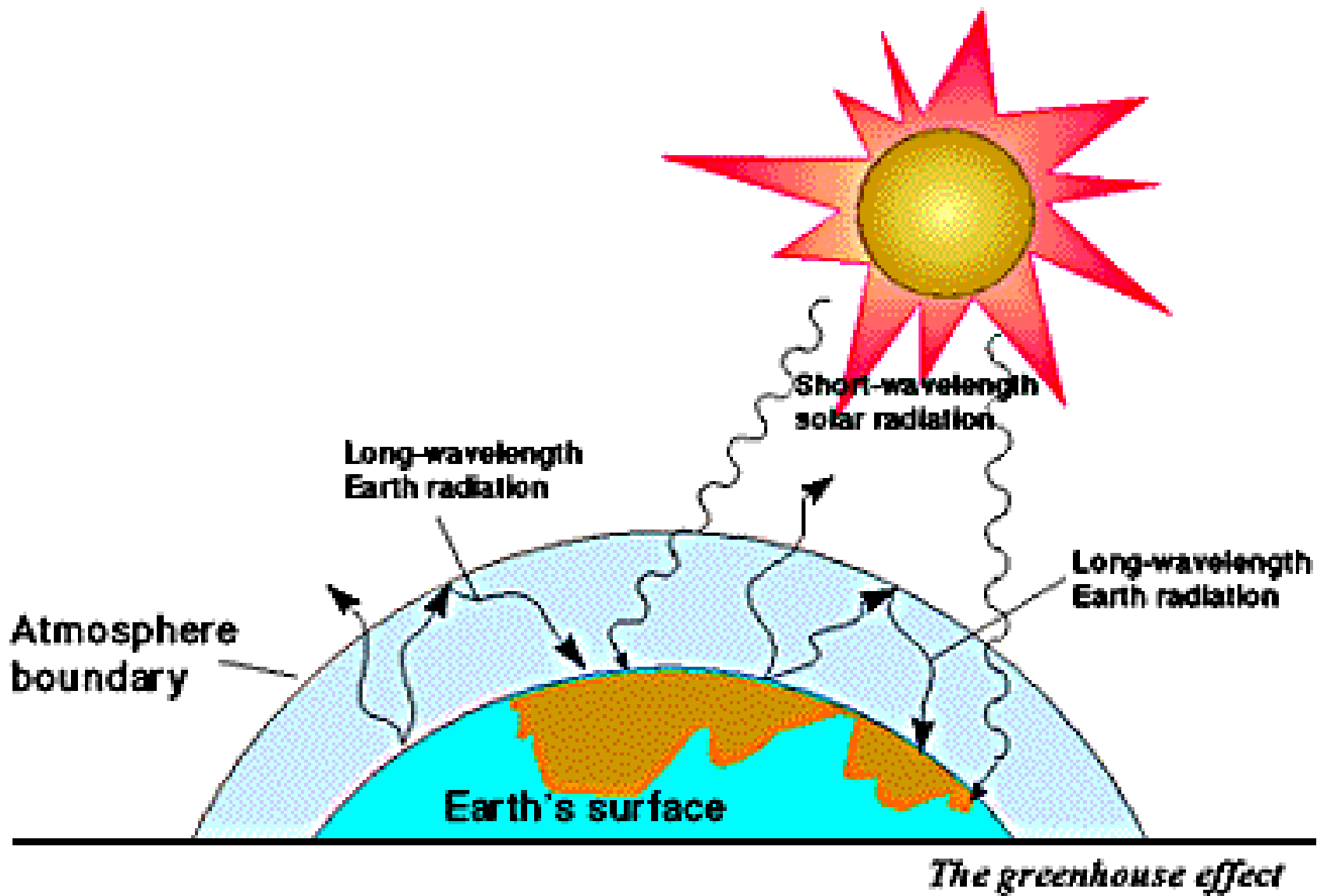
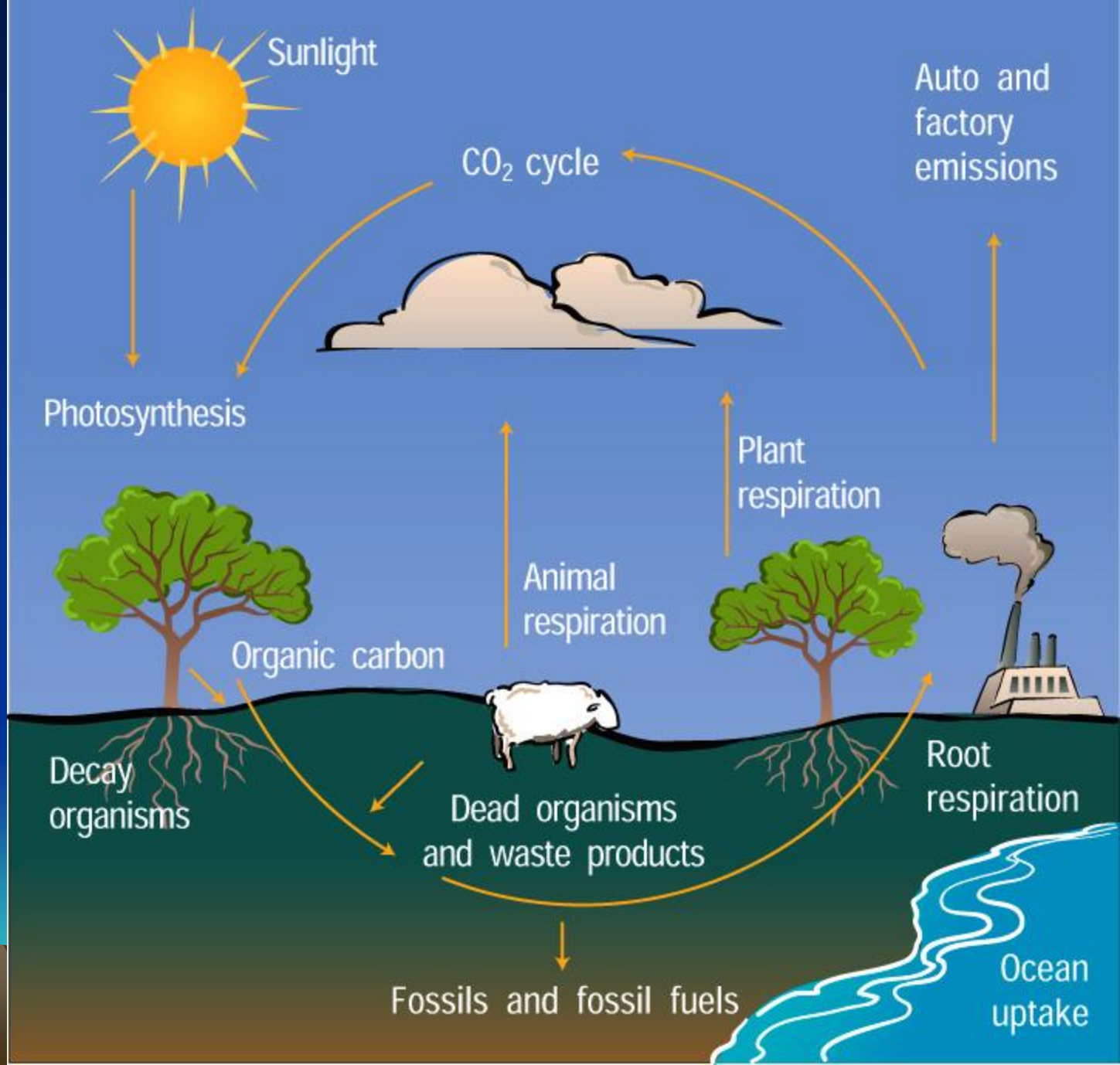
