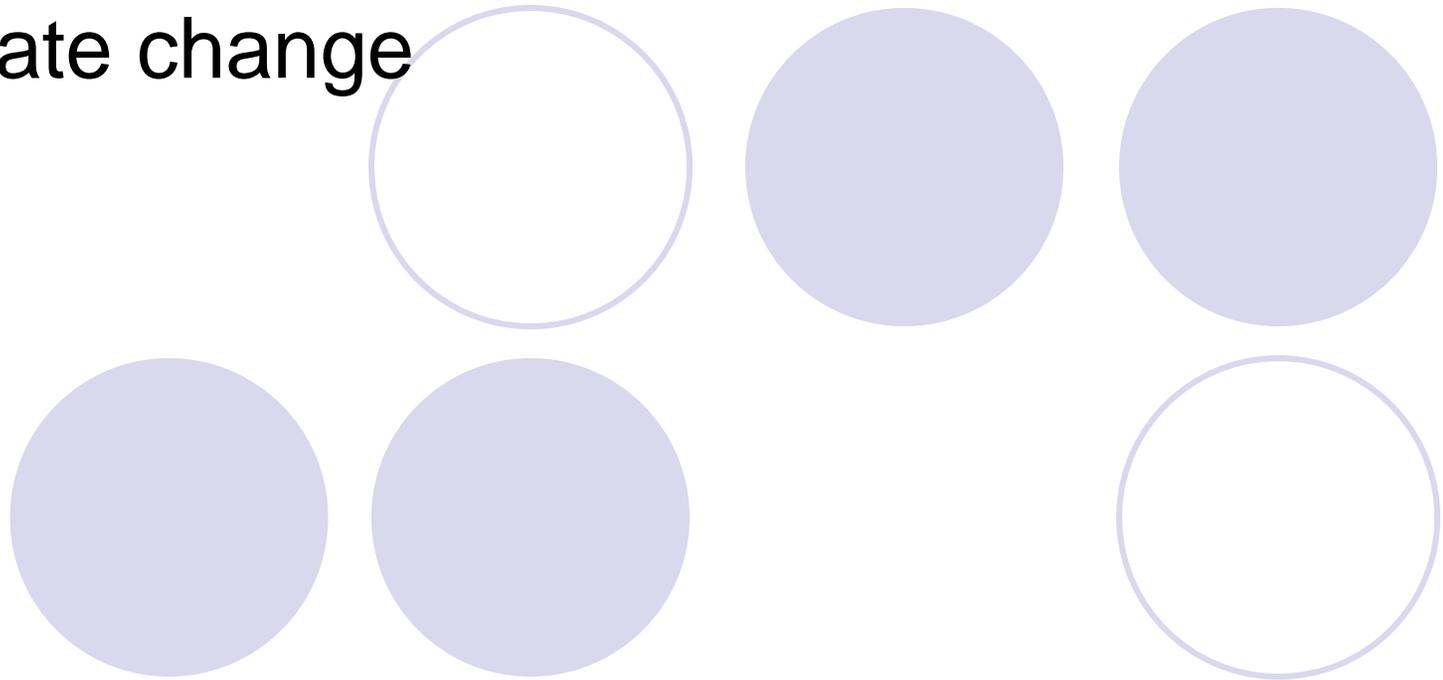


Professor Zoran Saporic PhD

Climate change

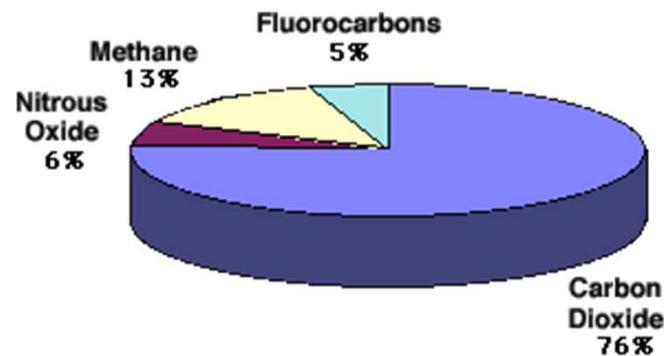


- In modern society people are aware that quality of human life and human health are closely related to the protection and improvement the environment – to the quality of the environment,
- Climate change is one of the most important component of the environmental activities
- Climate change is caused by accumulations of green house gases in the atmosphere, mainly from human activities such as combustion of fossil fuels (which release carbon dioxide) and deforestation (because forests remove carbon from the atmosphere). The atmospheric concentration of carbon dioxide, the main greenhouse gas, has increased by 30 percent since pre industrial period.
