

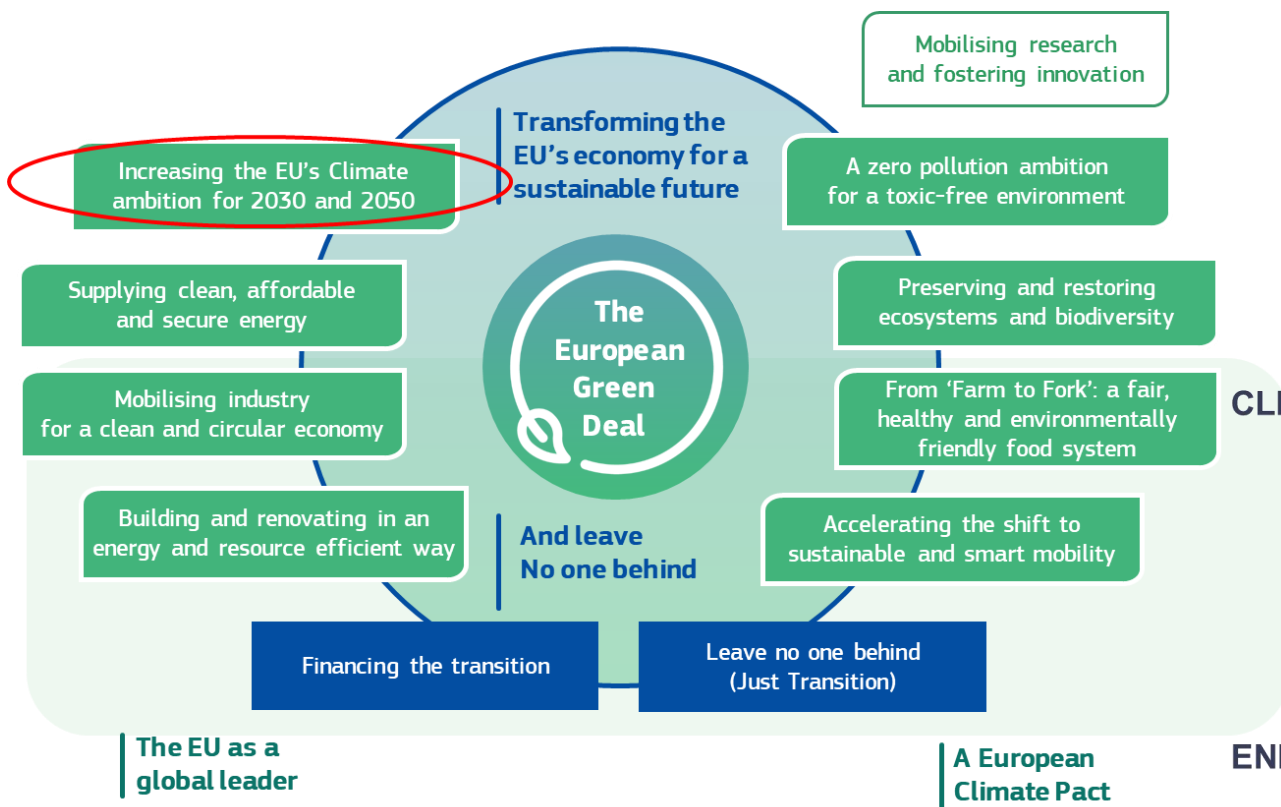


Vehicle LCA activities in the EC

GRPE Workshop on carbon LCA of vehicles

31 May 2022

The European Green Deal



Decarbonisation of the entire EU economy – policy action in all sectors

- Commission's July 2021 package, implementing the increased climate ambition of at least 55% GHG reduction by 2030 compared to 1990

