ECOVIAGEMCP GLOSSARY

Environmental, economic and energy impact simulator comparing road and rail transport.

Greenhouse gases (GHG): these are gases that contribute towards the Greehouse effect due to their physical or chemical properties. The main GHGs are: Carbon Dioxide (CO2), Methane – CH4 and Nitrous Oxide – N2O), but they all have quite different impacts on overall warming.

Carbon Dioxide (CO2): this gas is produced during combustion and it is the main Greenhouse gas.

Hydrocarbons: these are chemical compounds made up of hydrogen and carbon atoms. The most widely used fuels (petrol, diesel, natural gas and GPL) are fossil hydrocarbons and they are known as fossil fuels. When a fossil fuel is burned it produces carbon dioxide and water.

Atmospheric pollution: these are chemical compounds that can cause damage to the environment. This simulator takes into consideration those pollutants generated during the combustion of fossil fuels. Carbon monoxide and particles are considered as the most important for public health reasons because they are toxic or harmful for the environment even when present in low concentrations.

Carbon Monoxide (CO): this pollutant is caused by incomplete combustion of fossil fuels and most of it is produced by petrol engines.

Partícles (PM): this pollutant is mainly produced by incomplete combustion in diesel engines.

Local emissions: emissions produced at the site of operations. In this context it refers to the pollutants produced by the use of internal combustion engines.

Global emissions: emissions arising not just from the use of the fuel but also the processes associated with its production and distribution. (See life-cycle analysis)

Life-cycle analysis: assessment of the impact arising from the production and distribution of a specific good. Here there is an assessment of the emissions and energy consumption associated with producing and distributing fuels and electricity.

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