Introduction

The atmospheric concentrations of carbon dioxide, methane, and nitrous oxide have increased to levels unprecedented in at least the last 800,000 years. Carbon dioxide concentrations have increased by 40% since pre-industrial times, primarily from fossil fuel emissions and secondarily from land use change emissions.

Global mean surface temperature increase as a function of cumulative total CO₂ emissions

Over every continent except Antarctica (where observations uncertainties are large), anthropogenic forcings have contributed to warming that is similar to the observed warming over this period.


www.climatechange2013.org

Contact: wgi@ipcc.unibe.ch