

# Transport emissions

## Global CO<sub>2</sub> emissions from transport

This is based on global transport emissions in 2018, which totalled 8 billion tonnes CO<sub>2</sub>. Transport accounts for 24% of CO<sub>2</sub> emissions from energy.

Our World  
in Data

74.5% of transport emissions  
come from road vehicles



OurWorldinData.org - Research and data to make progress against the world's largest problems.

Data Source: Our World in Data based on International Energy Agency (IEA) and the International Council on Clean Transportation (ICCT).

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- 24% of global GHG-emissions comes from Transport, 18% from Road transport
- Transport emits 8 billion metric tons of CO<sub>2</sub> emissions
- 45% coming from cars & buses
- 85% of motorised road passenger transport emissions comes from individual transport modes

**BUS = 1,25% of global GHG-emissions**

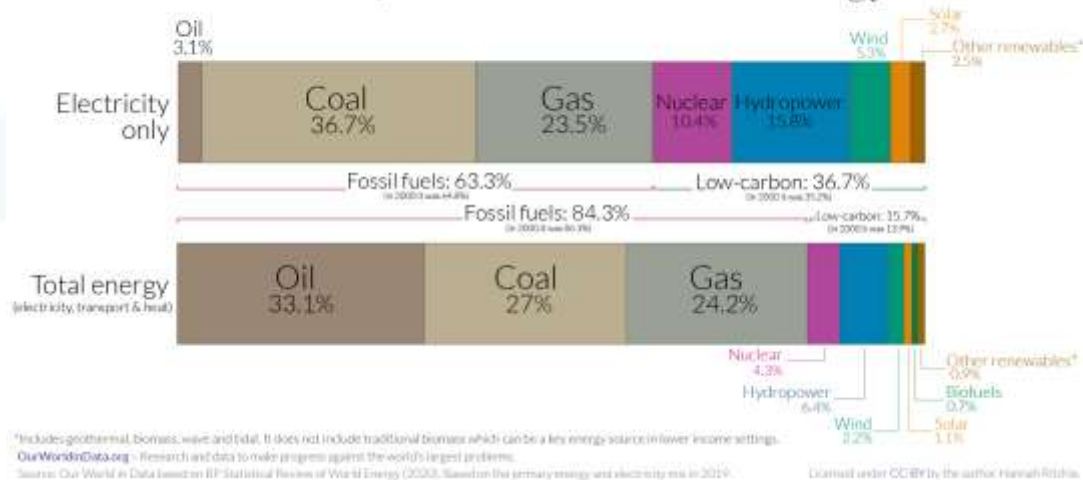
### ANSWERS

- Low & Zero emission technologies : BEV, FHEV, PHEV, ...
- The collectivisation of road transport

# Electrification of buses

## Availability of green electricity

More than one-third of global electricity comes from low-carbon sources; but a lot less of total energy does Our World in Data



