

INTRODUCTION TO GLOBAL WARMING

Summary

Global warming, and accompanying processes, such as sea level rise and shrinking of cryosphere, in the last 50 years have been unequivocal. Most of it is very likely have been caused by anthropogenic factors, such as increase of atmospheric concentration of greenhouse gases and deforestation, leading to intensification of the greenhouse effect. Illustration in the process of increase in atmospheric carbon dioxide concentration and increase of temperature, based on observational evidence, is presented. Since emissions of greenhouse gases continue to

rise, we are committed to further warming in the future. The rate of the future warming depends on the path of socio-economic development and the effectiveness of global mitigation policies. Business-as-usual would lead to a large warming – in 2100 the mean annual temperature can be by 1,8-2,4°C higher than the average for 1980-1999. Climate change impacts can be tempered – avoided, reduced, or delayed if an effective global climate change mitigation policy is agreed upon and implemented.