



NGVA Europa Annual Event 2019

Busworld Academy Brussels Expo

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Brussels, 18 October 2019



@Transport_EU

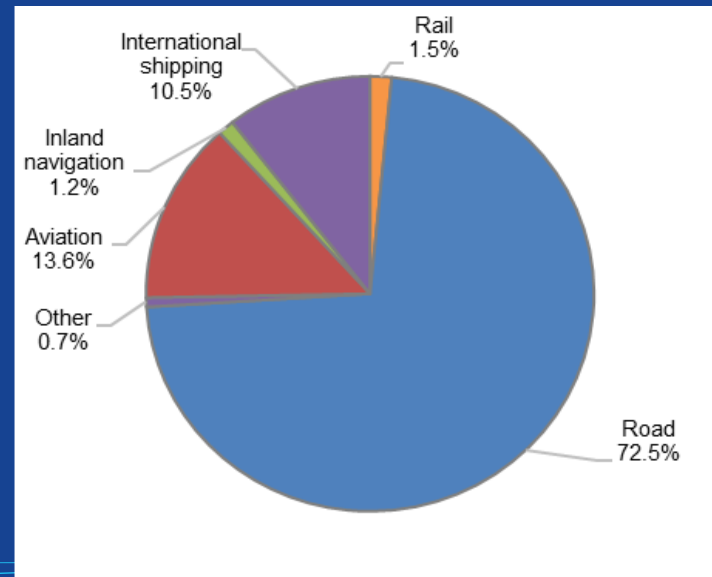
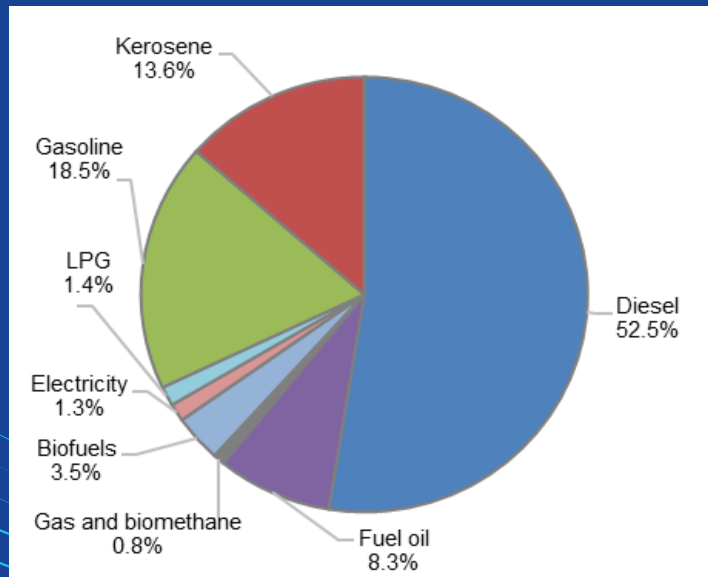
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Transport energy demand

Where do we stand?

- Share of EU28 transport energy demand by source and mode in 2017 (%)



TRANSPORT EMISSIONS

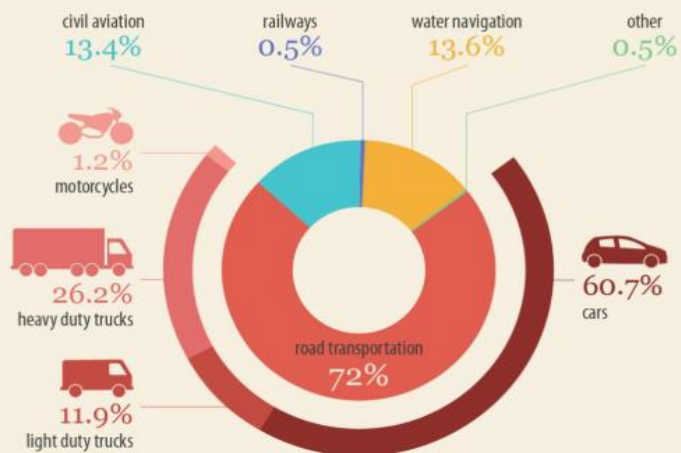
Road transport : more than 70% of transport CO₂ emissions

