

1. Transport Statistics Great Britain 2019

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/870647/tsqb-2019.pdf

Public transport journeys made;

Local Bus Services 4.8 billion

National Rail 1.8 billion

83% of km covered were in taxis, cars and light vans.

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Greenhouse Gas Output;

Local Bus Services 3%

Light vans 15%

Cars and Taxis 55%

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2. UK Greenhouse Gas Emissions 2018

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/863325/2018-final-emissions-statistics-summary.pdf

Transport 55%

3. Road transport and air emissions 2017

<https://www.ons.gov.uk/economy/environmentalaccounts/articles/roadtransportandairremissions/2019-09-16>

20% of UK Greenhouse Gas emissions were from road transport in 2017.

Section 5

It takes one average car driver less than 18 months to emit the same amount of carbon as is saved by recycling a ton of plastic bottles. *

That's 25,000 bottles.**

*Average car mileage p.a. 2019 was 7400 (11909km)

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/906055/nts0901.ods

Average car CO² output per km 2019 was 127.9gm/km

<https://www.smmmt.co.uk/2020/01/record-year-for-zero-emission-cars-fails-to-reboot-uk-market-as-sector-calls-for-supportive-policies-to-boost-uptake/>

This equates to $127.9 \times 7400 = 0.946$ tonnes of CO² (check)

Carbon saving from recycling 1 tonne of plastic bottles = 1.5 tonnes

<https://www.recycle-more.co.uk/household/recycling-facts>

$0.946 \times 1.5 \times 12 = 17.03$ months (check)

++ <https://www.recycle-more.co.uk/household/recycling-facts>

4. Comparison of Euro VI category bus and Euro VI category car diesel fuel consumption per passenger.

Wright Streetlite Euro VI 41 seater +29 standee bus. Fleet average 10.06mpg.

Info from Arriva NE Commercial Manager for Darlington Depot vehicles in 2019.

What Car's 10 most efficient diesel cars tested January 2020. Average 53.5mpg.

<https://www.whatcar.com/news/true-mpg-most-efficient-diesel-cars/n19281>

Assuming the standard 1.6 person occupancy in the car and 1/3rd occupancy in the bus, the car would achieve $53.5 \times 1.6 =$

85.6 miles to the gallon per occupant. (check)

The bus would achieve $1/3rd \times 70 = 23.3 \times 10 .06 =$

247miles per gallon per occupant. (check)

With Euro IV technology on both, the CO₂ saving would be pro rata.

Nearly 3 times less fuel used and carbon produced that of the car.

5. Electric vs Internal Combustion Engine (ICE) CO² emission.

At least a halving of CO₂ emitted. Some sources claim a 2/3 reduction.

This would mean that an electric car will still be a no better, and possibly

slightly worse, emitter than a Euro VI diesel bus. However, an electric bus will

still be nearly one third as polluting with CHG's per passenger carried than an electric car.

<https://www.transportenvironment.org/what-we-do/electric-cars#:~:text=While%20electric%20cars%20have%20zero,their%20lifetime%20than%20diesel%20cars.>

6. Hybrid cars?

A Transport and Environment and Greenpeace joint study seems to show that hybrid cars release only 30% less CO² than an ICE car, not the 75% claimed. A Euro VI diesel bus would still deliver half as much CO² than a hybrid car, in that case.

<https://www.transportenvironment.org/publications/uk-briefing-plug-hybrid-con>

7. Coronavirus

Buses have been found to be safe. Much, much safer than taxis, or sharing a car!

<https://news.sky.com/story/coronavirus-why-public-transport-could-be-safer-than-we-thought-12091657>

8. Congestion

The electric car congests to the same degree as an ICE one. Replacing ICE with electric will still mean that new road building will happen with its ensuing environmental destruction. For example, the suggested dualling of the A64 to Barton Hill will destroy much countryside and raise noise levels greatly, and will then add irresistible pressure for the "missing link" – Whitwell to Malton – to be dualled. This would probably desecrate the Crambeck and Huttons Ambo areas with a very tall bridges and at least two huge road junctions. Next door to the River Derwent SSI. Surely, as environmentalists, we should all be fighting that?

9. A suggestion.

Most of the Ryedale towns have a regular commercial hourly bus service, as do many of its villages.

All allow free travel to bus pass holders.

The buses used are comfortable and clean. The York/Malton/Pickering/Thornton – le – Dale/Whitby Coastliner 840 wears the mantle of Britain's most beautiful bus journey.

However, some of the more rural, Sunday and evening services leave a lot to be desired. NYCC used to fund these services, but no longer do. We want to see that funding reinstated.

Clear evidence of increasing bus use in Ryedale would be very powerful backing for the argument that County should re-invest in those missing rural, Sunday and evening services.

If REG adopted a policy of suggesting that members swap the car for the bus once a week, they would create nearly 67% less CO² that day. 9.5% per week.

That's the equivalent of 100([check](#)) bottles recycled.

And we'd have a bit nicer, safer, Ryedale for pedestrians, cyclists, the young and the old and all who would like to see a return to the car-free, pollution free days of the first few weeks of lockdown.