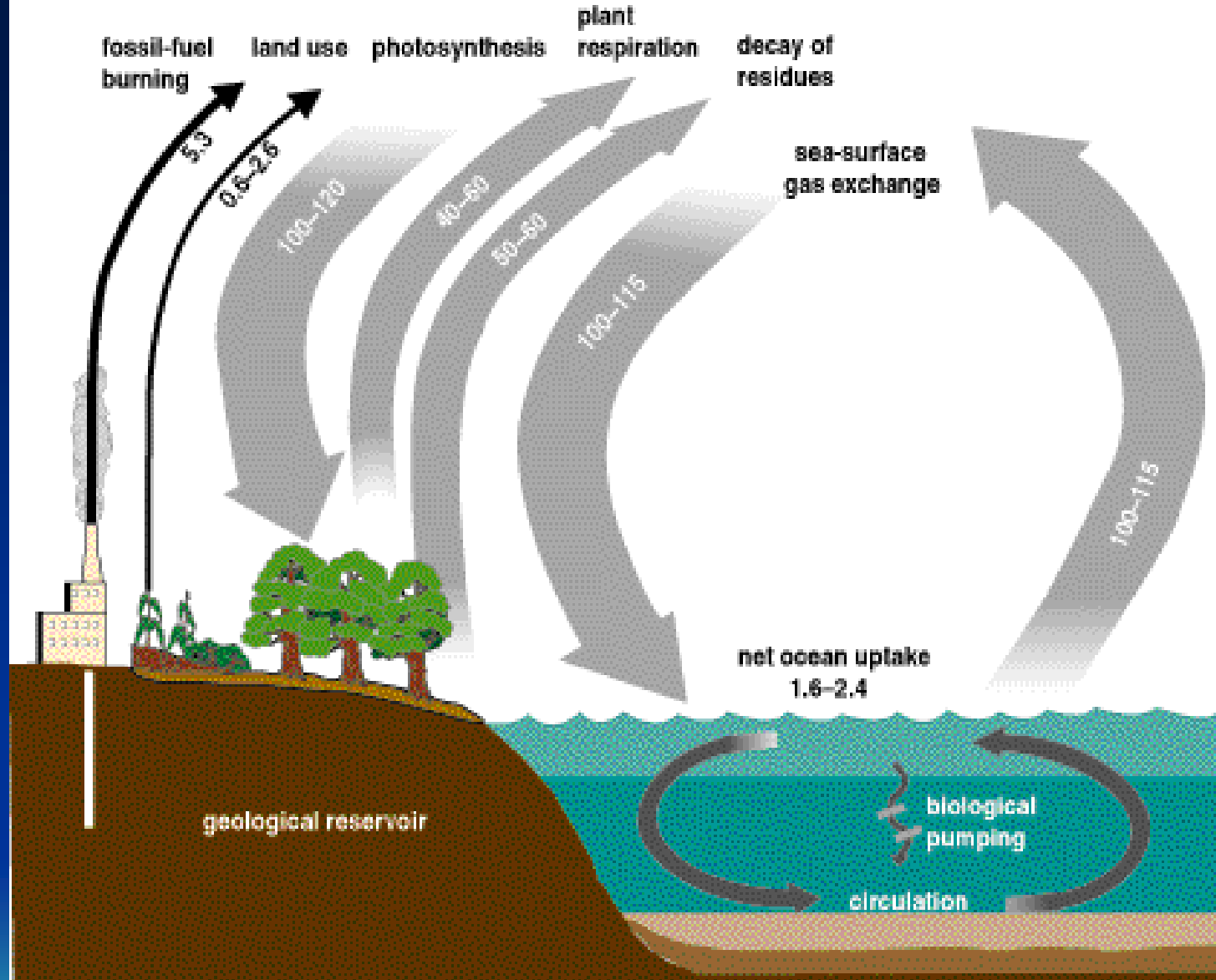


