

Decarbonising road transport



LowC^{VP}
Low Carbon Vehicle Partnership

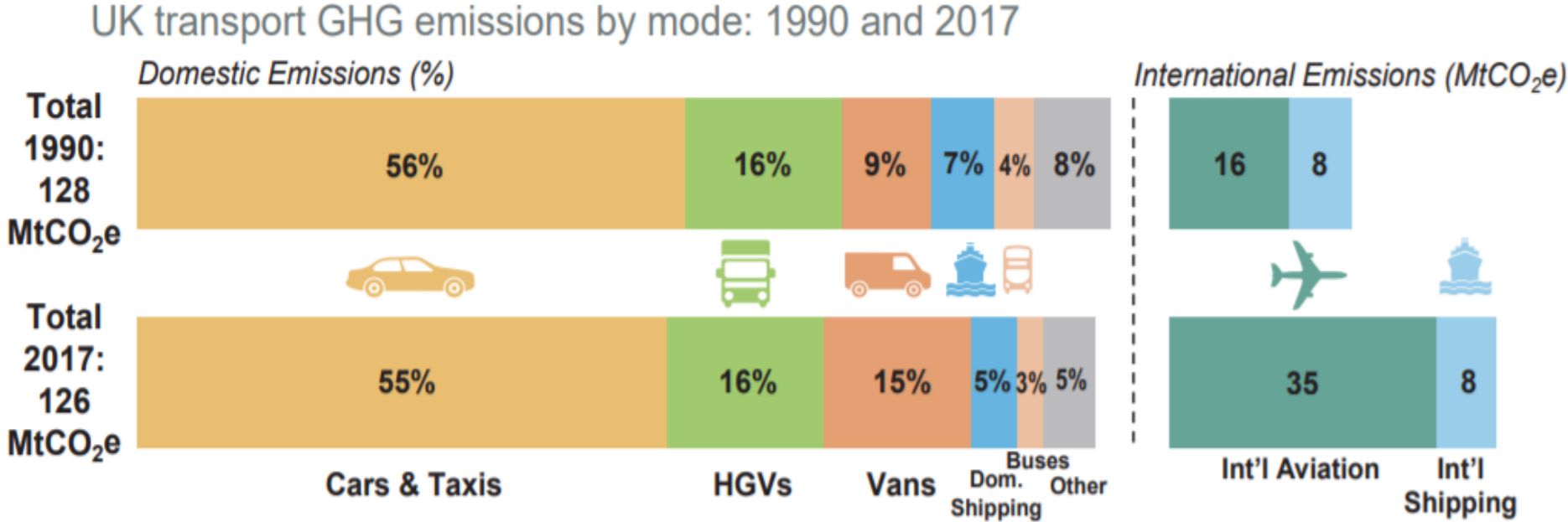


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Managing Director

Decarbonising Road Transport?

