

Greenhouse Gases

Greenhouse gases are gases responsible for trapping infrared radiation (like the glass on the greenhouse - can think of this as a blanket)

- water vapour (H_2O) - not visible as a vapour
 - responsible for 70% of the green house effect
 - largest contribution to the **NATURAL GREENHOUSE EFFECT**
- carbon dioxide (CO_2)
- methane (CH_4) called natural gas
- nitrous oxide (NO_2)

Carbon Dioxide is produced by:

- cellular respiration (happens in all living things)
- all combustion of hydrocarbons (includes wood, grass, **FOSSIL FUELS (OIL, GAS, NATURAL GAS, DEISEL FUEL)**)
- most of the extra carbon dioxide present in our atmosphere now is due to burning fossil fuel (transportation, home heating, industrial processes)

Efficiency per molecule = 1

Methane is produced by:

- decaying living matter
- farts
- released by melting permafrost

Efficiency per molecule = 25

Nitrous Oxides are produced by:

- car exhaust
- any time there is a hot flame source

Efficiency per molecule = 230