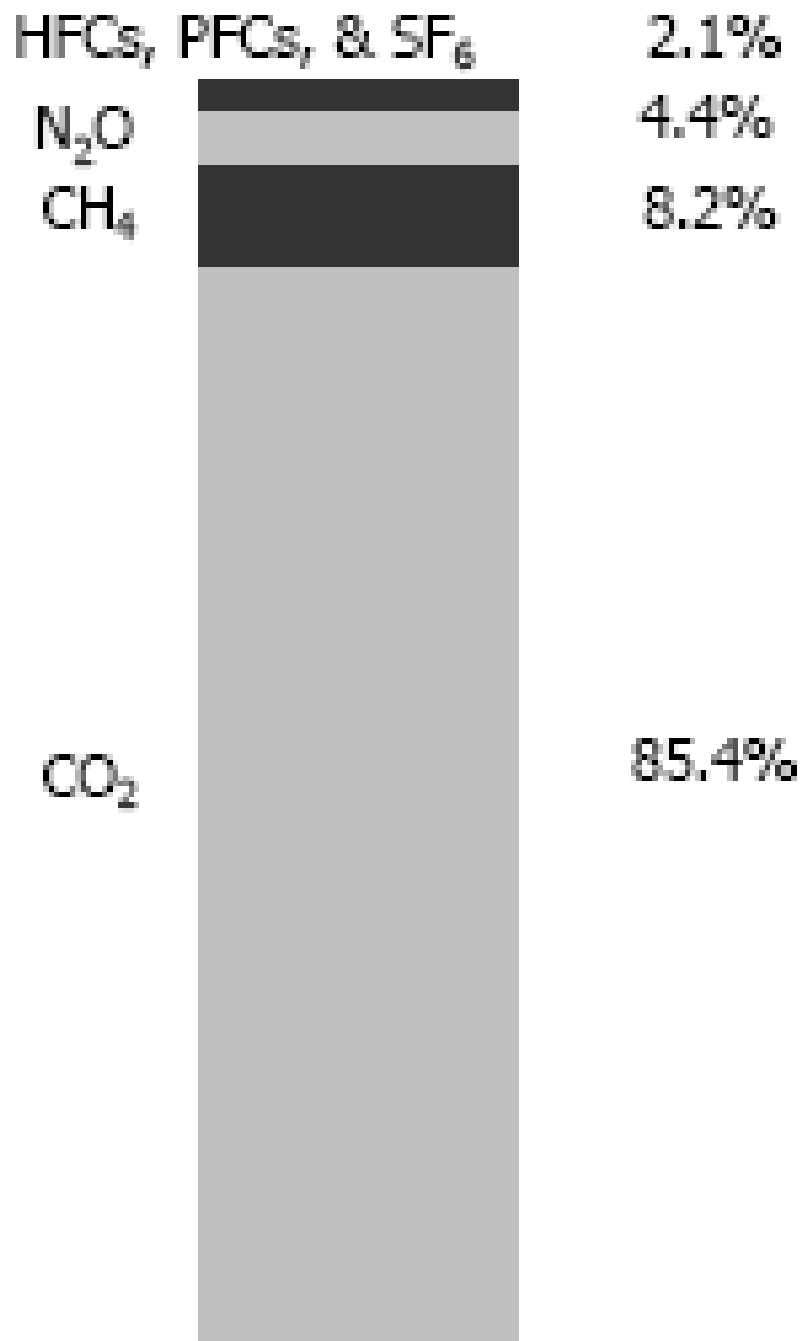
Greenhouse Effect and Carbon Footprint