Waterborne transport: 2nd largest source, at ~14% of transport emissions

Aviation = ~13% of transport CO₂ emissions, but highest growth

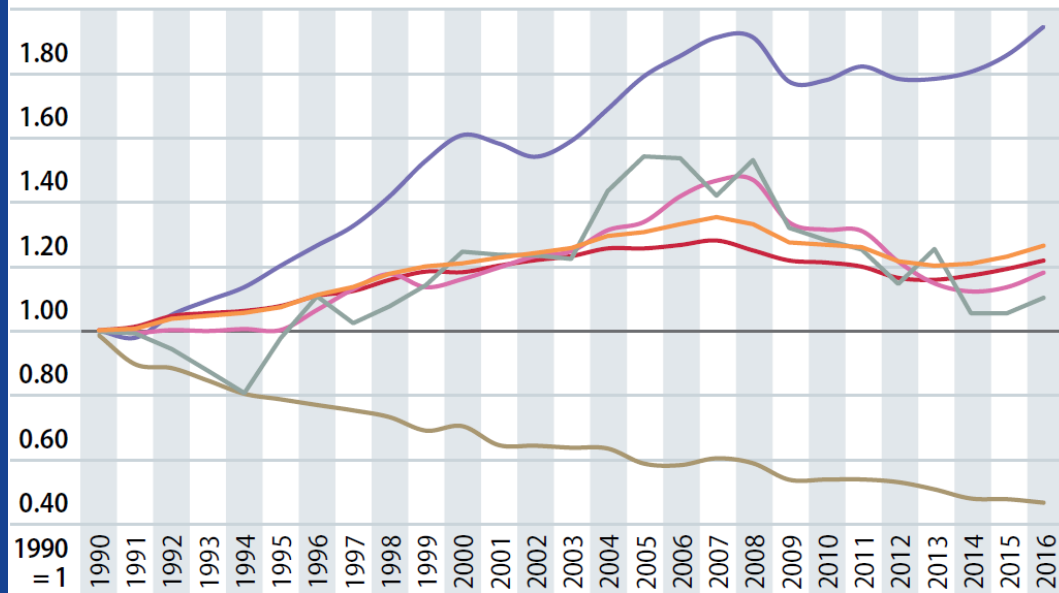
TRANSPORT CO₂ EMISSIONS IN THE EU

Emissions breakdown by transport mode (2016)



Notes: (*) Excluding International Bunkers (international traffic departing from the EU).
 (**) Including International Bunkers and Indirect CO₂ but excluding LULUCF.
 (***) Excluding indirect emissions from electricity consumption.
 (****) Combustion emissions from all remaining transport activities including pipeline transportation, ground activities in airports and harbours, and off-road activities.
 (*****) Total transport share in total emissions.

Total Civil Aviation · Road Transportation · Railways (***) · Total Navigation · Other · Total Transport

