



# Vehicles and the environment



The negative impacts of motor vehicle transport on the environment are obvious. Internal combustion engines burn huge amounts of oil products, releasing various hazardous substances into the air:

- Carbon monoxide – This extremely toxic gas poses a risk to the environment and to humans. Carbon monoxide affects the cortex of the human brain, causing irreversible damage to the nervous system.
- Solid particles – If inhaled, these particles penetrate the lungs and remain there permanently, causing respiratory diseases and cancer. They also damage water reservoirs and plant growth.
- Nitrogen oxides – In contact with moist surfaces such as the lining of the respiratory tract, nitrogen oxides form nitric acid that can damage the respiratory system.
- Sulphur dioxide – This highly toxic substance is harmful to all warm-blooded creatures. In humans it can cause kidney failure, heart failure and cardiovascular impairment. Sulphur dioxide corrodes metal objects and can destroy building structures.
- Hydrogen sulphide – This toxic, suffocating gas causes neurodevelopmental disorders, damages the cardiovascular and respiratory systems, and can be fatal.
- Aromatic hydrocarbons – Emitted into the atmosphere as a result of the incomplete combustion of fuel and from fumes from engines and petrol stations, these toxic elements can have serious harmful effects on the human body.
- Benzopyrene – This carcinogen causes human cells to mutate.
- Formaldehyde – A highly toxic substance, formaldehyde affects the human nervous system.

One of the dangers of burning oil products is that the effects are not immediately visible. Harmful substances accumulate in the human body over time, and many remain permanently. Some of the impacts appear only after some years, by which time the damage is irreversible. As some of the associated diseases are hereditary, they may become more common in successive generations.

The noise produced by car engines also has a strong negative impact on human beings, causing fatigue and exacerbating a variety of mental and nervous disorders. Constant exposure to noise makes it difficult for people to sleep, rest or work productively. Some scientists argue that such constant exposure to noise can significantly reduce a person's life expectancy.

Transport infrastructure, comprising roads, ports, garages, depots and parking areas, can never be neutral with respect to the environment. This land could potentially be used for many other, more environmentally friendly purposes.