

CH₄ Connections 2020

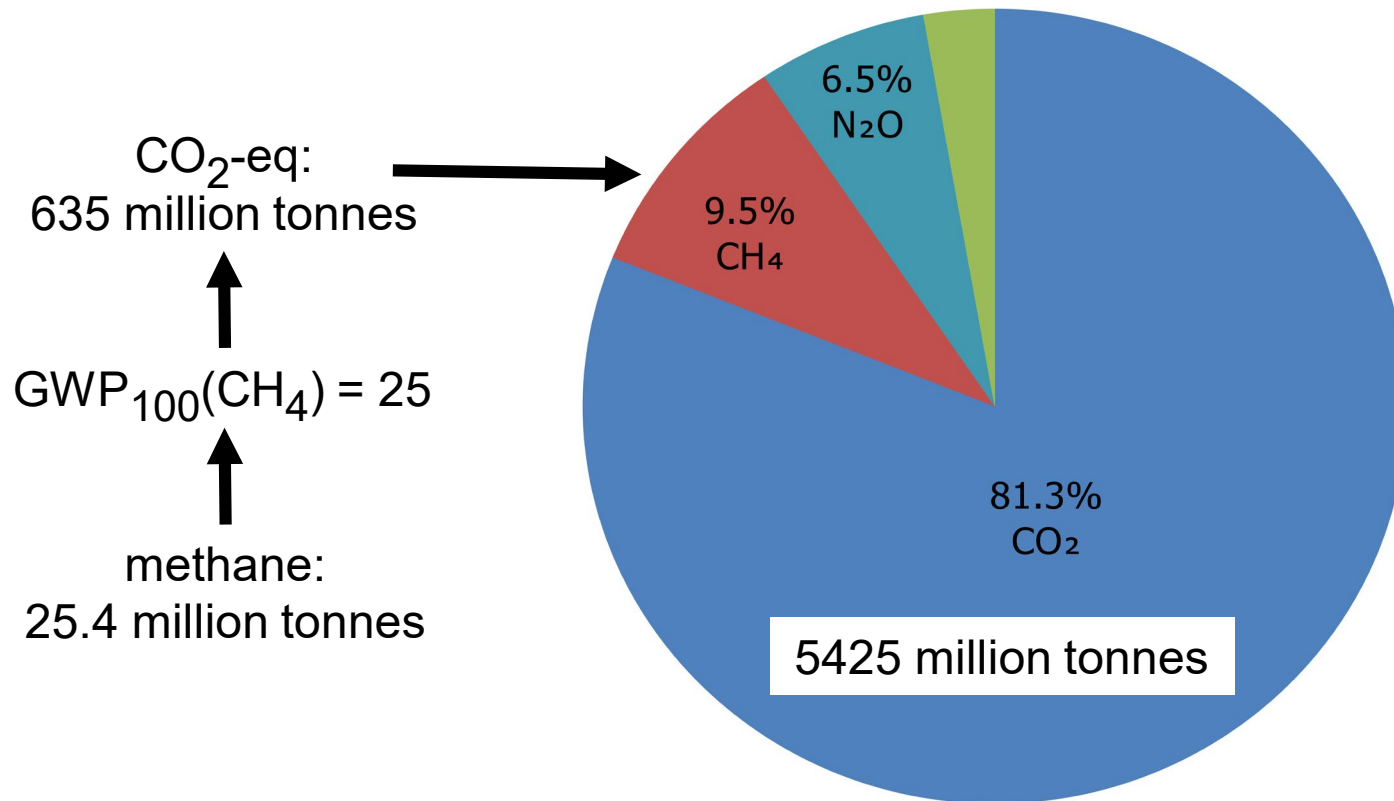
Is Methane the Second Most Important Greenhouse Gas?

