

GTR traction

GTR traction data table

Traction type	April 2018 to March 2019	April 2019 to March 2020	April 2020 to March 2021
Traction electricity	0.599 vehicle km per kilowatt hour	0.662 vehicle km per kilowatt hour	0.663 vehicle km per kilowatt hour
Traction diesel (Southern only)	1.63 vehicle km per litre	1.61 vehicle km per litre	1.70 vehicle km per litre
Traction scope 1 emissions (Southern only)	208,233 tonnes CO ₂ e	193,807 tonnes CO ₂ e	159,751 tonnes CO ₂ e
Traction scope 2 emissions	12,842 tonnes CO ₂ e	12,853 tonnes CO ₂ e	11,870 tonnes CO ₂ e

Data for GTR traction is an accumulation of traction figures across Southern, Gatwick Express, Thameslink and Great Northern.

Energy efficiency is measured as vehicle kilometres per kilowatt hour (kWh) for electric traction units, and vehicle kilometres per diesel litre for diesel traction units. 'Vehicle km' is the fleet mileage converted into kilometres and then multiplied by the number of vehicles. For example, if the Class 455 fleet covers 410,000 kilometres in a period (approximately 260,000 miles), this is the equivalent of 1,640,000 vehicle km (410,000 multiplied by 4 = 1,640,000). The higher the number, the more energy efficient the vehicle is.

Total traction electricity consumption has declined across GTR reflecting the various reductions in services operated over the last year in reaction to the coronavirus pandemic. This is most notable in the early periods of 2021.

Diesel consumption on Southern also shows an improvement in fleet efficiency. As well as reduced services during the pandemic, there have also been changes to the fleet operation with the four car units operating services between Eastbourne and Ashford International instead of the two car units previously operated.

Diesel reporting only accounts for Southern as Gatwick Express, Thameslink and Great Northern do not operate a diesel fleet.



Great Northern



GATWICK EXPRESS

SOUTHERN

ThamesLink/

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