- Climate change as a huge global problem and climate change and issues related to climate are very complex,
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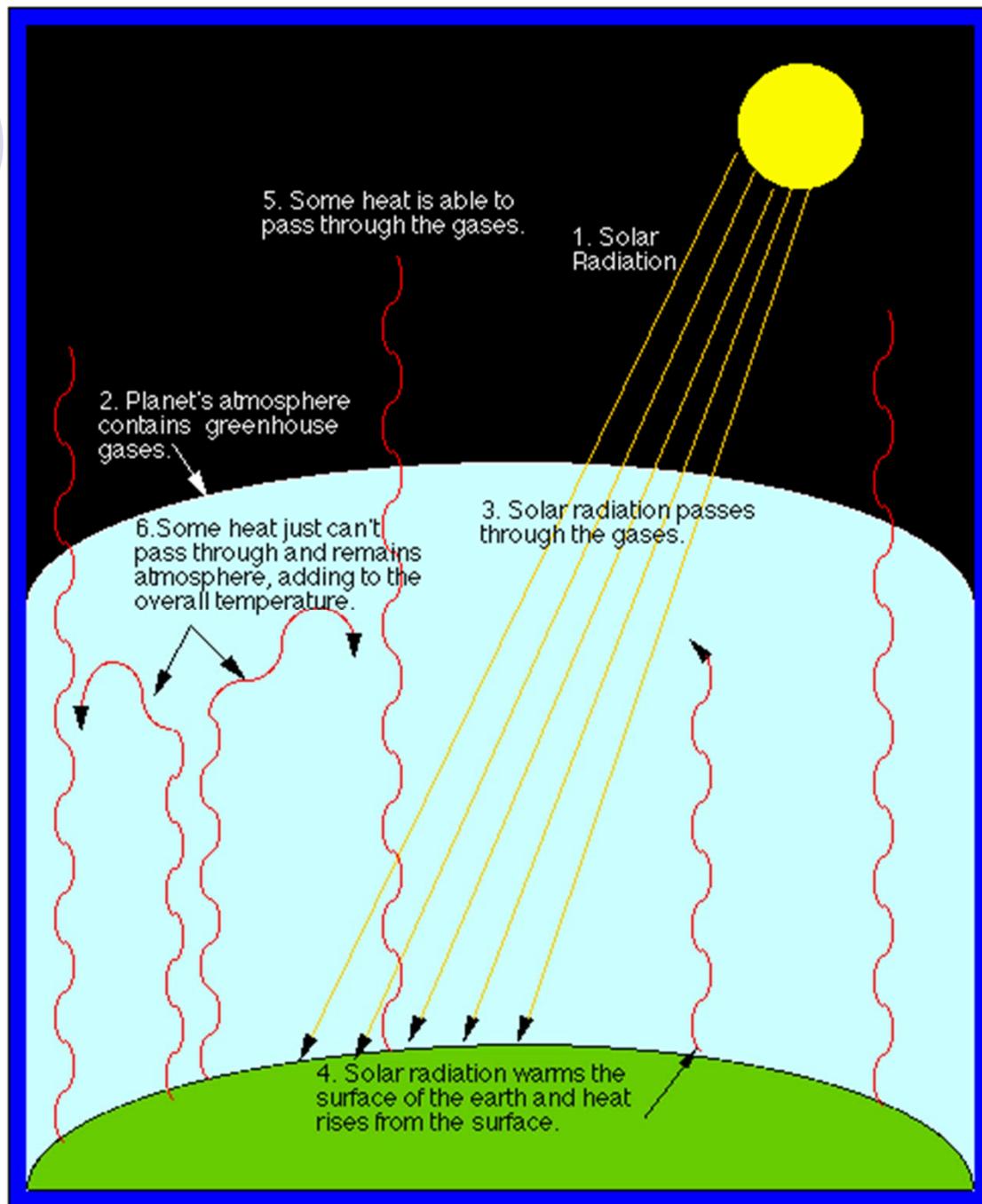
- According The United Nation Framework Convention on Climate Change- climate change is the earth's and climate change as a change of climate directly or indirectly affects the composition of global atmosphere and have impacts to natural climate variability observed over comparable period.
- According The United Nations Intergovernmental Panel for Climate Change(IPCC), prediction in the period less than 100 years the average temperature could be raised more than the 1,5 Celsius degree, that will be very dangerous for the environmental for the nature and human population,
- Sustainable development – our responsibility for the future generations.

