

Learning Resources

Part I: Electric Vehicles



Urban Pathways Mobility

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Federal Ministry for the
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Electric Vehicles: Status Quo



Motorisation in our cities is on the rise

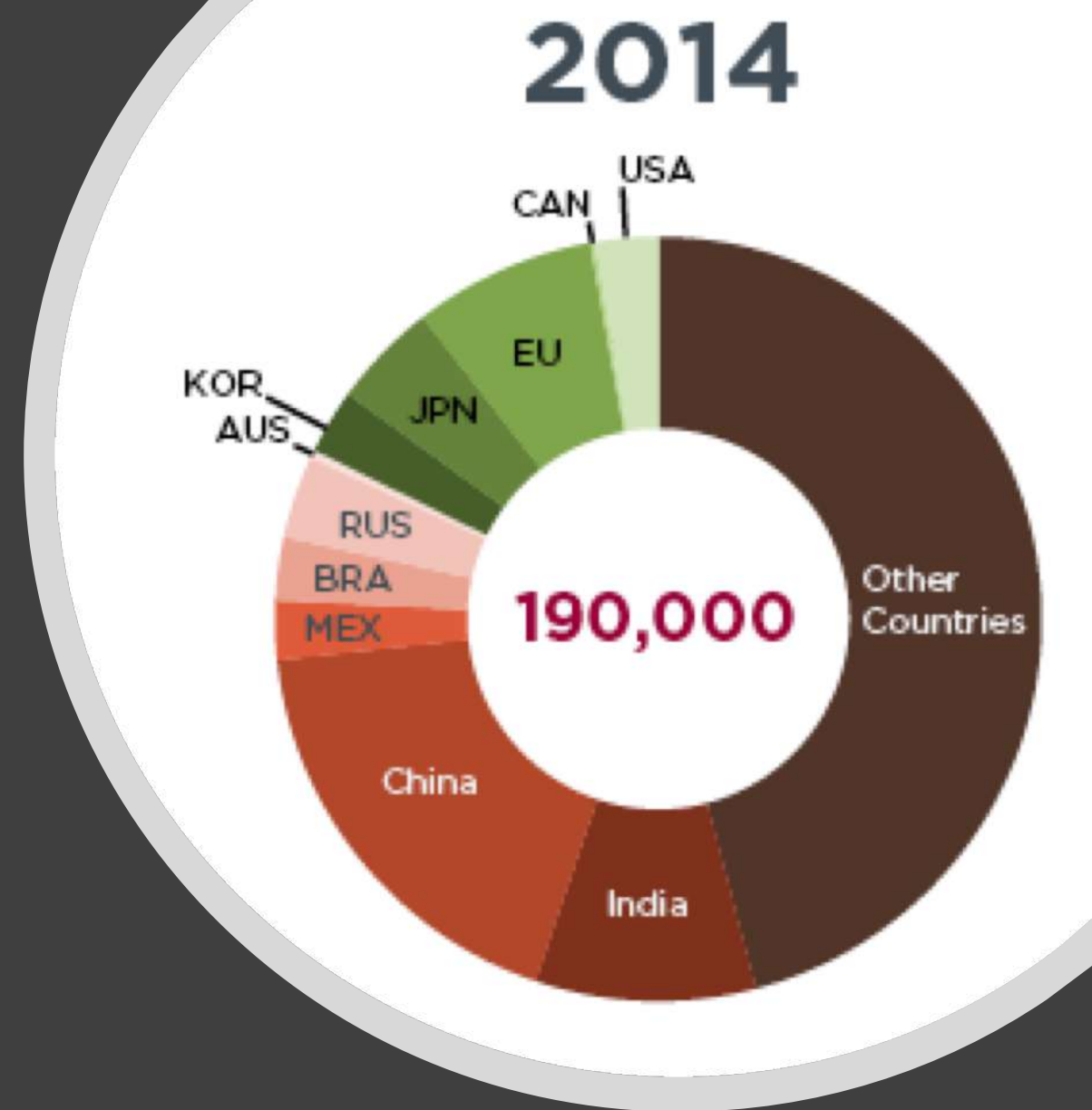
- Motor vehicles in many of our cities are increasing
- These vehicles are fuelled by fossil-fuels
- Rise of vehicle numbers in cities lead to high emissions resulting in worsened air quality and pollution
- Increase in air pollution leads to negative health complications



Photo by Santhosh Kodukula, 2011

Health affects

- Fossil fuel vehicles emit carbon monoxide (CO), nitrogen oxides (NOx), particulate matter (PM), non-methane hydrocarbons (HC), sulphur oxides and airborne toxins
- Particulate matter (PM) is responsible for premature deaths
- The vast majority of negative health impacts from fossil fueled vehicle activity occur in India, China, Brazil, Mexico, and the countries in the Asia-Pacific, Latin America, Middle East, and Africa.

