

# ENERGY, HEALTH, AND THE ENVIRONMENT

## How energy choices affect our health and the environment

TERMS IN THE GLOSSARY

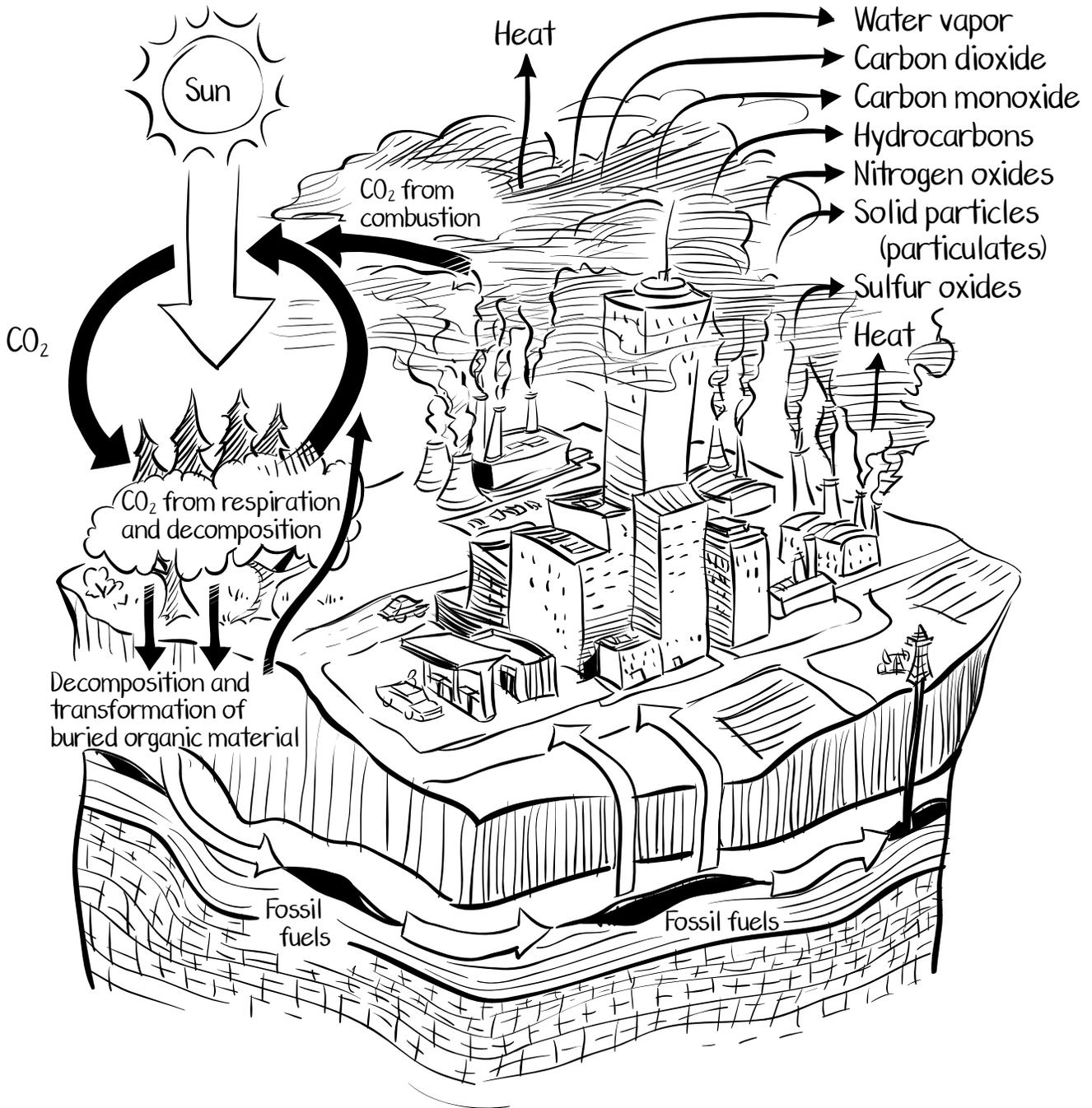
- carbon monoxide
- carbon sink
- conservation
- ecosystem
- encroach
- exempt
- greenhouse effect
- habitat
- nitric acid
- nitrogen oxides
- old-growth forest
- organic decay
- ozone
- particulates
- photochemical smog
- sediment
- sulfur oxides
- sulfuric acid
- temperate zone
- unburned hydrocarbons
- wetland



**A**LL LIVING THINGS NEED CLEAN AIR. They need clean water too, and a temperature range in which they can survive. When the air becomes dirty and polluted, it affects the health of all plants and animals, and it can alter the climate.

Ever since Earth’s beginnings, naturally produced pollutants have entered our planet’s air from volcanic eruptions, forest fires, dust storms, and pollination. But in the last 200 years, human activities have added greatly to the amount of pollution entering the atmosphere, making it difficult for Earth’s natural balancing systems to keep up.

The main cause of excess pollution in our air has been the burning of fossil fuels – for industrial processes, transportation, and electricity generation. Fossil fuel combustion contaminates our air with gases, chemicals, smoke, and ashes – pollutants that are ultimately deposited in our water and soil as well.



**Fossil Fuel Cycle**

The fossil-fuel cycle starts with the capture of carbon dioxide by trees, plants, and other vegetation during photosynthesis. Buried organic material goes through chemical changes to form fossil fuels in a process that takes millions of years. The burning of fossil fuels releases heat, water vapor, carbon dioxide, and other air emissions. Some of the carbon dioxide is recaptured by plants, but if there is an excess, much can remain in the atmosphere.