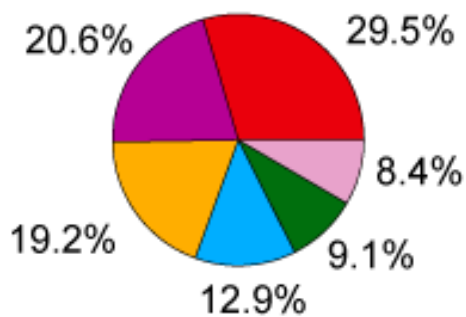
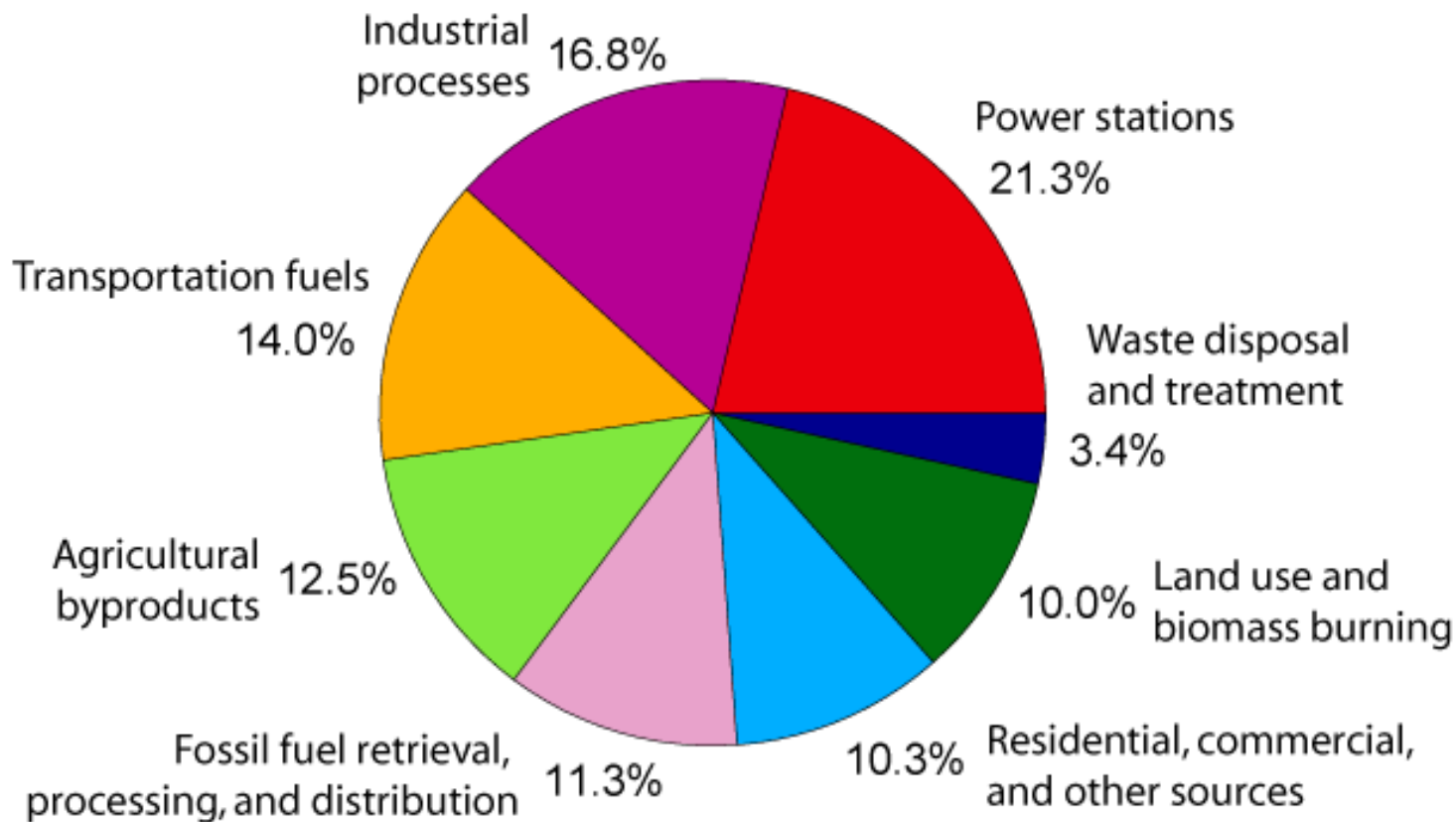