## TCO electric vs diesel bus > 1

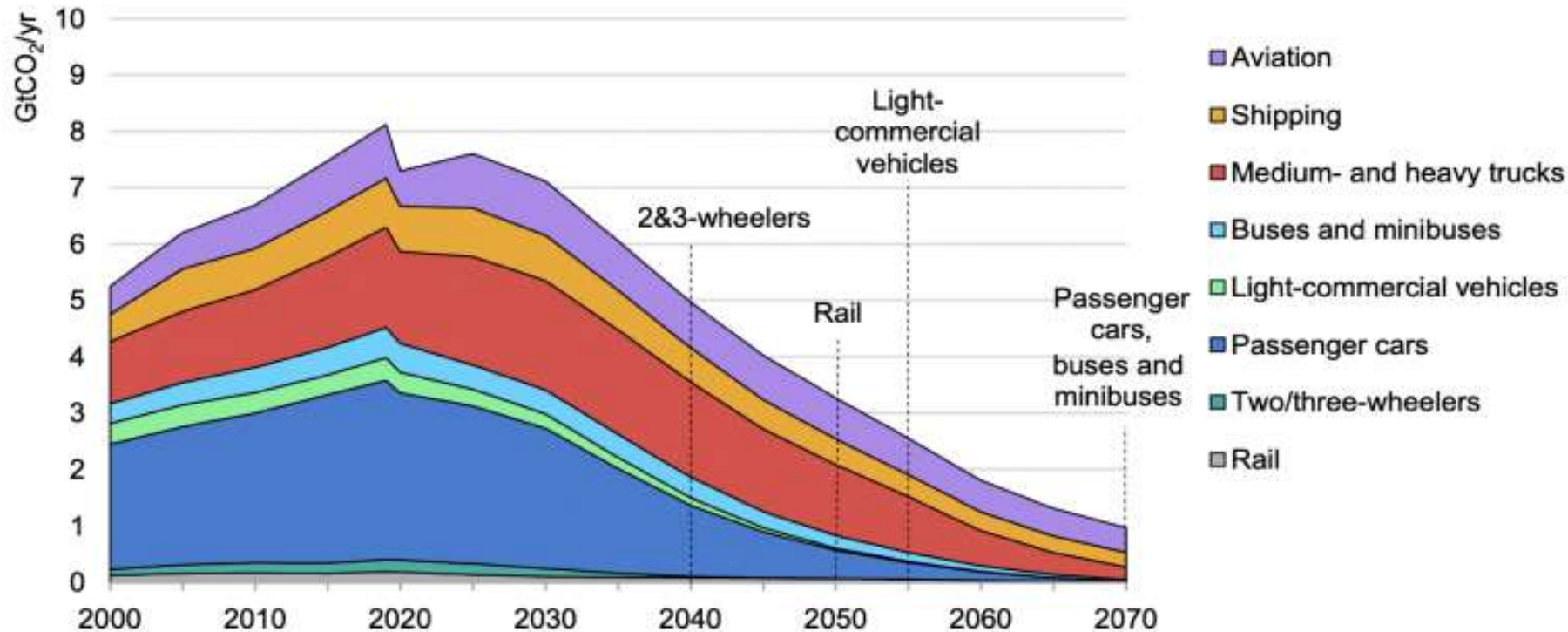
=> First deployment of electric buses only in public or big private operators & with strong external financial support

- Capex : > 2 (incl depot adaptations.)
- Opex : ??? <> lifetime of the battery  
battery waste management  
staff training

.....

=>further consolidation of the industry

Figure 3.16 Global CO<sub>2</sub> emissions in transport by mode in the Sustainable Development Scenario, 2000-70



Global transport emissions increased by less than 0.5% in 2019 (compared with 1.9% annually since 2000) owing to efficiency improvements, electrification and greater use of biofuels.

# Collectivisation + electrification

- A passenger car carrying one person emits 89 pounds of CO<sub>2</sub> per 100 passenger miles, while a full bus emits only 14 pounds
- A single person who switches from a 20-mile commuting alone by car to existing public transportation, can reduce their annual CO<sub>2</sub> emissions by 20 pounds per day. That is equal to 10% reduction in all greenhouse gases produced by a typical two-adult, two-car household.
- **How many car miles would we need to replace by bus-miles to equal the effect of the electrification of the busfleet ?**

# Collectivisation of motorised road transport reduces emissions and congestion

- Policy, regulations, taxation, ....based on data analysis
  - Infrastructure (dedicated buslines, prioritizing collective transport modes, car free city centers, multi modal hubs, ...)
  - Stimulating & Facilitating the use of public transport => **DIGITAL TOOLS**
    - ⇒ Safe for all (road safety, hygienic, avoiding criminality, ...)
    - ⇒ Comfortable & Ease of Use vs other modes  
(offer & schedule, crowdyness, commercial speed, ITS & MaaS, multimodal system, first & last mile solutions, ...)
    - ⇒ Affordable
- LOWER budget consumption & possible NOW**

# Busworld worldwide : stay in touch

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Partnerships with UN HABITAT & UN CRD, ASRTU, ...



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