- Combating climate change is one of the most important task for the humanity, and will resulted in benefit of present and future generations,
- The main objectives of combating climate change negative effects is to stabilize and reduce greenhouse gases
- The Framework Convention on Climate Change- and The Kyoto Protocol
- Unfortunately some large industrial states still not signed and ratified The Framework Convention on Climate Change- and The Kyoto Protocol,
- Emission trading, flexible mechanisms,
- European Union has strong activities in combating climate change,
- Main greenhouse gases – carbon dioxide, methane, nitrogen oxides etc.

- Global responsibility – technical and financial assistance and support from developed states to the developing states and transfer of modern technologies,
- Main greenhouse gases – carbon dioxide, methane, nitrogen oxides etc.



- The "greenhouse effect" is the heating of the Earth due to the presence of greenhouse gases. It is named this way because of a similar effect produced by the glass panes of a greenhouse. Shorter-wavelength solar radiation from the sun passes through Earth's atmosphere, then is absorbed by the surface of the Earth, causing it to warm. Part of the absorbed energy is then reradiated back to the atmosphere as long wave infrared radiation. Little of this long wave radiation escapes back into space; the radiation cannot pass through the greenhouse gases in the atmosphere. The greenhouse gases selectively transmit the infrared waves, trapping some and allowing some to pass through into space. The greenhouse gases absorb these waves and reemits the waves downward, causing the lower atmosphere to warm.



The negative impacts of carbon dioxide are mainly caused by human activities through unsustainable economic and industrial growth

Negative impacts of carbon dioxide and climate change:

-air pollution:

- Rising sea level and rising temperature, melting ice, polar melting, that leading to massive floods to the low and coastal area
- Droughts,
- Loss of biodiversity – plant, animal fish species intolerant to higher temperature,

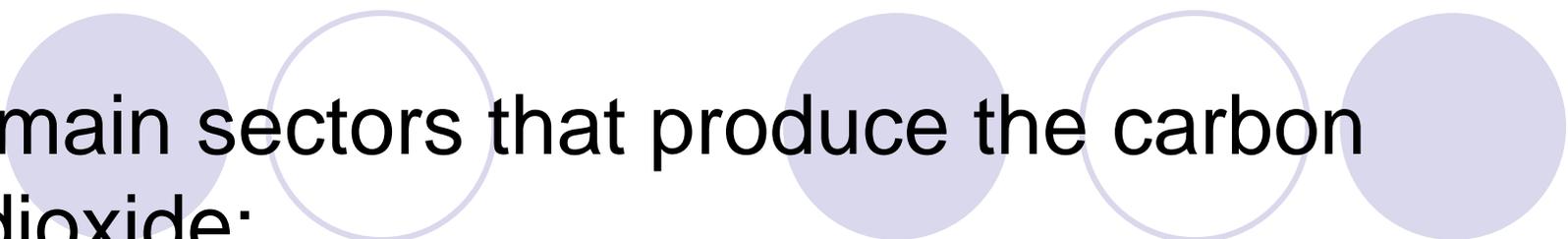
Human health,

-social dislocation,

-food security,

-small islands could disappeared,

-deforestation,



- main sectors that produce the carbon dioxide:

- Industrial sector,
- agriculture sector,
- transport sector,
- Energy sector