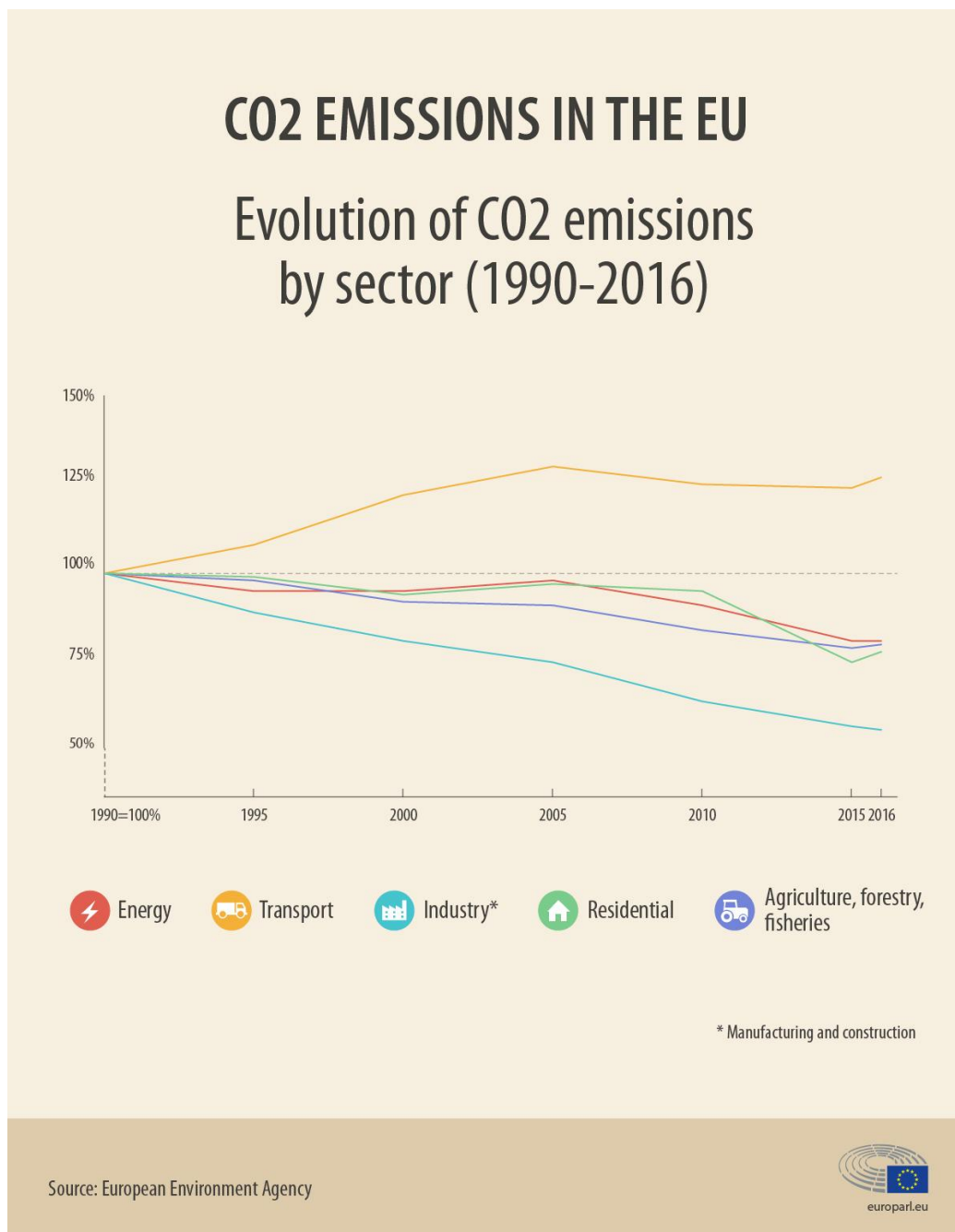
Transport is responsible for nearly 30% of the EU's total CO2 emissions, of which 72% comes from road transportation. As part of [efforts to reduce CO2 emissions](#), the EU has set a goal of reducing emissions from transport by 60% by 2050 compared to 1990 levels.

### Transport emissions on the rise

Significantly reducing CO2 emissions from transport will not be easy, as the rate of emission reductions has slowed. Other sectors have cut emissions since 1990, but as more people become more mobile, CO2 emissions from transport are increasing.

Efforts to improve the fuel efficiency of new cars are also slowing. After a steady decline, newly registered cars emitted on average 0.4 grammes of CO2 per kilometre more in 2017 than the year before.

