

## Methane

Methane emissions have caused the largest radiative forcing by any greenhouse gas after carbon dioxide. Around 60% of global methane emissions are due to human activities. The main sources of anthropogenic methane emissions are agriculture, including rice cultivation and keeping ruminant livestock; coal mining, oil and gas production and distribution; biomass burning and municipal landfills.

Apart from directly influencing the climate, methane has an indirect effect by being an important precursor to the formation of the powerful air pollutant, tropospheric ozone. Increased methane emissions are responsible for half of the observed rise in tropospheric ozone levels globally. While methane does not cause direct harm to human health or crops, it can be attributed to as much as 15% of premature mortalities due to air pollution, and more than 20% of respiratory mortalities associated with tropospheric ozone in South America, Europe, the Middle East, and Asia.