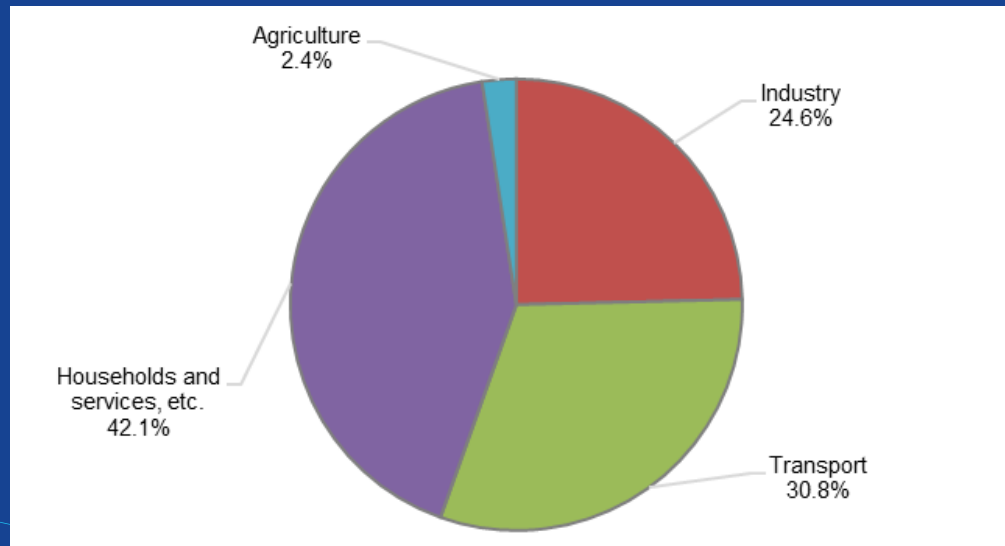


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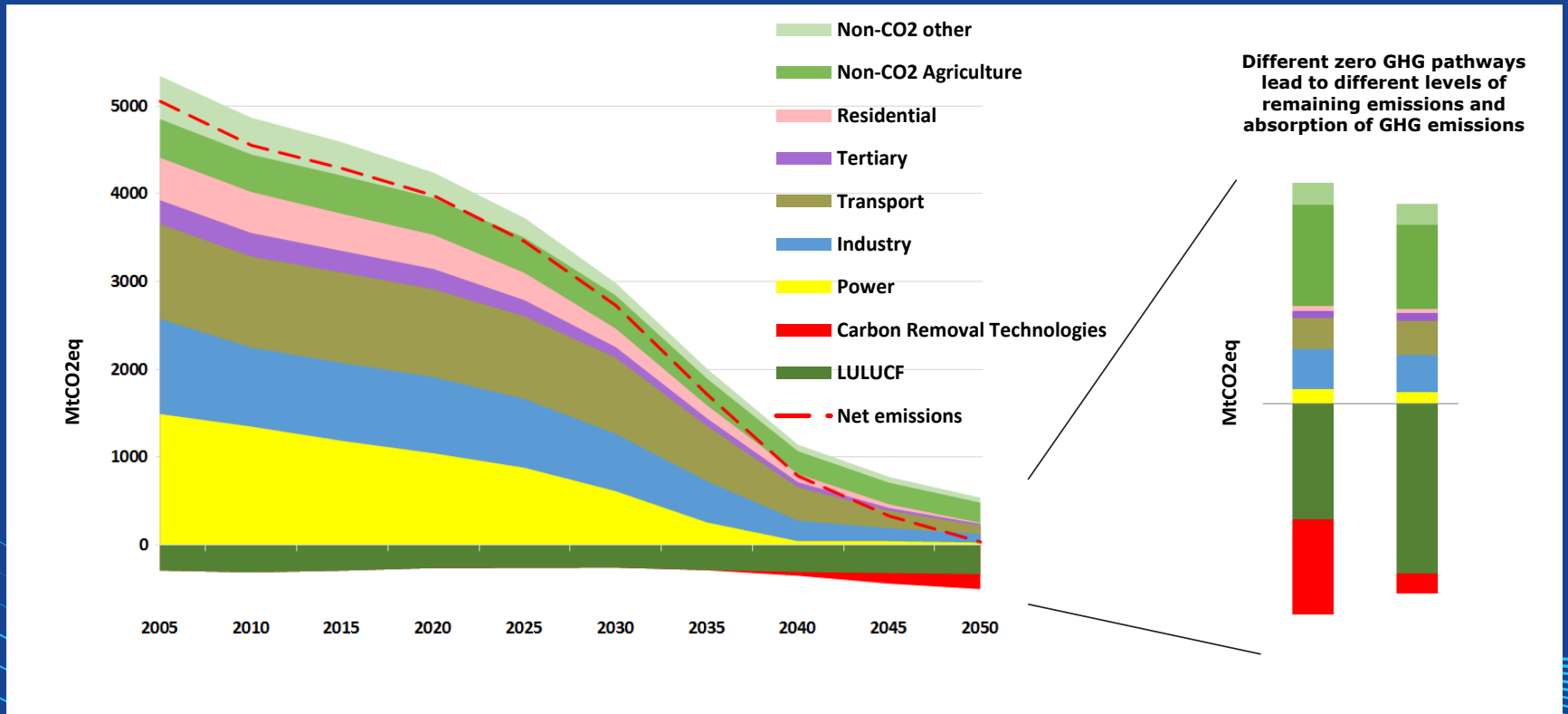
Energy consumption

Where do we stand?