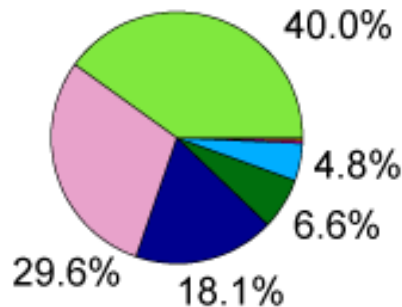


2007 Greenhouse Gas Emissions by Gas (percents based on Tg CO₂ Eq.)
(Tg – teragram = 10¹² g)
(<http://www.epa.gov/climatechange/emissions/downloads09/ExecutiveSummary.pdf>)

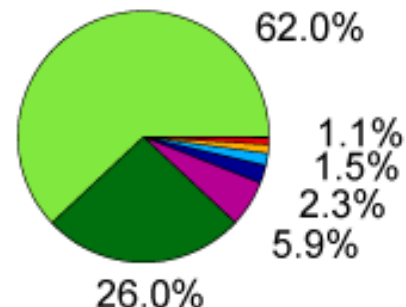
Annual Greenhouse Gas Emissions by Sector



Carbon Dioxide
(72% of total)



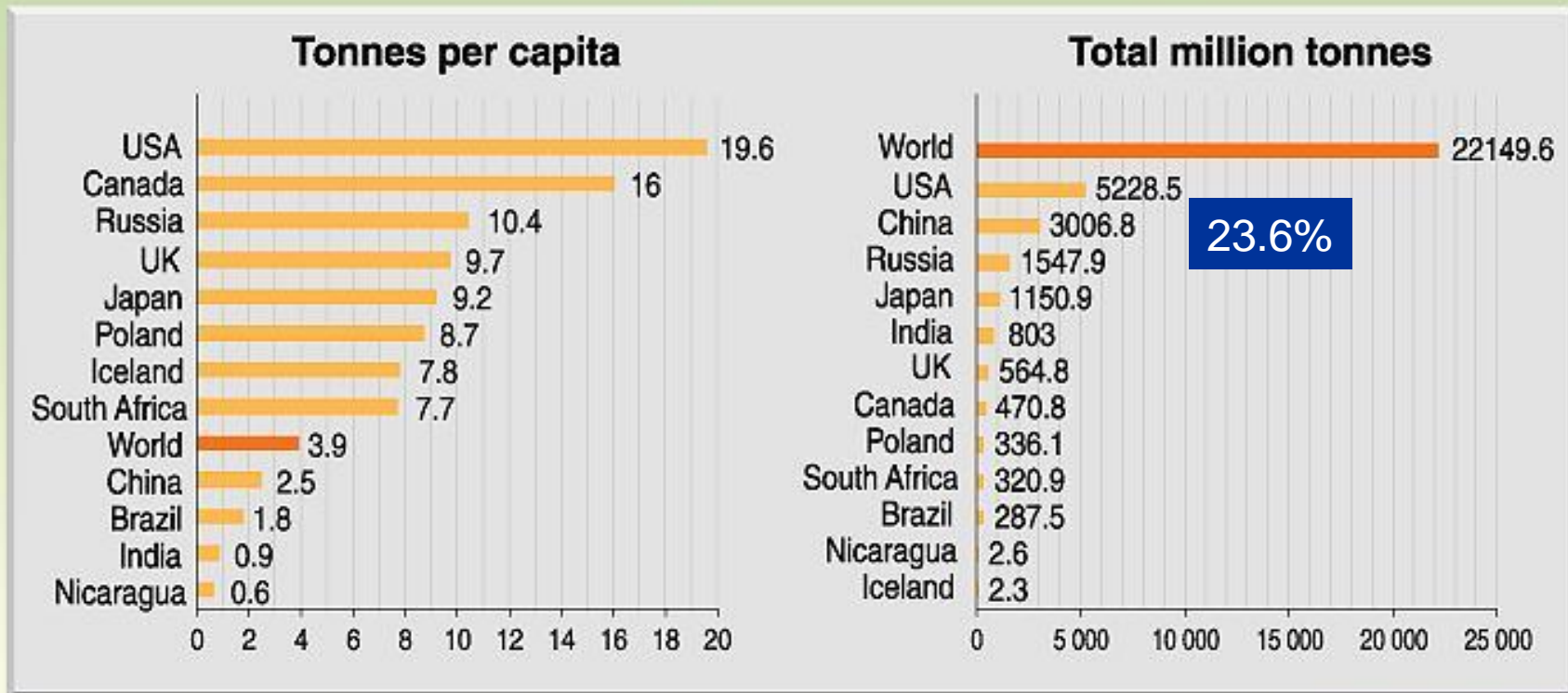
Methane
(18% of total)



Nitrous Oxide
(9% of total)