To curb the trend, the EU is introducing [new CO2 emission targets](#), which aim to cut harmful emissions from new cars and vans. MEPs adopted the new rules during the plenary session on 27 March. On 18 April, MEPs also approved a proposal to [cut CO2 emissions from new trucks](#) by 30% by 2030 compared to 2019 emission levels.



Evolution of CO2 emissions in the EU by sector (1990-2016)

### Cars major polluters

CO2 emissions from passenger transport vary significantly depending on the transport mode. Passenger cars are a major polluter, accounting for 60.7% of total CO2 emissions from road

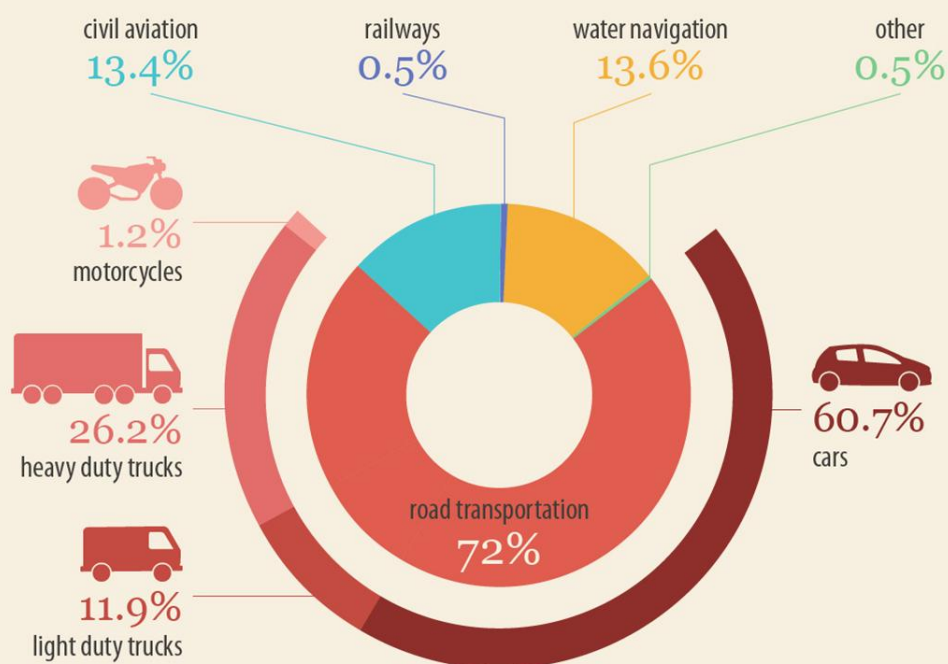
transport in Europe.

However, modern cars could be among the cleanest modes of transport if shared, rather being driven alone.

With an average of 1.7 people per car in Europe, other modes of transport, such as buses, are currently a cleaner alternative.

# TRANSPORT CO2 EMISSIONS IN THE EU

## Emissions breakdown by transport mode (2016)



Source: European Environment Agency



Cars account for 60% of transport CO2 emissions

### Are electric cars cleaner?

There are two ways to reduce CO2 emissions from cars: by making vehicles more efficient or by changing the fuel used. Today, the majority of cars in Europe use petrol (52%); however,

electric cars are gaining traction.

Despite electric cars' small market share (about 1.5 % of new registered passenger vehicles), the number of new electric car registrations in the EU has been increasing steadily over the last few years. Sales of battery electric vehicles in the EU rose 51% in 2017 compared to the year before.