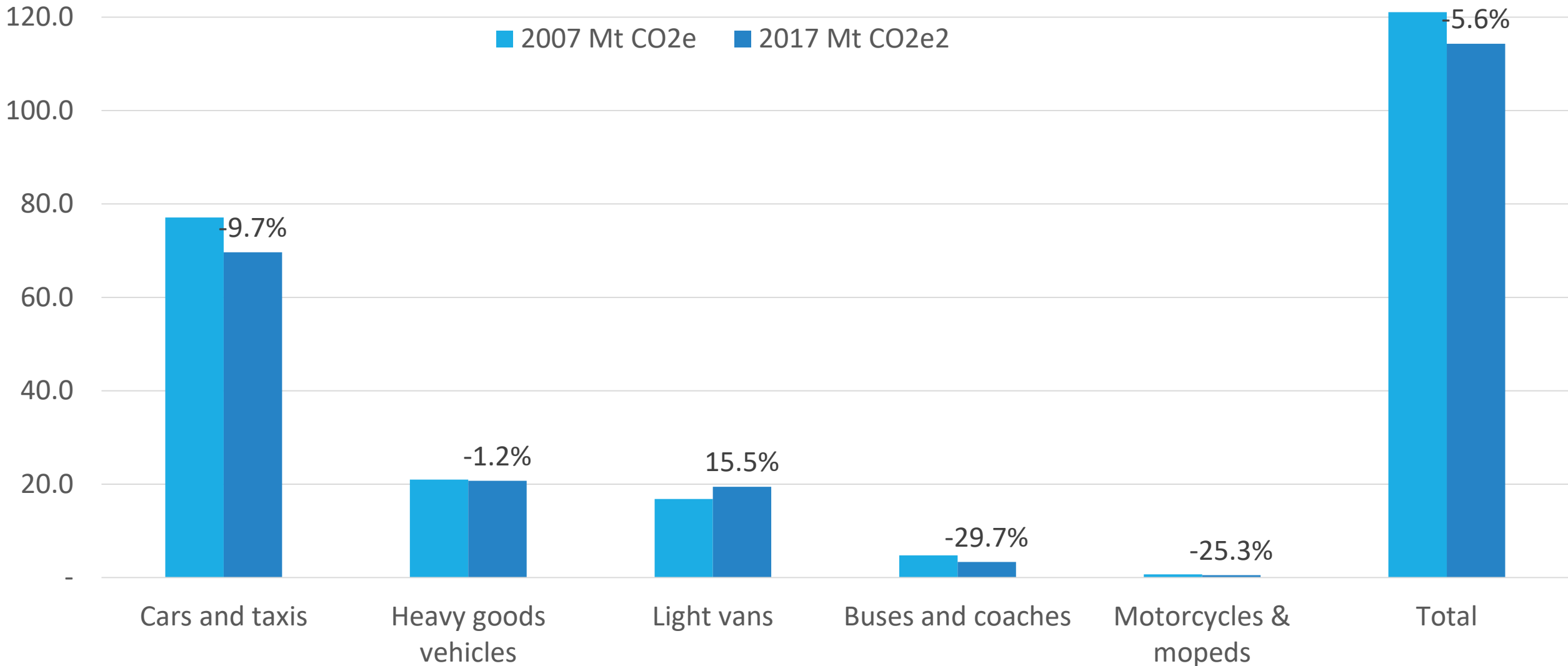
GHG emissions by transport mode

- Since 1990, emissions from rail, buses and domestic shipping decreased, whereas van emissions increased by 67%. Van traffic has doubled since the early 1990s.