- Final energy consumption in 2017 (%) by sector (EU28)



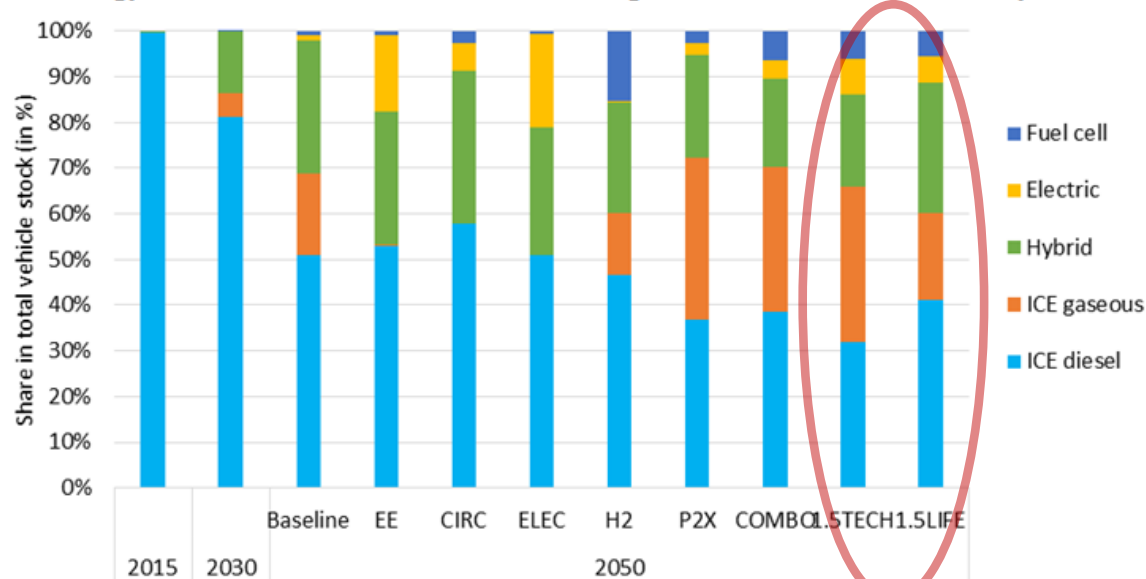
Our vision for a clean planet by 2050 (I)



Our vision for a clean planet by 2050 (II)

Example: drivetrains in HGV

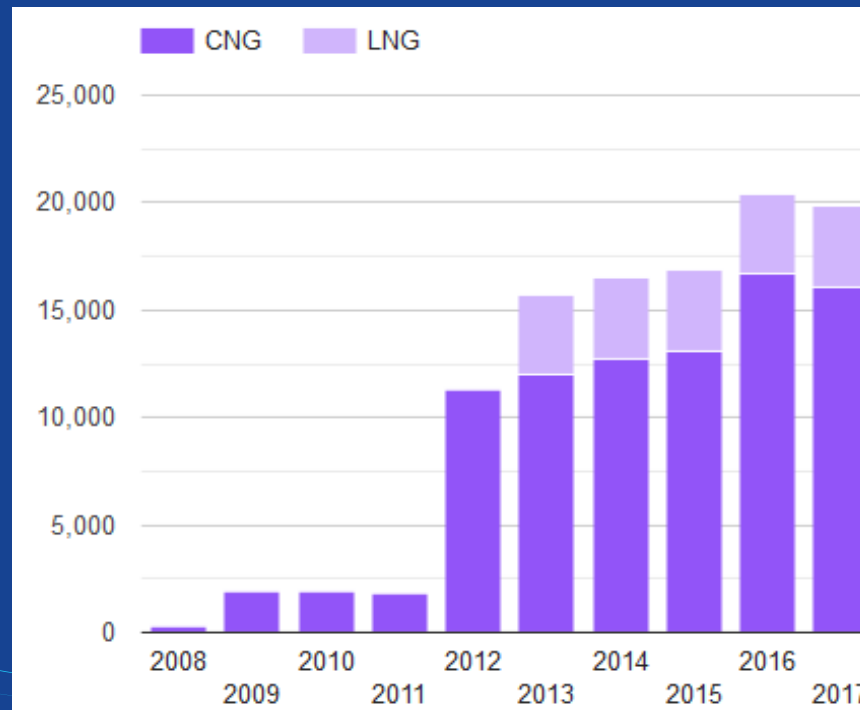
Example of in depth analysis: Shares in total heavy goods vehicles stock by drivetrain technology in the Baseline and scenarios reaching -80% to net zero emissions by 2050



Source: PRIMES.

