The greenhouse effect

Greenhouse gases, including carbon dioxide (CO₂) form a blanket around the Earth. Without them all the heat energy would escape into space and the Earth would be a very cold planet.

Some heat energy escapes back into space. Without the greenhouse gases the average temperature of Earth would be -18°C.

Heat energy from the Sun beams down onto the Earth. Some of it passes through a blanket of gases in our atmosphere.

Some of the heat energy is absorbed by the blanket of gases. The greenhouse effect is essential to life on Earth!

Human activities including burning fossil fuels are creating more greenhouse gases, which means more heat energy is absorbed and the Earth gets hotter.