

**P 27. EMISSION INVENTORIES OF GREENHOUSE GASES AND OTHER AIR  
POLLUTANTS**

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**ABSTRACT:** Air pollution can be defined as the presence of one or more air pollutants in the atmosphere in amounts and times that damage human, plant and animal life, commercial or personal property and environmental quality. Sulfur dioxide, nitrogen oxides, hydrocarbons, volatile organic compounds and particulate matters are examples of air pollutants. They are described as greenhouse gases such as water vapor, carbon dioxide, ozone, methane, nitrite oxide and greenhouse gases. The greenhouse effect in a natural phenomenon linked to the absorption of solar energy by the earth's atmosphere. Part of the long-wave infrared radiation emitted by the sun is not reflected back into space by the Earth's but is absorbed by greenhouse gases (GHGs) naturally occurring in atmosphere. This radiation is transformed into heat, resulting in a stable average temperature of 15°C in the Earth's atmosphere. The Intergovernmental Panel on Climate Change (IPCC) projects a minimum temperature increase of 1.4°C and projected sea level increase of 0.2m by 2100. The main contributors regarding greenhouse gases are fossil fuels burning for electricity production and utilisation in industry, deforestation, transportation system, agricultural waste burning, livestock emissions, sanitary landfill. Establishing emission inventories in estimating greenhouse gases and other air pollutants levels is also known. Emission inventories are the reports of the type and amount of the pollutants originating from the heating, traffic, industry, agriculture (agriculture, livestock) in the designated regions. In the past, different emission inventory studies have been completed in different scales around the world, such as IPCC-AR4, ECE-EMEP, EDGAR, CORINAIR. In this study, greenhouse gas generation processes and emission inventories methodology of air pollutants are taken into consideration. For this purpose, emission inventory studies prepared for greenhouse gas and other pollutants in our country and in the world have been examined and a review has been made.

*Keywords: air pollutants, greenhouse gases, emission inventory, IPCC*