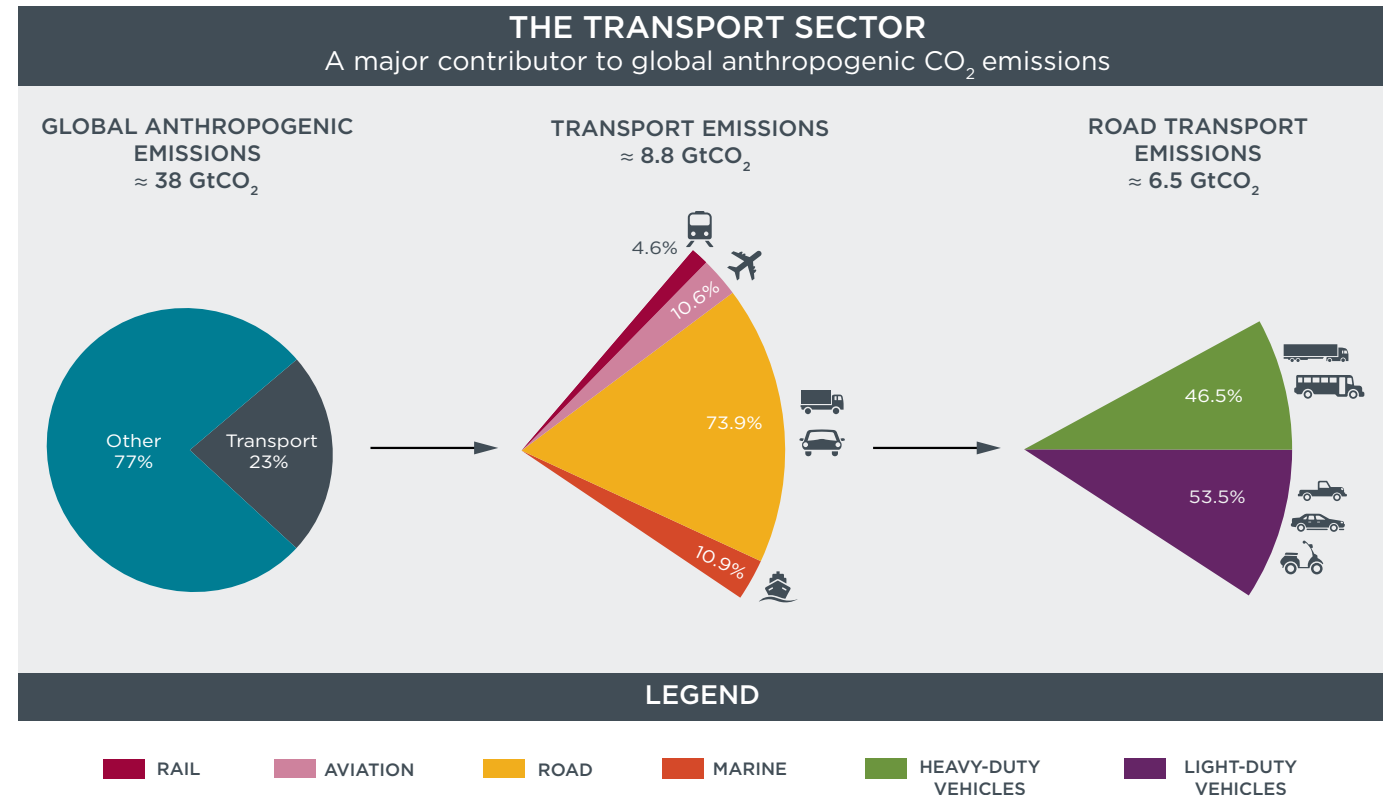


Global premature deaths from light- and heavy-duty vehicle exhaust PM2.5 (ICCT, 2014)