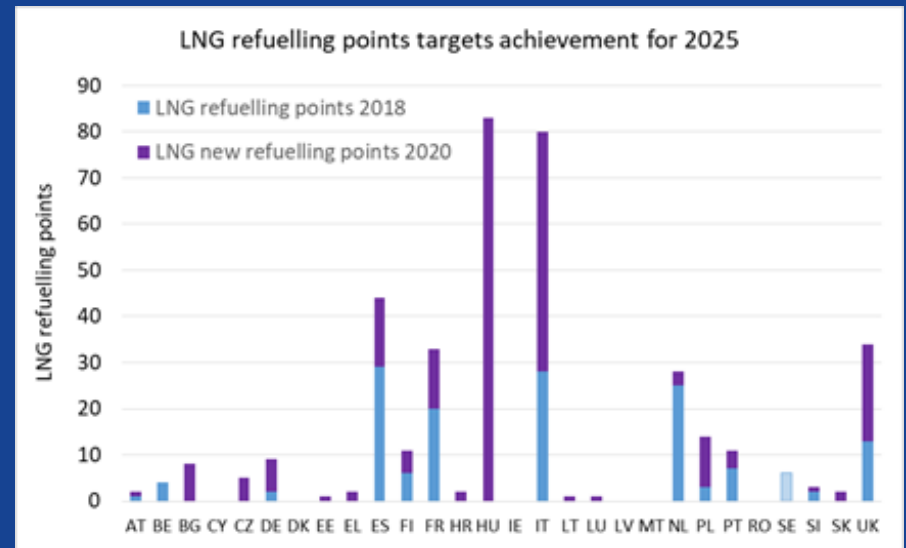
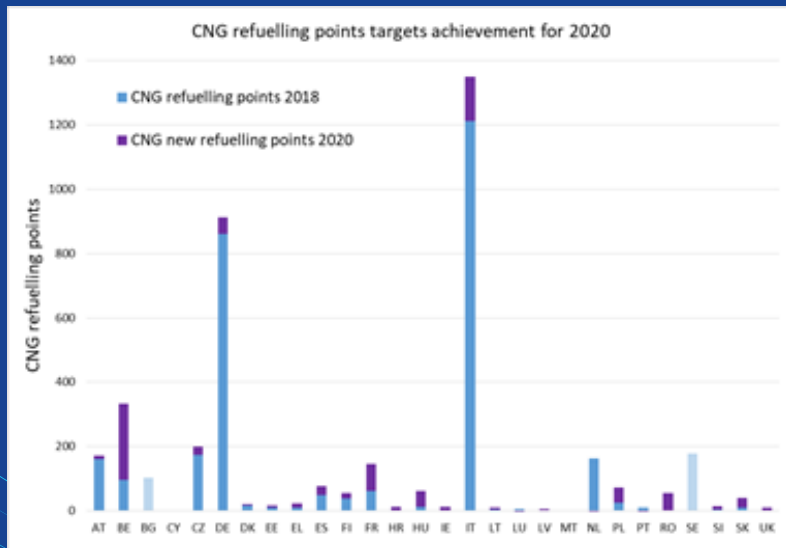
Use of natural gas in urban fleets

- Natural gas bus/coach stock in the EU28 (EAFO, 2019)



Availability of infrastructure

- CNG and LNG refueling points targets achievement for 2020





New legislation promoting clean HDV

- ❑ **Revision of the Clean Vehicle Directive** has put an emphasis on the increased public procurement of alternative fueled buses:
 - For HDV each MS has overall minimum procurement targets for clean vehicles (up to 15% for trucks, up to 65% for buses), coupled with a sub-target for buses with zero emission at tailpipe. HDV running on natural gas and biomethane are considered **clean vehicles**.

- ❑ **CO₂ emission standards HDV:**
 - CO₂ emissions of new trucks must be on average 15% less CO₂ between 2025 and 2029 compared to 2019 emission levels. From 2030 onwards, they will be required to emit on average 30% less CO₂.





Natural Gas Standards

- European standard EN ISO 16923 'Natural gas fuelling stations – CNG stations for fuelling vehicles'
- European standard EN ISO 14469 'Road vehicles - Compressed natural gas (CNG) refuelling connector'
- European standard EN ISO 16924 'Natural gas fuelling stations – LNG stations for fuelling vehicles'
- European standard EN ISO 12617 'Road vehicles – Liquefied natural gas (LNG) refuelling connector – 3,1 MPa connector'



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Thank you for your attention!

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