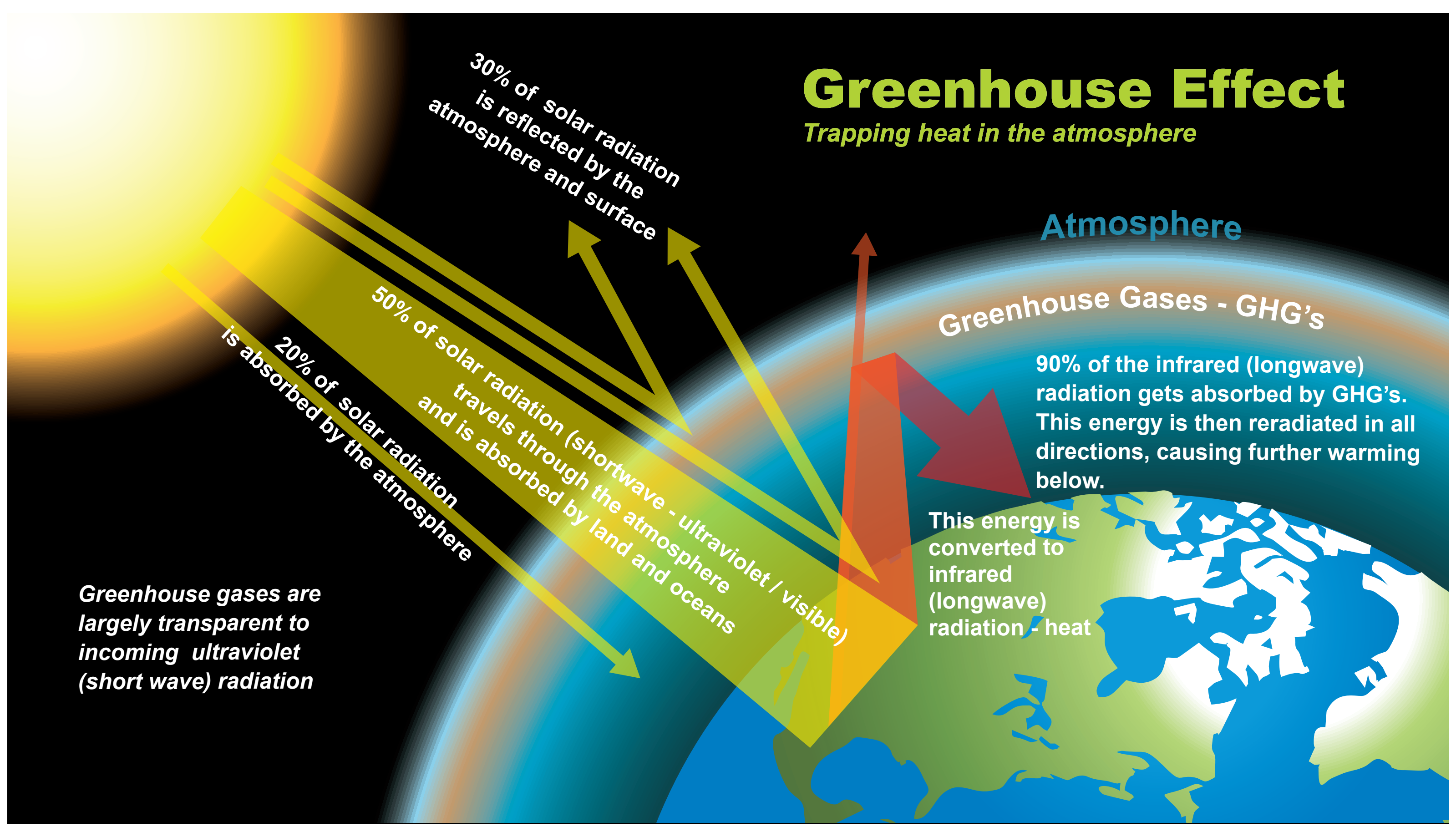


Greenhouse Effect

Trapping heat in the atmosphere



30% of solar radiation is reflected by the atmosphere and surface

50% of solar radiation (shortwave - ultraviolet / visible) travels through the atmosphere and is absorbed by land and oceans

20% of solar radiation is absorbed by the atmosphere

Greenhouse gases are largely transparent to incoming ultraviolet (short wave) radiation

Atmosphere

Greenhouse Gases - GHG's

90% of the infrared (longwave) radiation gets absorbed by GHG's. This energy is then reradiated in all directions, causing further warming below.

This energy is converted to infrared (longwave) radiation - heat