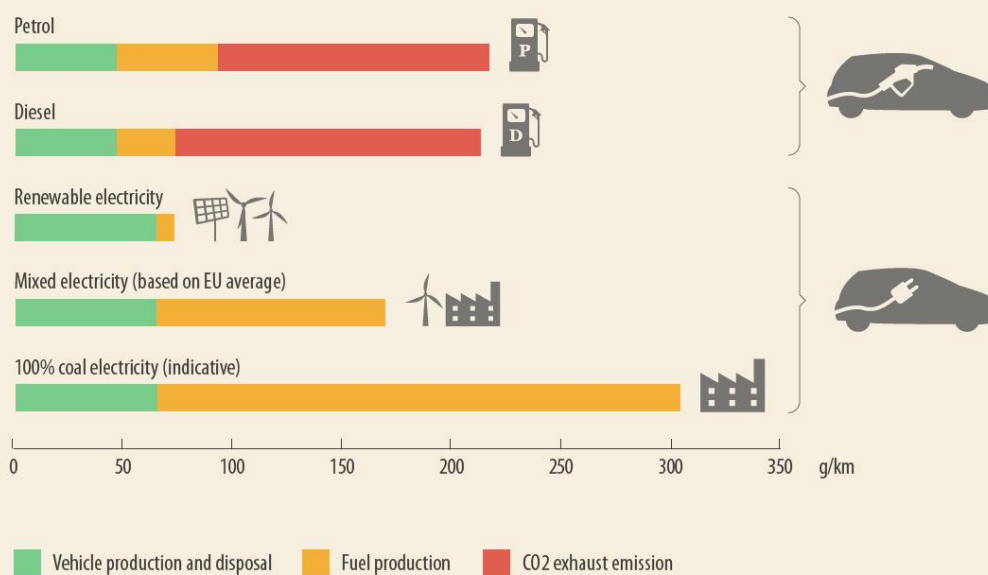
To calculate the amount of CO<sub>2</sub> produced by a car not only the CO<sub>2</sub> emitted during use must be taken into account, but also the emissions caused by its production and disposal.

The production and disposal of an electric car is less environmentally friendly than a car with an internal combustion engine and the level of emissions from electric vehicles varies depending on how the electricity is produced.

However, taking into account the average energy mix in Europe, electric cars are already proving to be cleaner than vehicles running on petrol. As the share of electricity from renewable sources is set to increase in the future, electric cars will become even less harmful for the environment.

# TRANSPORT CO2 EMISSIONS IN THE EU

## Range of life-cycle CO2 emissions for different vehicle and fuel types (2014)



Sources: European Environment Agency; TNO



Car CO2 emissions per fuel type and for electric cars

### Other EU measures to cut greenhouse gas emissions

Under the Paris agreement on climate change, the EU committed to cut greenhouse gas emissions by at least 40% in all economic sectors by 2030 compared to 1990 levels.

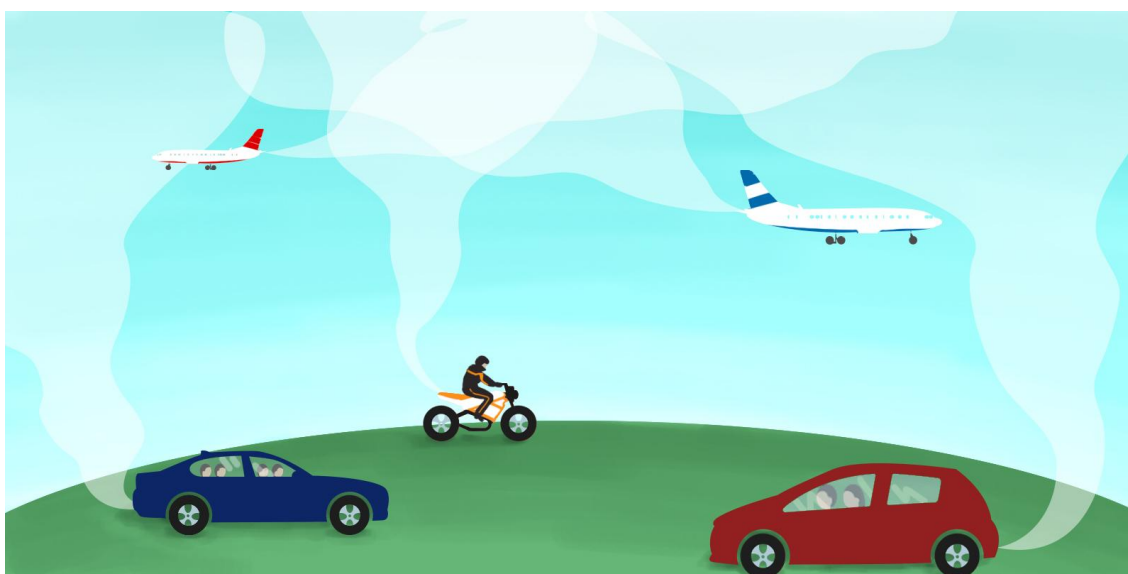
In addition to setting targets for car emissions, MEPs have adopted the following measures to help the EU meet this commitment:

- The European Emissions Trade Scheme for the industry's emissions
- Binding national targets to cut greenhouse gas emissions from non-industrial sectors
- The use of forests to offset carbon emissions

Check out our infographic on the [EU's progress towards reaching its 2020 climate change targets](#).

## Find out more

[Procedure file: emission performance standards for new passenger cars and for new light commercial vehicles](#)



CO2\_emissions\_cover\_pic