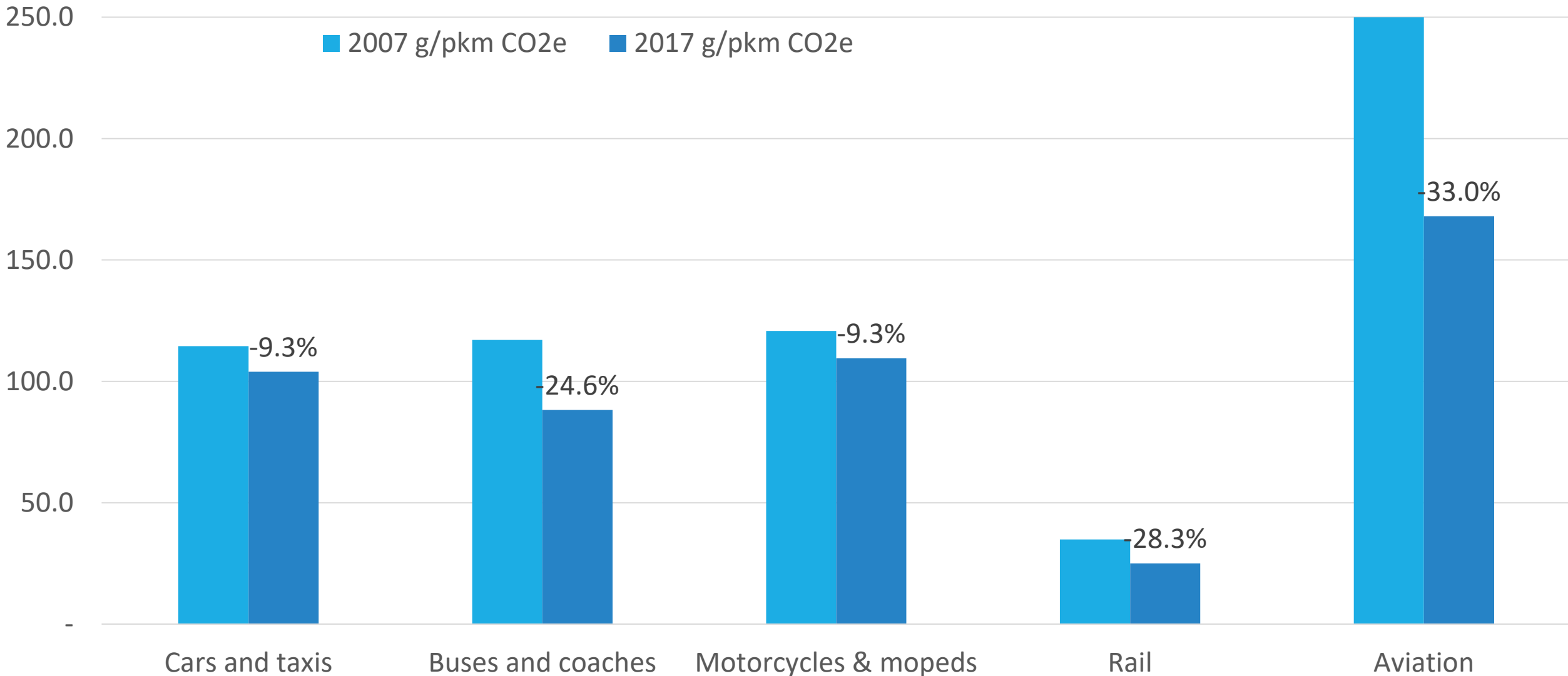


- International aviation emissions, which are not part of the UK's domestic emissions, have more than doubled since 1990.

A decade of progress? Road sector contribution



A decade of progress? Travel mode intensity



Getting the right metrics for decarbonising journeys

- Impact of a journey is product of -
People (or tonnes) x distance travelled x carbon intensity

