1.1 - Electric vehicles (EVs)

The role of transport in the environmental crisis

- GHG emissions: 25-30% of total energy-related emissions, **mainly due to** burning fossil fuels [Note: petrol (UK) - gas (USA)], then **trap**ping **heat**, driving GW/CC.
- Air pollution in urban areas: environmental issues (**smog**), respiratory diseases, etc.
- Noise pollution (road traffic, air traffic, etc.)
- The **depletion** of resources
- **Land use**, as transport infrastructures harm ecosystems and biodiversity

The types of transport

- **Road transport**: 75% of transport CO2 emissions + air pollutants
- **Aviation**: high ratio of emission per passenger and per kilometre
- **Shipping**: extremely high level of emissions, **although** efficient per kilometre
- **Rail** + **Public transport**: lower emissions + may be decarbonised soon

Perspectives

- The development of public transport, **cycle routes** in major cities, **walkable cities** (Cf. 15-minute cities), etc.
- Vehicles powered by electricity, renewable energies, or biofuels

Dependence on transport

- **The 2023 Panama Canal drought**, limiting ship crossing, and therefore slowing down trade
- **The 2021 Suez Canal obstruction**, blocking one of the world's busiest trade routes for 6 days, delaying hundreds of ships carrying oil, food and goods.
- **The 2020-2022 CoVID-19 pandemic's supply chain crisis**, with lockdowns disrupting transport of goods and medicines