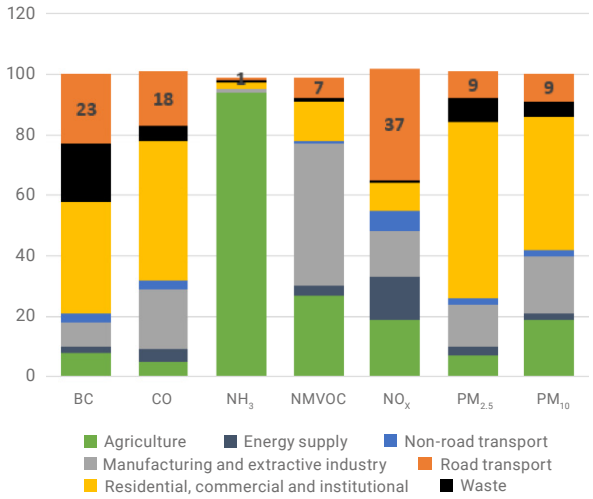
The Health Need for an Ambitious Euro 7 Emissions Standard

Air pollution is the biggest environmental health threat that Europeans suffer. The health effects of air pollution related to internal combustion engine transport in Europe is significant. The detrimental effect of this transport on health is largely preventable through effective legislation. There is an urgent need for a strong, ambitious Euro 7 Emissions Standard to protect the health of Europeans. Reducing traffic-related air pollution will have significant health, social, and economic benefits.

Key Environmental Facts:

- On average in the EU, the largest contribution to nitrogen oxide (NO_x) pollution is from road transport, at 39%. This proportion rises to 47% in urban areas, where most Europeans live. Furthermore, 89% of the EU's urban population is exposed to Nitrogen Dioxide (NO_2) levels above the WHO guidelines.
- Road transport is also a significant contributor to other air pollutants of concern, such as fine particulate matter ($PM_{2.5}$), black carbon (BC) and carbon monoxide (CO). Each of these pollutants has a significant detrimental impact on health and wellbeing in Europe.

Contributions to EU-27 emissions of air pollutants from the main source sectors in 2020 - EEA (2022)



Key Health Facts:

Air pollution causes hundreds of thousands of deaths in Europe per year, up to 430,000 due to NO_2 as estimated by the Centre for Research on Energy and Clean Air (CREA).

NO_2 pollution is associated with type 2 diabetes mellitus, stroke, myocardial infarction ("heart attack"), atrial fibrillation, pneumonia, asthma (including new-onset asthma in children), susceptibility to other respiratory infections and chronic lung disease**.

The EEA estimates 175,070 Years Lived with Disability from type 2 diabetes alone in 31 European countries, related to NO_2 air pollution in 2020*.

Vulnerable populations, such as older people, younger people, pregnant women, and those living with medical conditions are more vulnerable to the effects of air pollution.

Disadvantaged populations, such as low socioeconomic groups and some ethnic minorities, are more at risk and vulnerable to air pollution exposure.

Meeting the WHO Guidelines could prevent 60% of mortality related to NO_2 in Europe, to less than 180,000 deaths per year.

The Euro 7 Standards bring an important opportunity to decrease the negative health, social and wellbeing effects of transport-related air pollution from internal combustion engines. This could help prevent a significant number of premature deaths in Europe, as well as related morbidity. A strong Euro 7 Standard needs to be introduced urgently to relieve the strain on health and health systems that road transport pollution places on Europe.

* Estimates related to the EU-27 countries, and calculated against the WHO Air Quality Guidelines 2021

References:
**Centre for Research on Energy and Clean Air (CREA). 2023. The toll of fossil fuel air pollution: A case for clean transportation. European Commission. 2022. Impact Assessment Report Part 1. **European Environmental Agency. 2022. Air Quality in Europe 2022. **Yazdi, M. D., et al (2021). Long-Term Association of Air Pollution and Hospital Admissions among Medicare Participants Using a Doubly Robust Additive Model. Circulation, 143(16), 1584–1596.