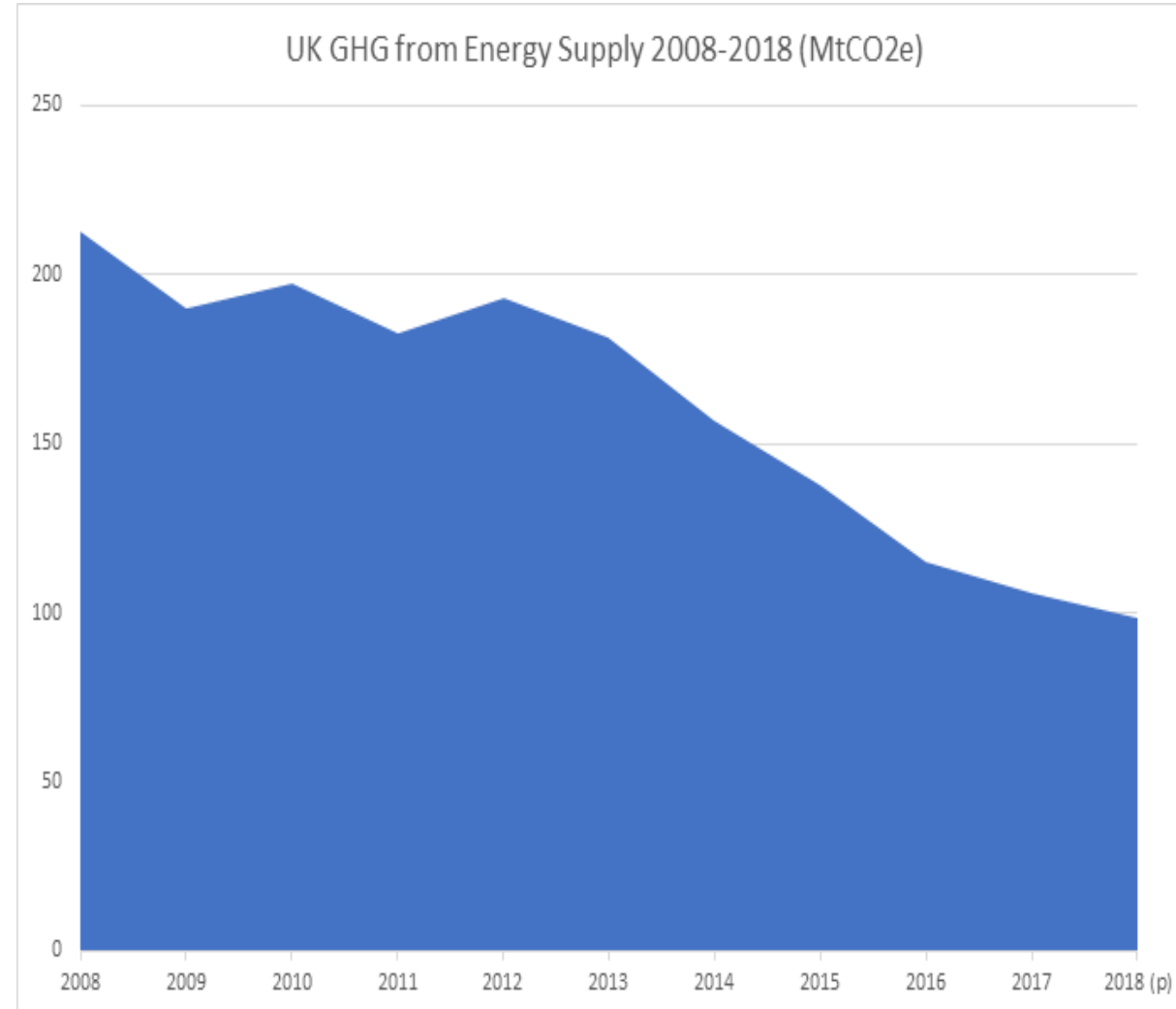