How the U.S. compares

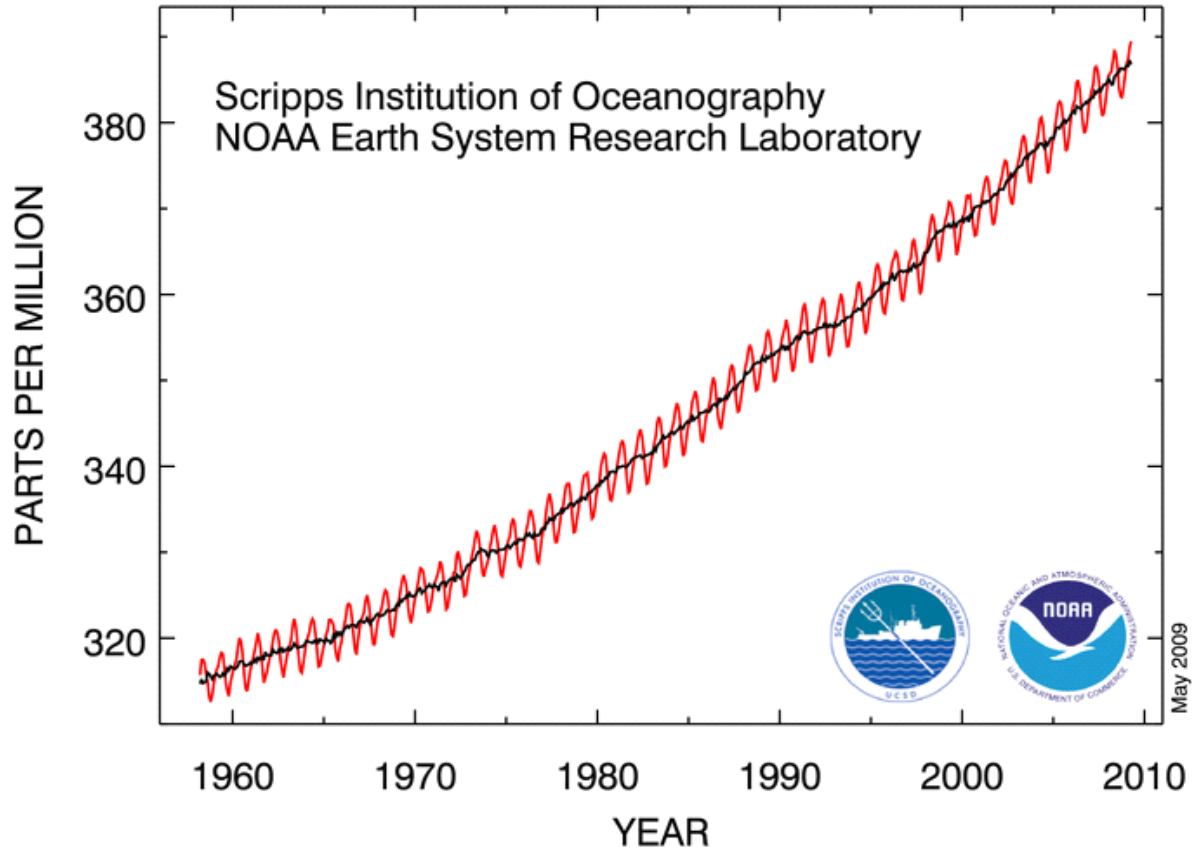
Emissions of CO₂ - selected countries (1995)



