

Article

Road transport and air emissions

Contribution of road transport to greenhouse gas and air pollutant emissions – further analysis of the UK Environmental Accounts data.

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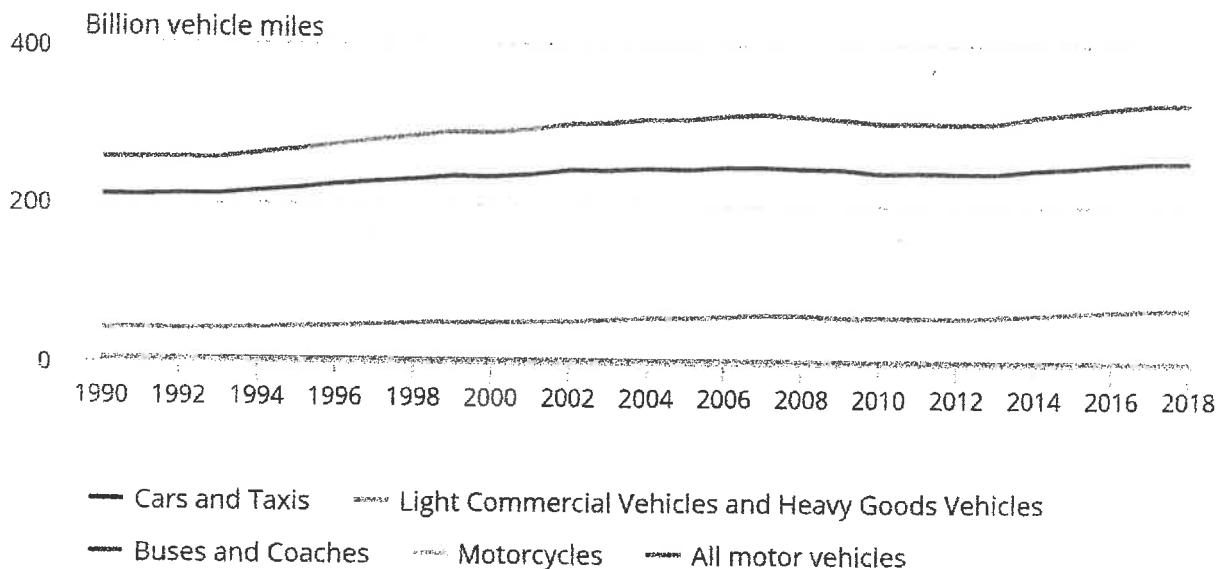
1. Main points
2. 0.5% of all licensed vehicles in the UK in 2018 were ultra-low emissions vehicles
3. Road traffic increased by 29% from 1990 to 2018
4. Diesel use for road transport overtook petrol use from 2005
5. Greenhouse gas emissions from road transport make up around a fifth of UK greenhouse gas emissions

Figure 1: Road traffic increased by 29% from 1990 to 2018

Road traffic by vehicle type, Great Britain, 1990 to 2018

Figure 1: Road traffic increased by 29% from 1990 to 2018

Road traffic by vehicle type, Great Britain, 1990 to 2018



Source: Department for Transport - National Road Traffic Survey

Notes:

1. Data for 1993 onwards are not directly comparable with the figures for 1992 and earlier.

4 . Diesel use for road transport overtook petrol use from 2005

Total fuel use for road transport has remained relatively stable between 1990 and 2017 as the fuel efficiency of new vehicles has improved^{1,2}. However, which fuel is used (predominantly petrol or diesel^{3,4}) has changed significantly.

Figure 2 shows that petrol use in the UK has fallen from 27 million tonnes of oil equivalent (Mtoe) in 1990 to 13 Mtoe in 2017, while the use of diesel has increased from 11 Mtoe in 1990 to 27 Mtoe in 2017. Diesel use exceeded petrol use from 2005 onwards.

These changes can be influenced by taxes, for example, reduced Vehicle Registration Tax for all cars with low carbon dioxide (CO₂) emissions and a tax cut on diesel fuel duty in 2001⁵, was likely to have encouraged motorists to trade in their petrol cars for diesel vehicles, which tend to produce less CO₂.

Notes for: 0.5% of all licensed vehicles in the UK in 2018 were ultra-low emissions vehicles

1. For more information see page 7 of [European Environment Advisory: Explaining road transport emissions](#).
2. Vehicle registrations, road traffic, fuel use and air emissions will likely vary by geographical location within the UK. [Vehicle registration](#) and [road traffic estimates](#) are available at lower geographical levels. Data for air emissions and petrol and diesel use on a residency basis are not available below UK level.
3. Sustainable Development Goals (SDGs) were introduced in 2015 and are a universal set of 17 Goals designed to end poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030. [More information about SDGs](#) can be found on the UN website. The [UK data for SDGs](#) are available on the online reporting platform.
4. Ultra low emission vehicles (ULEVs) are vehicles that emit less than 75 grams of carbon dioxide (CO₂) from the exhaust for every kilometre travelled and typically refer to battery electric, plug-in hybrid electric and fuel cell electric vehicles.
5. [Department for Transport: Vehicle licensing statistics](#)

3 . Road traffic increased by 29% from 1990 to 2018

Data from the Department for Transport (DfT) show that road traffic in Great Britain, measured in vehicle miles, increased by 29% from 1990 to 2018, to stand at 328 billion miles in 2018 (Figure 1). Just over three-quarters of road traffic in 2018 was from cars and taxis.