

Trends in Historic Emissions Indicators

The United States believes that effective action to control greenhouse gas emissions must consider greenhouse gas emissions trends and current circumstances and the underlying factors and indicators which influence them. Since the relative importance of various sources and underlying circumstances differs among countries, appropriate policy responses may also differ among countries. Consideration of these differences should therefore be an important element of analysis and assessment under the Berlin Mandate.

This submission contains some key points regarding historic emissions trends and indicators. We have also provided some references and sources for additional information.

- The 1992 Supplement to the IPCC Scientific Assessment highlights the relative importance of the various greenhouse gases and sources globally. While the developed countries and economies in transition account for the majority of energy-related CO₂ emissions, developing countries account for the majority of land-use related CO₂ emissions and a large proportion of other greenhouse gas emissions.
- The fact that the relative importance of the different greenhouse gas sources differs by region has important implications. Programs focused on energy-related CO₂ are not likely to reduce emissions of land-use related CO₂ or anthropogenic methane. Policies to mitigate greenhouse gas emissions must consider all sources and types of greenhouse gases.
- Energy-related CO₂ remains the single most important anthropogenic component of radiative forcing. The developed countries account for the bulk of energy-related CO₂ emissions over the past 60 years, although their proportion of global emissions over the past two decades has declined. Trends in economic growth and energy consumption further suggest that the biggest growth in future emissions levels will occur in developing countries.
- Countries differ markedly in terms of their energy and carbon intensity per unit of economic output. Even among OECD countries with comparable levels of economic development, there are significant differences in patterns of energy consumption and related carbon emissions. This demonstrates that factors other than aggregate economic activity and population growth are important components of energy-related carbon emissions.