CLIMATE

ENERGY

TRANSPORT

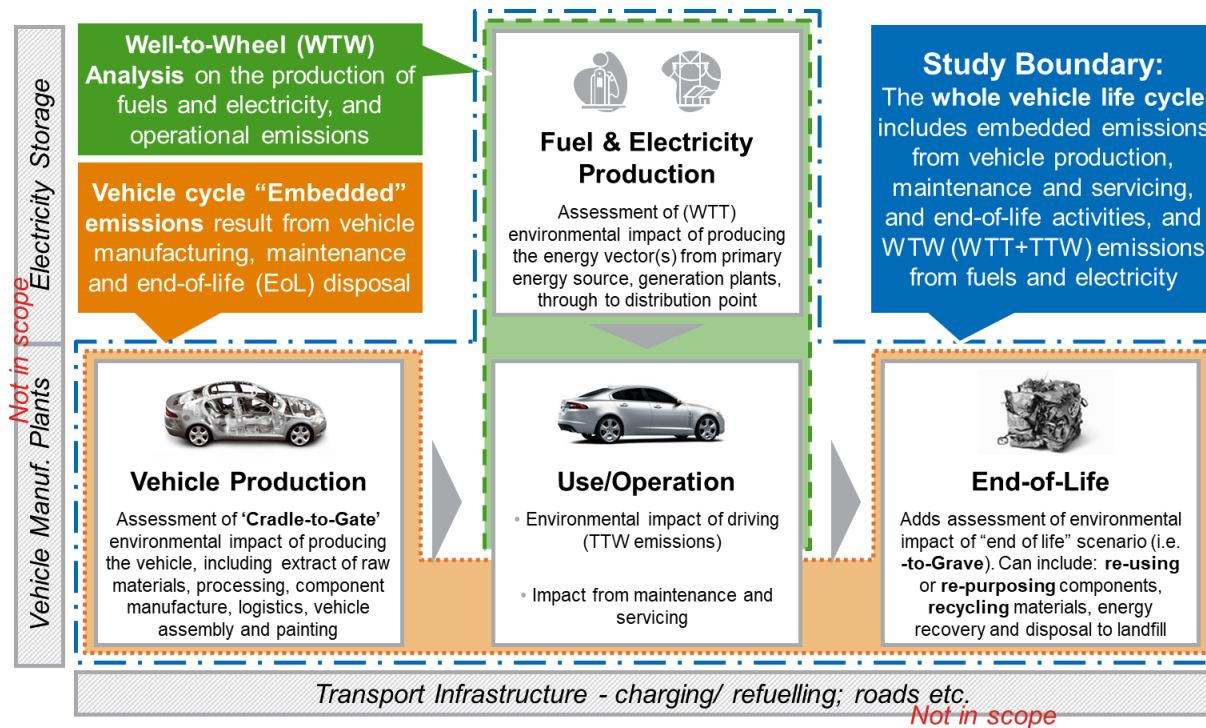
TAXATION AND TRADE



Vehicle LCA related activities in the EC

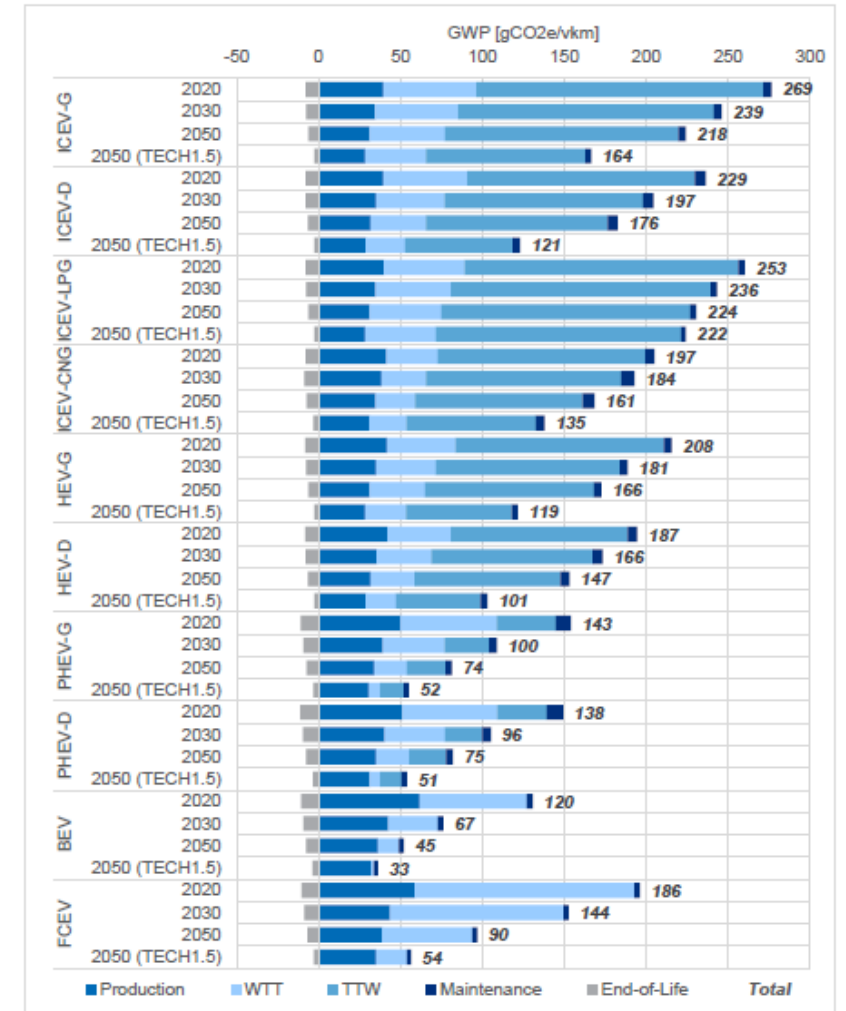
- CO₂ performance standards for light duty vehicles and for heavy duty vehicles
 - Mandate the Commission to evaluate by 2023 the possibility of developing a common Union methodology for the assessment and the consistent data reporting of the life-cycle CO₂ emissions
 - [Study](#) on determining environmental impacts of conventional and alternatively fuelled vehicles through LCA (2020)
 - CO₂ standards are currently under revision, in line with the increased EU climate ambition
- EU funded projects (Horizon Europe) – [2ZERO partnership](#)
- Joint Research Centre work - [JEC activities](#)

Study on determining the environmental impacts of conventional and alternatively fuelled vehicles through LCA



- Developing a vehicle policy LCA is a highly complex process, requiring a vast amount of data and implies a number of key assumptions and methodological decisions
- Caution is needed when comparing results from different studies – e.g. different analytical boundaries, different data sources, different specific data processing choices
- No “definitive” results on the environmental impacts of different vehicles

Figure 5.59: Summary of breakdown of overall lifecycle GWP impacts for Lower Medium Cars for different powertrain types (Baseline scenario for 2020, 2030 and 2050, Tech1.5 for 2050)



Notes: Production = production of raw materials, manufacturing of components and vehicle assembly; WTT = fuel/electricity production cycle; TTW = impacts due to emissions from the vehicle during operational use; Maintenance = impacts from replacement parts and consumables; End-of-Life = impacts/credits from collection, recycling, energy recovery and disposal of vehicles and batteries.

Thank you