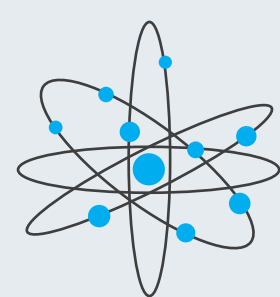


WHERE DO GREENHOUSE GAS EMISSIONS COME FROM

INDUSTRY SECTOR

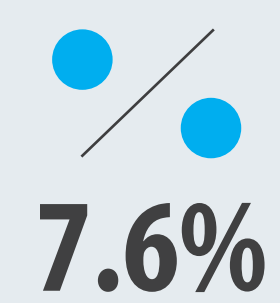


Greenhouse gas emissions are released from many industrial activities that **CHEMICALLY OR PHYSICALLY TRANSFORM MATERIALS**

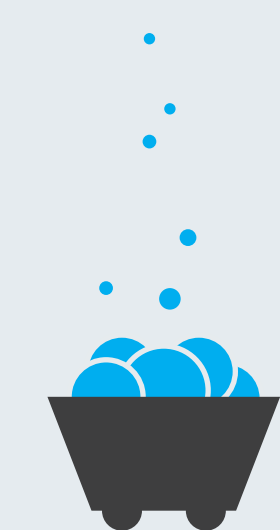


A number of different greenhouse gases are emitted during these industrial processes, including

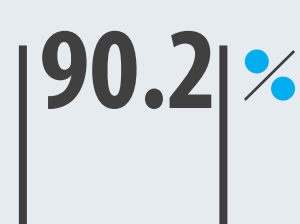
- CARBON DIOXIDE
- METHANE
- NITROUS OXIDE
- HYDROFLUOROCARBONS
- PERFLUOROCARBONS



ANNUAL EMISSIONS of greenhouse gases from the Industrial Processes sector account for 7.6% of all national emissions



THE MINERAL AND METAL INDUSTRIES produce the largest proportion of emissions within the Industrial Processes sector



EMISSIONS FROM CEMENT PRODUCTION (29.1%), FERROALLOY PRODUCTION (41.1%) AND REFRIGERATION AND AIR CONDITIONING (19.9%) account for 90.2% of total emissions in the industrial processes sector



Empowered lives. Resilient nations.



MINERAL INDUSTRY

31% OF THE TOTAL EMISSIONS IN THE INDUSTRY SECTOR

CEMENT PRODUCTION

93.8% of total emissions in the mineral industry. Concrete is used in the construction of highways, roads, buildings, runways, houses, dams, channels and other objects. First used by the Romans on a large scale, for example in the building of the Colosseum, concrete became highly popular again from the mid-18th century. Despite all of the benefits of this strong and durable material, the production of cement for concrete structures generates 5% of the total amount of carbon dioxide emissions in the world.

Use of limestone and soda ash

6.2% of total emissions from the mineral industry

LIME PRODUCTION

<0.01% or around 0.002% of total emissions from the mineral industry

THE METAL INDUSTRY

49.1% OF TOTAL EMISSIONS FROM THE INDUSTRIAL PROCESSES SECTOR

FERRO-ALLOY PRODUCTION

83.9% of total emissions from the metal industry

IRON AND STEEL PRODUCTION

16.1% of total emissions from the metal industry. Steel can be recycled without reducing its quality. Recycling steel can save 75% of the needed energy for its production, decreasing CO₂ emissions by 58%. Why is steel production industry so important? Steel is used in electronics, household appliances, construction, ships, trains, trucks, vehicle parts, transmission lines, wind turbines, stadiums...

PRODUCT USES

19.9% OF TOTAL EMISSIONS FROM THE INDUSTRY SECTOR