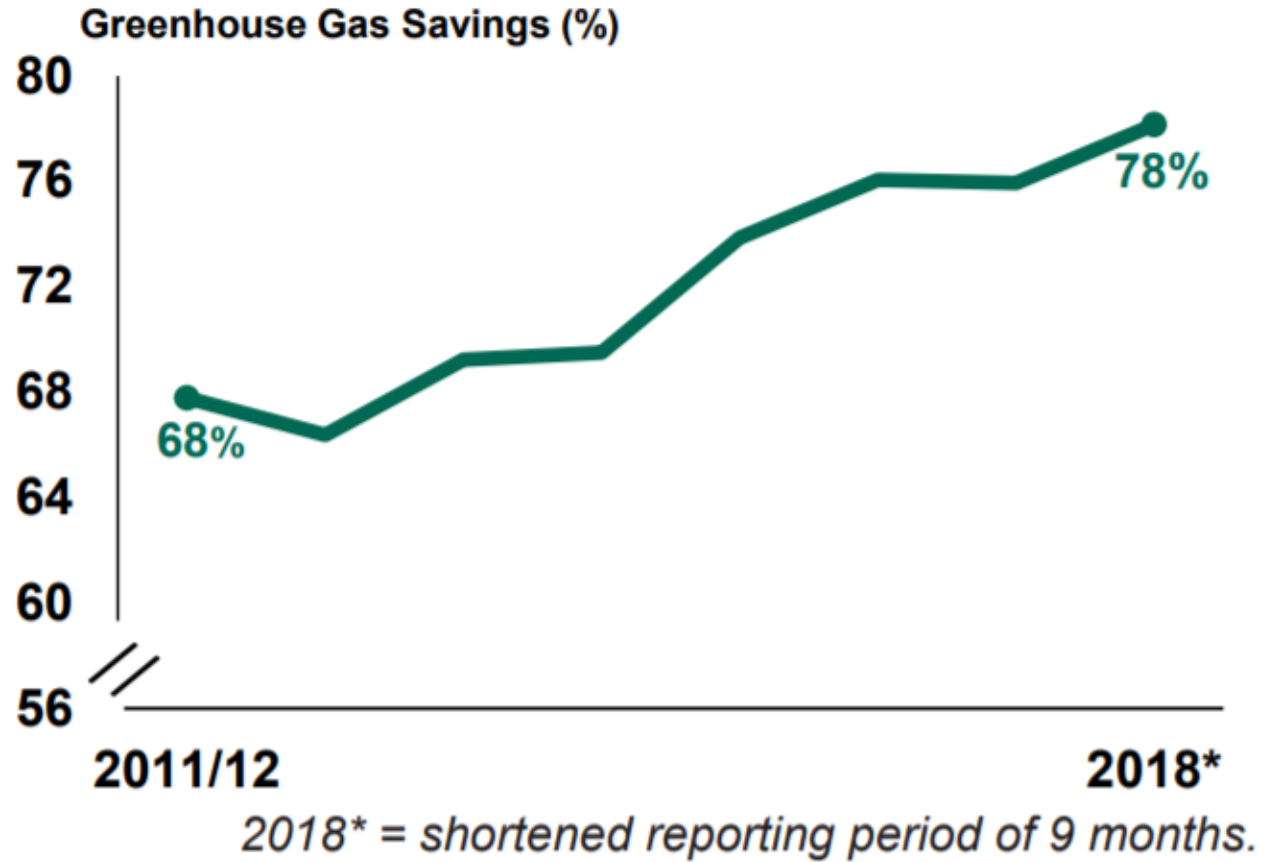
Carbon intensity of a journey