Top 8 countries make 44% of CO₂

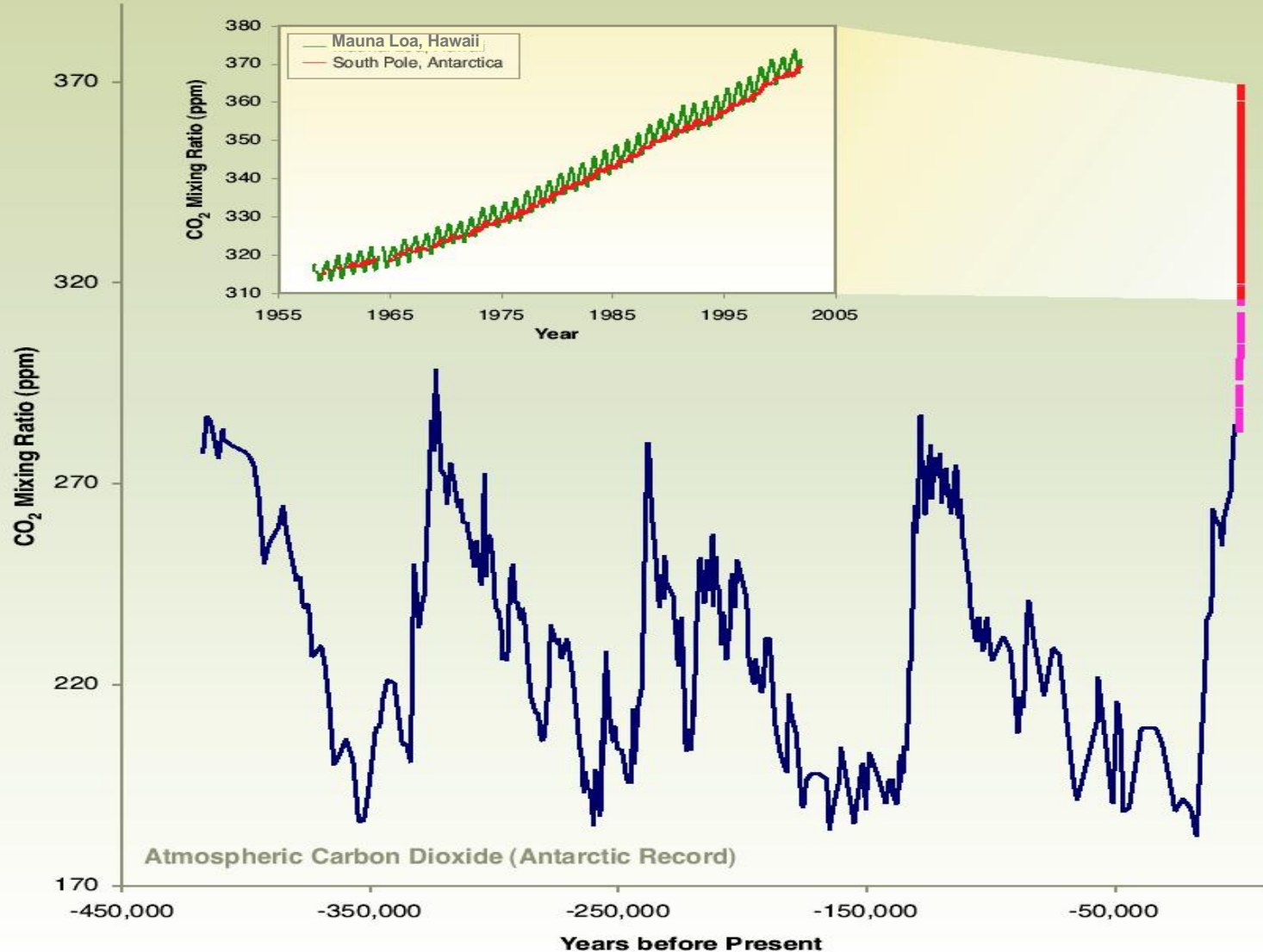
GRAPHIC DESIGN : PHILIPPE REKADEWICZ

Atmospheric CO₂ at Mauna Loa Observatory

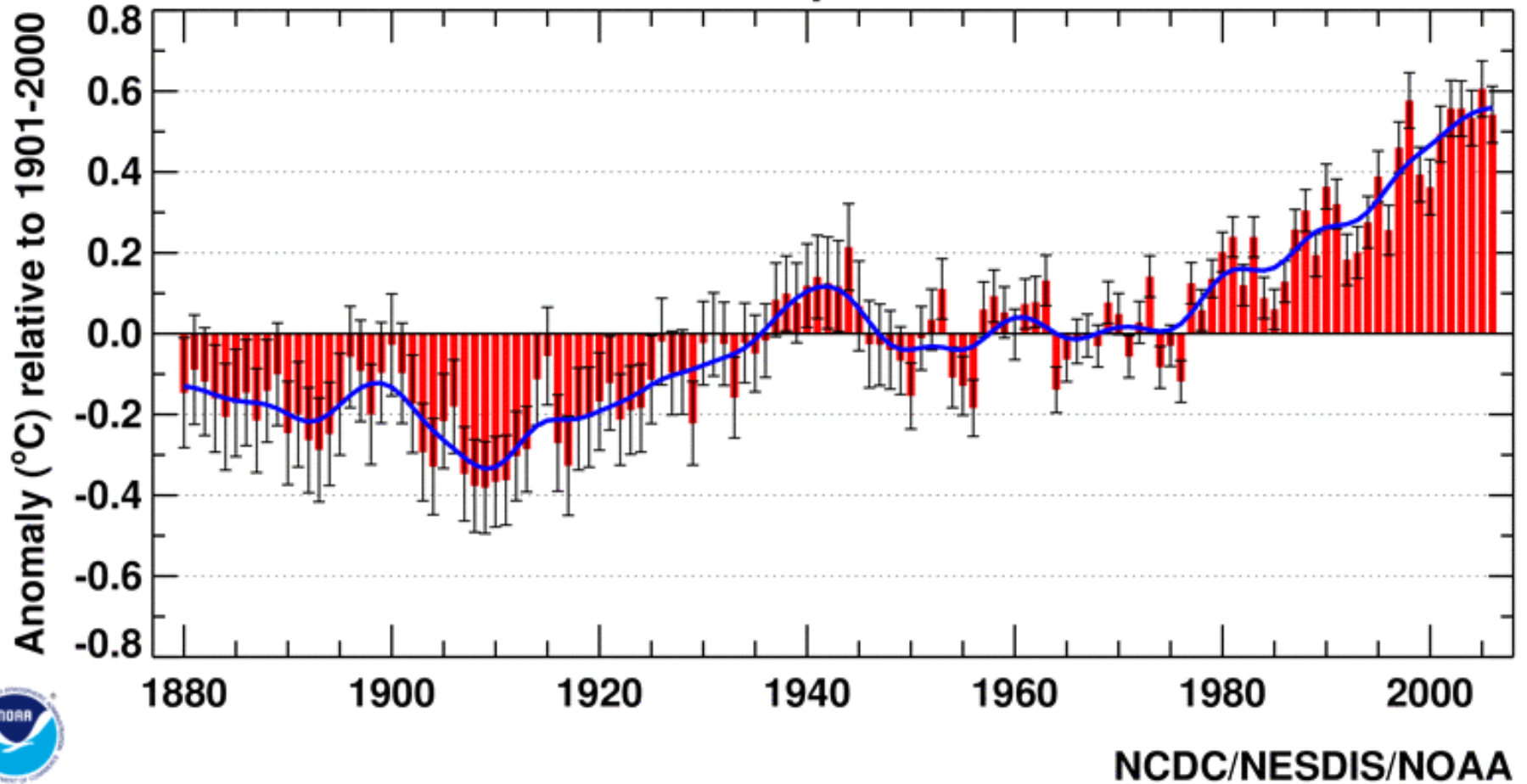


CO₂ concentrations at the Mauna Loa Observatory in Hawaii (as of May 2009)

What about before 1960?



Jan-Dec Global Mean Temperature over Land & Ocean



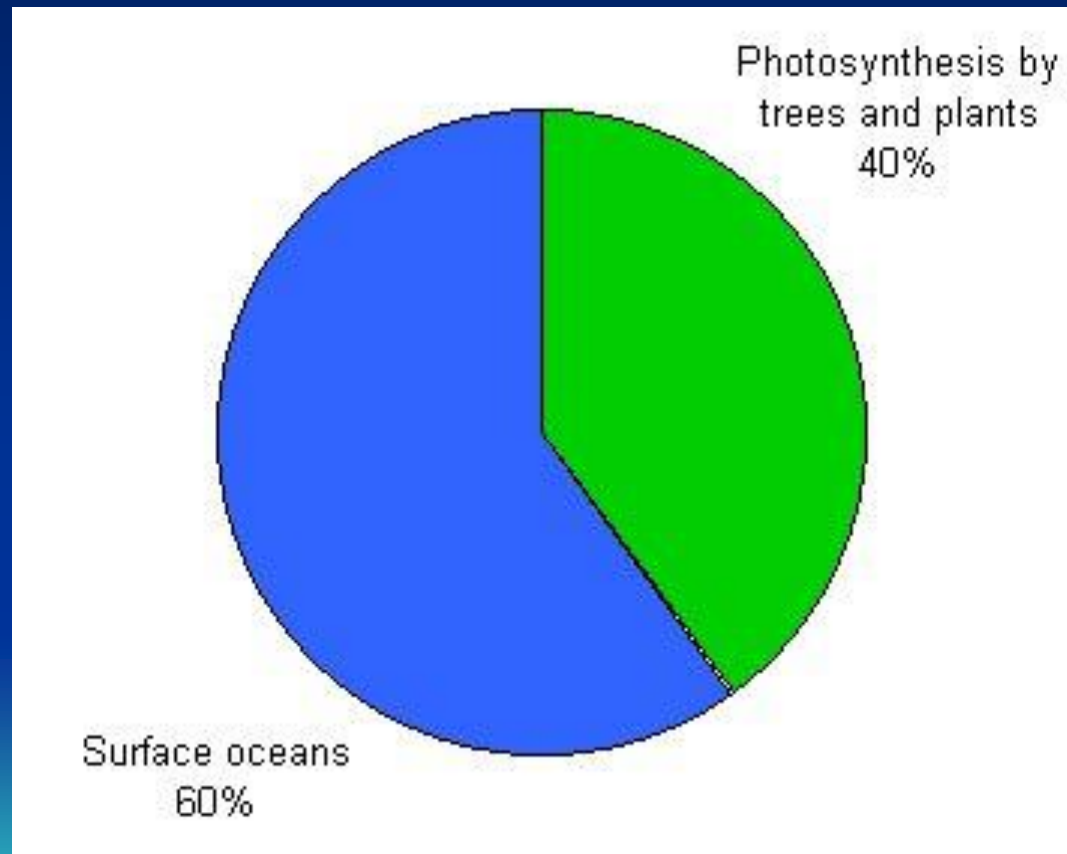
Changes in the average global temperature relative to the mean temperature during the 20th century)

How do we remove this CO₂?

- Carbon sink: is a reservoir of carbon that accumulates and stores carbon for an indefinite period. The main sinks are:
 - Absorption of carbon dioxide by the oceans
 - Photosynthesis by plants and algae to turn the carbon into plant matter
 - Injection of CO₂ emissions deep into geological subsurface



Breakdown



What is a carbon footprint?

- Carbon footprint (FP): is “the total set of GHG (greenhouse gas) emissions caused directly and indirectly by an individual, organization, event or product”

(UK Carbon Trust 2008).

- Everyone in this room has a FP



Let's determine your C-FP

