

MODULE 3

HYDROGEN LOGISTICS, SUSTAINABLE DEVELOPMENT, AND ECOLOGY

HYDROGEN VERSUS GASOLINE: DIFFERENCE IN EMISSIONS

Hydrogen vehicles emit only water, whereas conventional automobiles are the primary contributors to pollution.

INTERNAL COMBUSTION ENGINE VEHICLE



120-170g

CO²/km

HYDROGEN VEHICLE



0g

CO²/km

- **Emission category:** Exhaust emissions (CO₂, NOx, particulate matter).
- **Noise:** Generally, a more pronounced engine operation.
- **Fuel:** Non-renewable fossil fuels.

- **Type of emission:** The sole emission is water vapor.
- **Noise:** Silent operation (electric drive utilizing fuel cells).
- **Fuel:** Hydrogen (potentially derived from renewable energy sources).
- **Refueling:** Rapid refueling (a few minutes), akin to the process at a gas station.