- Energy we use for the vehicle (g/kWhr)
- Efficiency of the vehicles (kWhr/km)
- Capacity of the vehicle (people per vehicle)

We need metrics and policies that drive improvements in every area and for every journey type

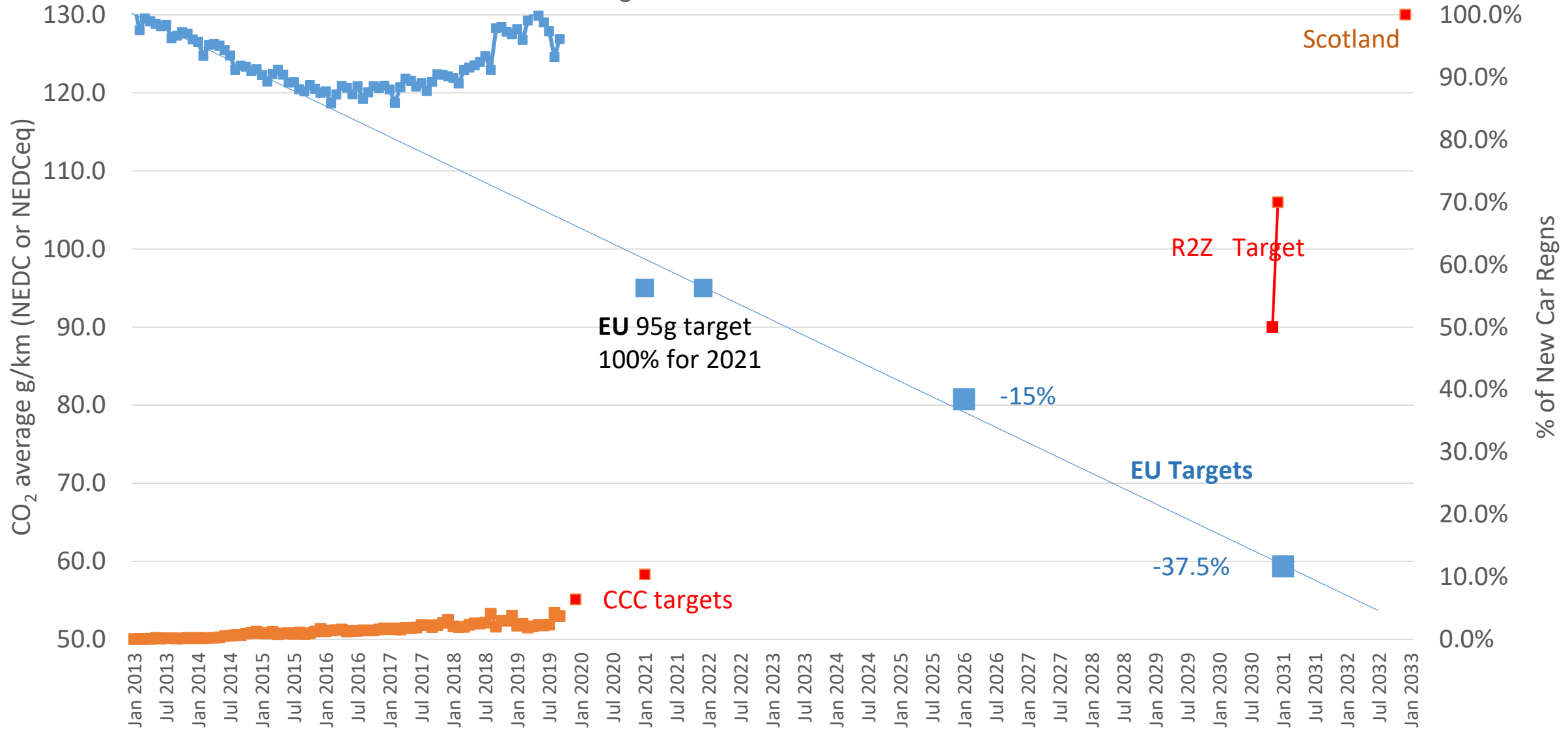
Energy for transport

Average GHG saving of UK renewable fuel:
2011/12 to 2018*

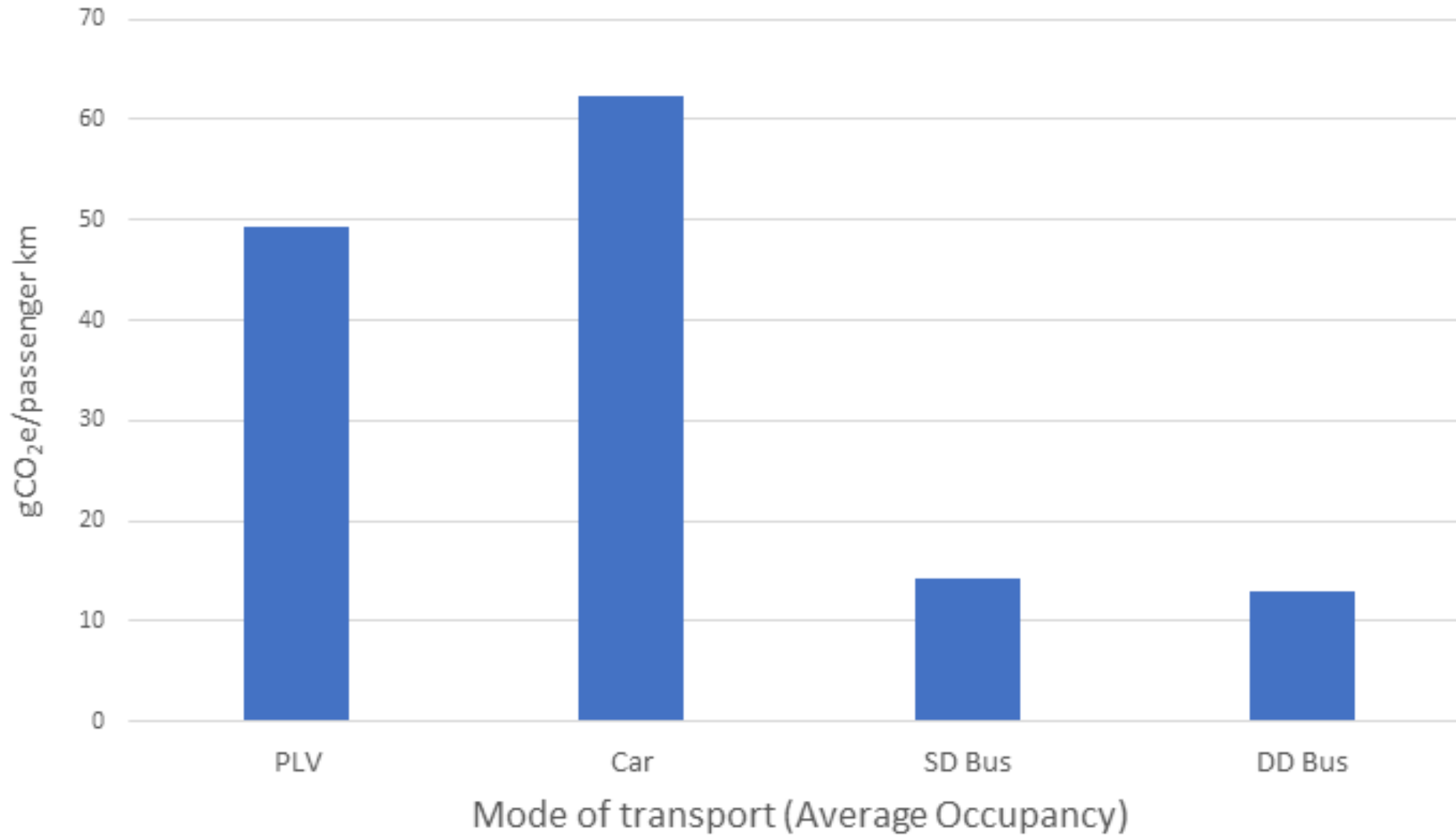


New Car CO2 and %ULEV car regns - data to Sep 2019 (source DfT VEH0150)

Average New car CO2 ULEV % of sales

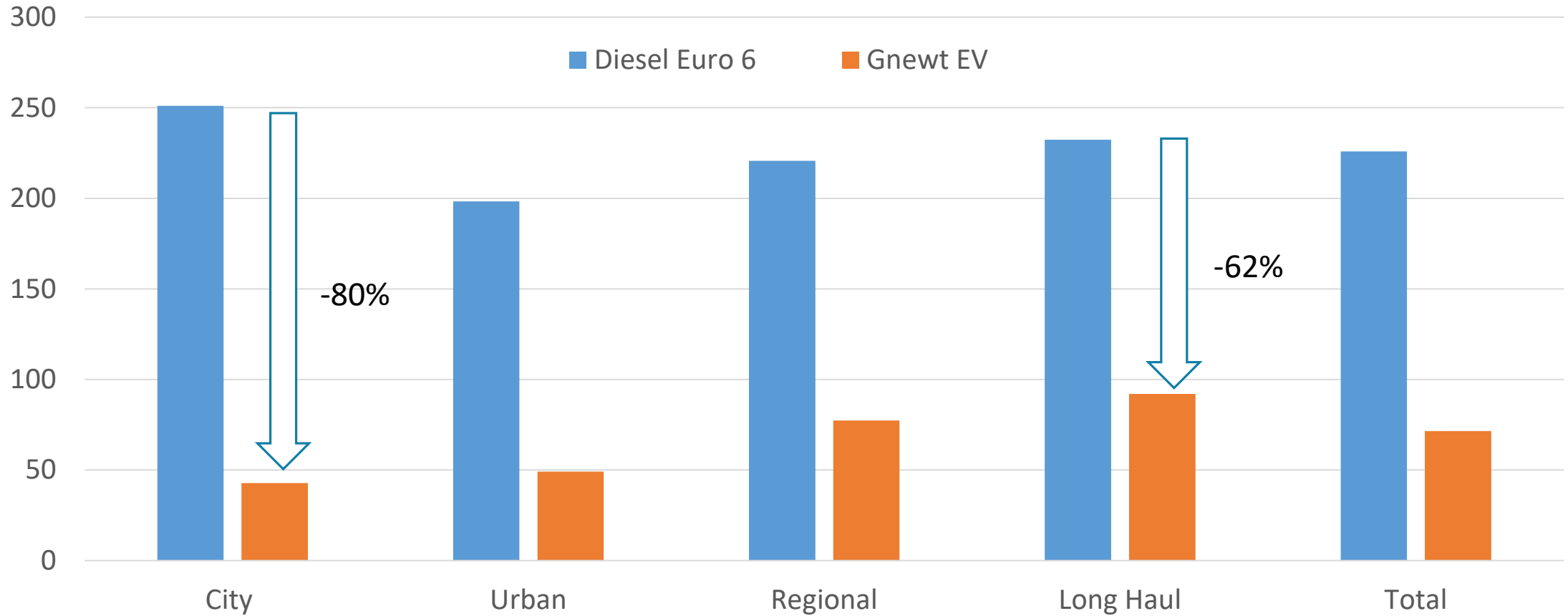


TOTAL Life Cycle CO₂e Emissions per PASSENGER electric kilometer travelled [gCO₂e/km]



