

Value of oil and gas

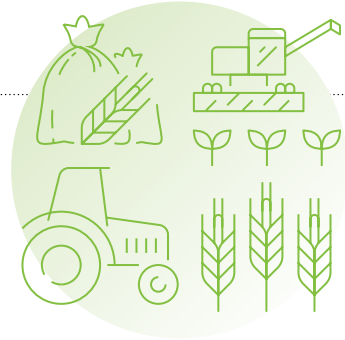
# Oil and gas: an integral part of everyday life

Oil and gas are not just reliable energy sources; they are also a key component of the thousands of everyday products we need for modern living that influence most aspects of human life.



## Ensuring food security

Natural gas is the primary feedstock for synthetic ammonia that forms the basis of fertilizers, essential for high yield food crops ensuring adequate supply and nutrition.

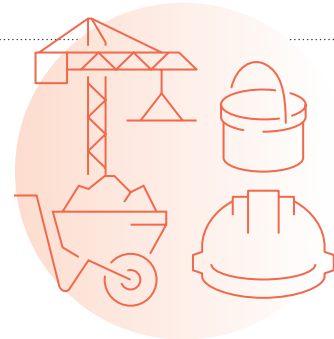


**8 billion**

people depend on stable food security, affordability, and access.  
Source: [United Nations, 2022](#)

## Fueling development

Oil and gas fuel the production of cement and steel; key ingredients for development of essential infrastructure. Oil-based products are used in the manufacture and operation of construction machinery advanced polymer products, and key building materials such as paint.

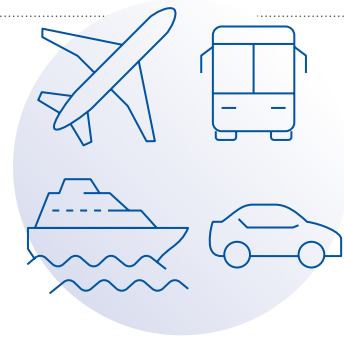


**4.1 billion tons of cement**

produced annually, as well as over 1.7 billion tons of steel.  
Source: [Global Cement and Concrete Association, 2024](#)

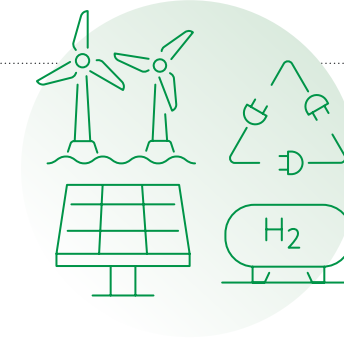
## Enabling global mobility

Long-haul travel remains reliant on oil and gas. Furthermore, oil-based products are essential for value chains of traditional and electric car manufacturing including durable lightweight carbon materials, (which enhance energy efficiency) along with rubber used in tires, gaskets, and seals.



**95%**

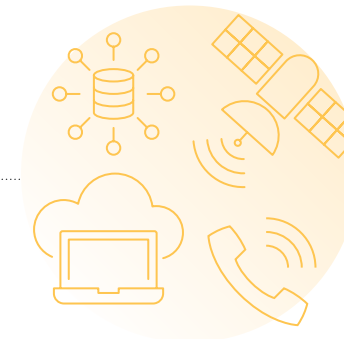
of transport energy comes from fossil-derived liquid fuels.  
Source: [Transportation Engineering, 2020](#)



## Powering the pathways towards net-zero

A materials transition is essential to enable an energy transition. The manufacture, operation, and transportation of renewable energy infrastructure is, today, part of the oil and gas value chain. Gas is also used in the production of blue hydrogen.

**90 MMT of crude oil equivalent:**  
The oil products and gas required to manufacture the composite fibers needed to have 2.5 TW of installed wind power is equivalent to 90 MMT of crude oil  
Source: [Smil, 2016](#)



## Connecting people

Hydrocarbons are essential for modern communication. Petrochemical products (e.g., plastics) are used to build data cables that enable internet connectivity and mobile and other computer devices.

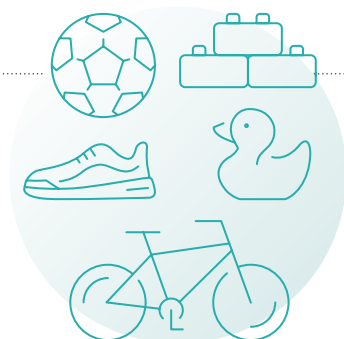
**3.6 devices per person**  
Connections per capita by 2023.  
Source: [CISCO Internet Report 2020](#)



## Supporting healthcare

Petrochemicals are a key ingredient in pharmaceutical, and medical equipment, from artificial limbs, to heart valves, to PPE.

**99%**  
of pharmaceutical feedstocks and reagents are derived from petrochemicals.  
Source: [Canadian Energy Centre, 2024](#)



## Making life comfortable

From the clothes we wear, to the health and beauty products we use, to the games we play and sports we pursue, thousands of our everyday products are derived from petrochemicals.

**70%**  
Synthetic fibres that use hydrocarbons make up about 60% of clothing and 70% of household textiles.  
Source: [European Environment Agency, 2021](#)