Climate Change effects

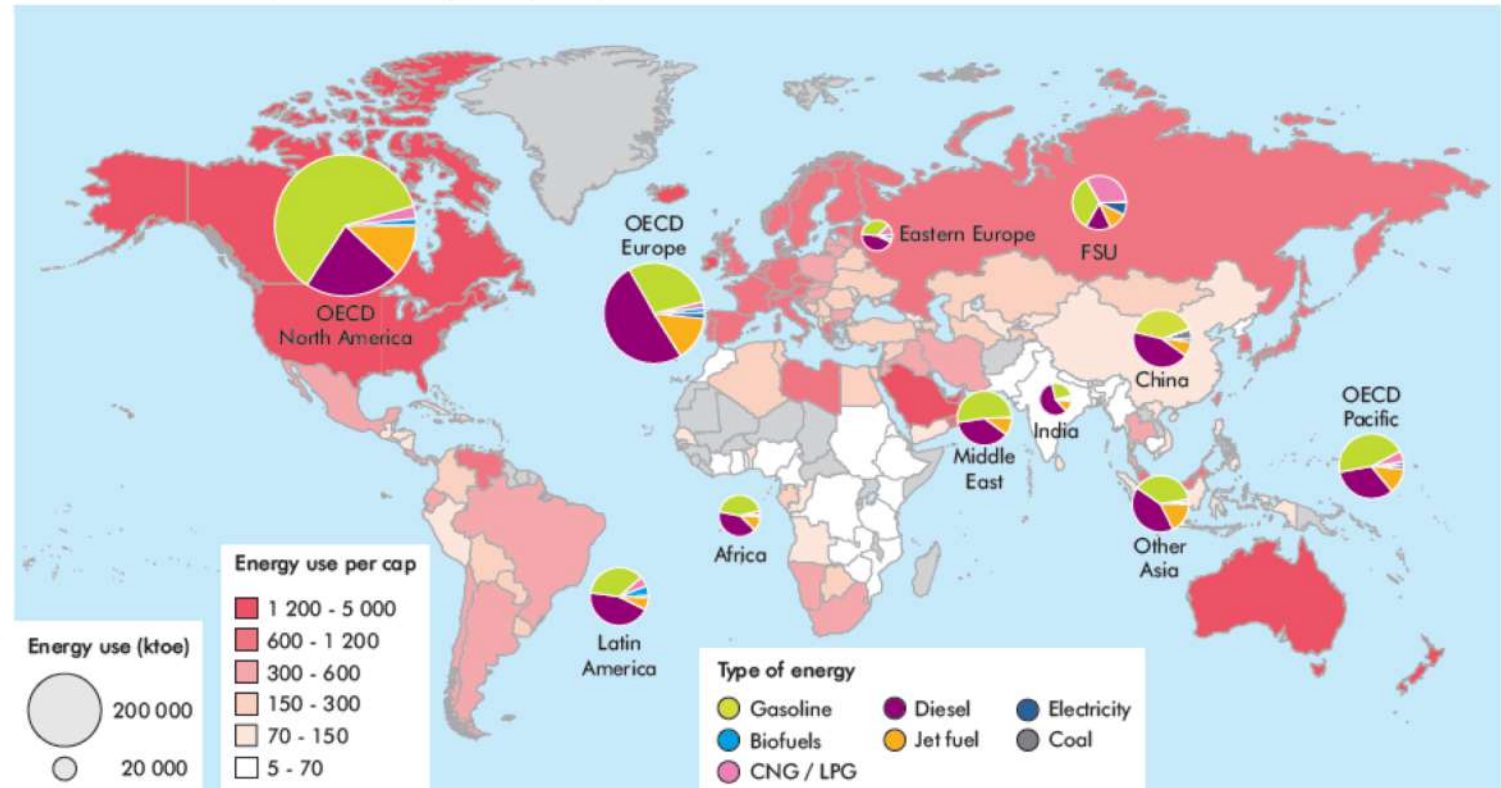
Transport is:

- responsible for 23% of CO₂ emissions
- road transport (incl. freight) is responsible for around 74% of these emissions
- personal automobiles: more than 50%



Source: Kodjak D, 2015, *Policies To Reduce Fuel Consumption, Air Pollution, and Carbon Emissions from vehicles in G20 Nations*, May 2015, *The International Council for Clean Transportation (ICCT)*

Transport energy use



The boundaries and names shown and the designations used on maps included in this publication do not imply official endorsement or acceptance by the IEA.

Note: Does not include international shipping.

Source: IEA statistics.

End of presentation

- In the next course component we will learn more about clean vehicles
- You may close this window and head to the next section in the course.



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www.urban-pathways.org