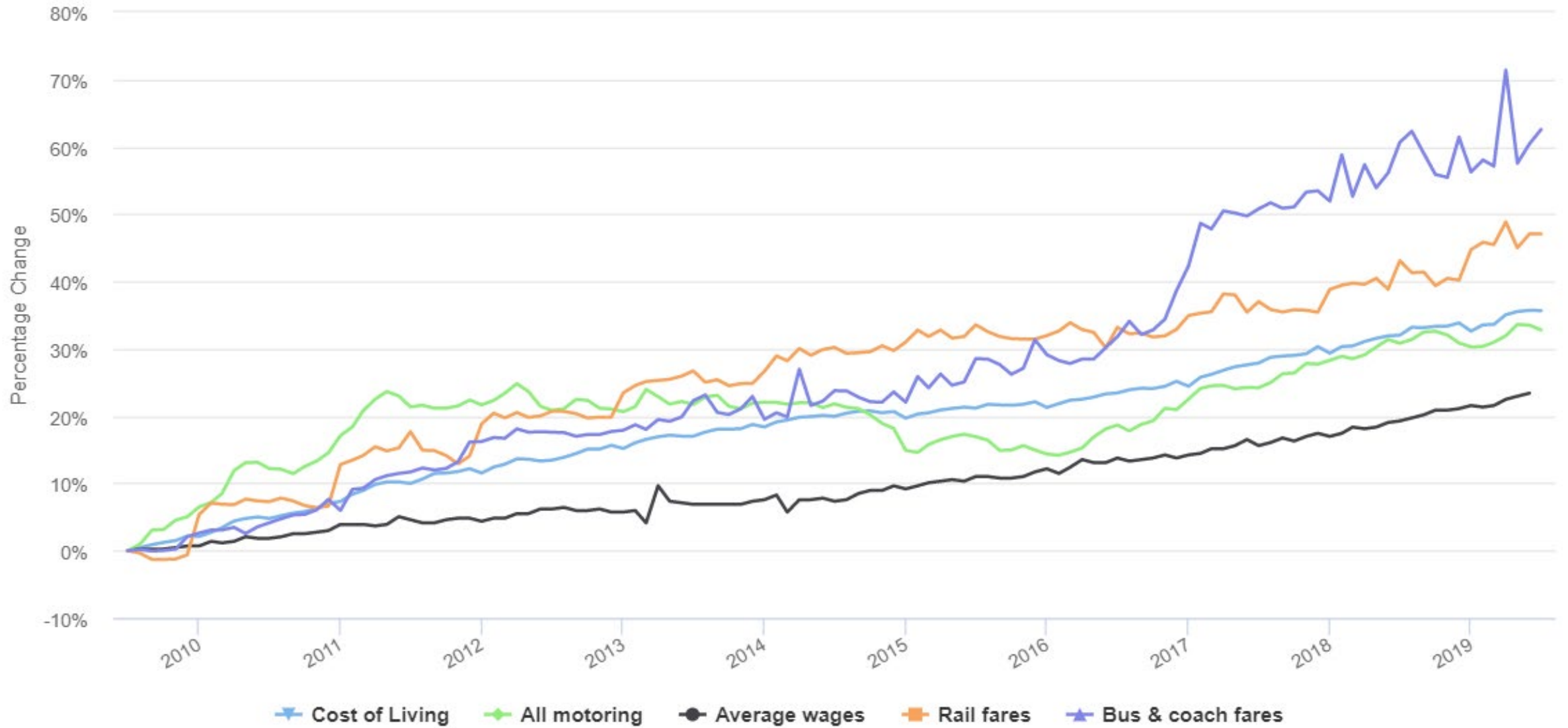
Well-To-Wheel CO₂e – by journey type

2t Delivery vans - WTW CO₂e g/km



Change in the cost of travel in the last 10 years

Motoring costs, bus rail and coach fares, wages and the cost of living



RAC Foundation (Source: ONS)