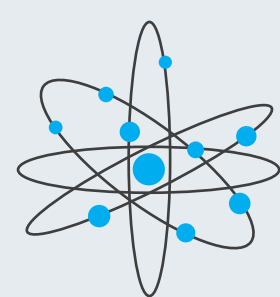


# WHERE DO GREENHOUSE GAS EMISSIONS COME FROM

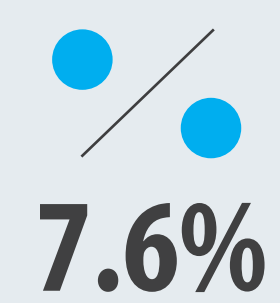
## INDUSTRY SECTOR



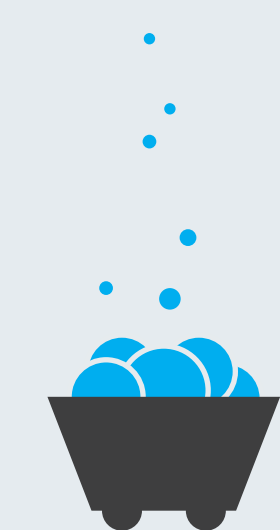
Greenhouse gas emissions are released from many industrial activities that **CHEMICALLY OR PHYSICALLY TRANSFORM MATERIALS**



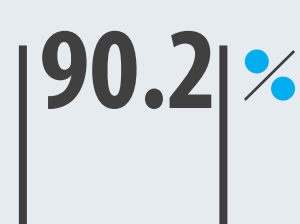
A number of different greenhouse gases are emitted during these industrial processes, including  
**CARBON DIOXIDE**  
**METHANE**  
**NITROUS OXIDE**  
**HYDROFLUOROCARBONS**  
**PERFLUOROCARBONS**



**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 CO<sub>2</sub> 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