Robert L. Kleinberg
Cambridge Massachusetts

18 November 2020

Greenhouse Gas Emissions (USA, 2018)

CO₂-equivalent = 6677 million tonnes

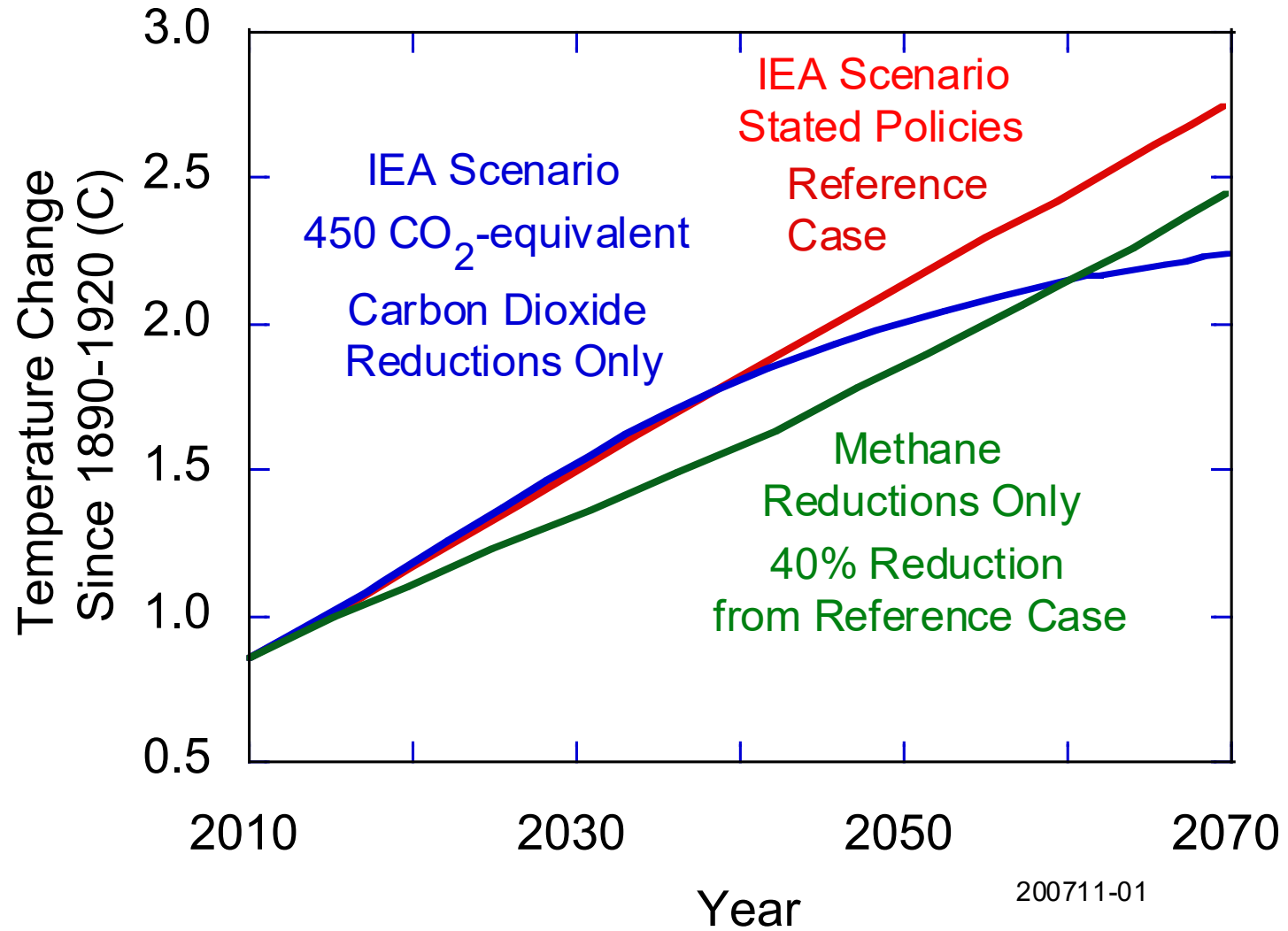


Inventory of U.S. Greenhouse Gas Emissions and Sinks, 1990-2018

U.S. Environmental Protection Agency, 2020, EPA 430-R-20-002

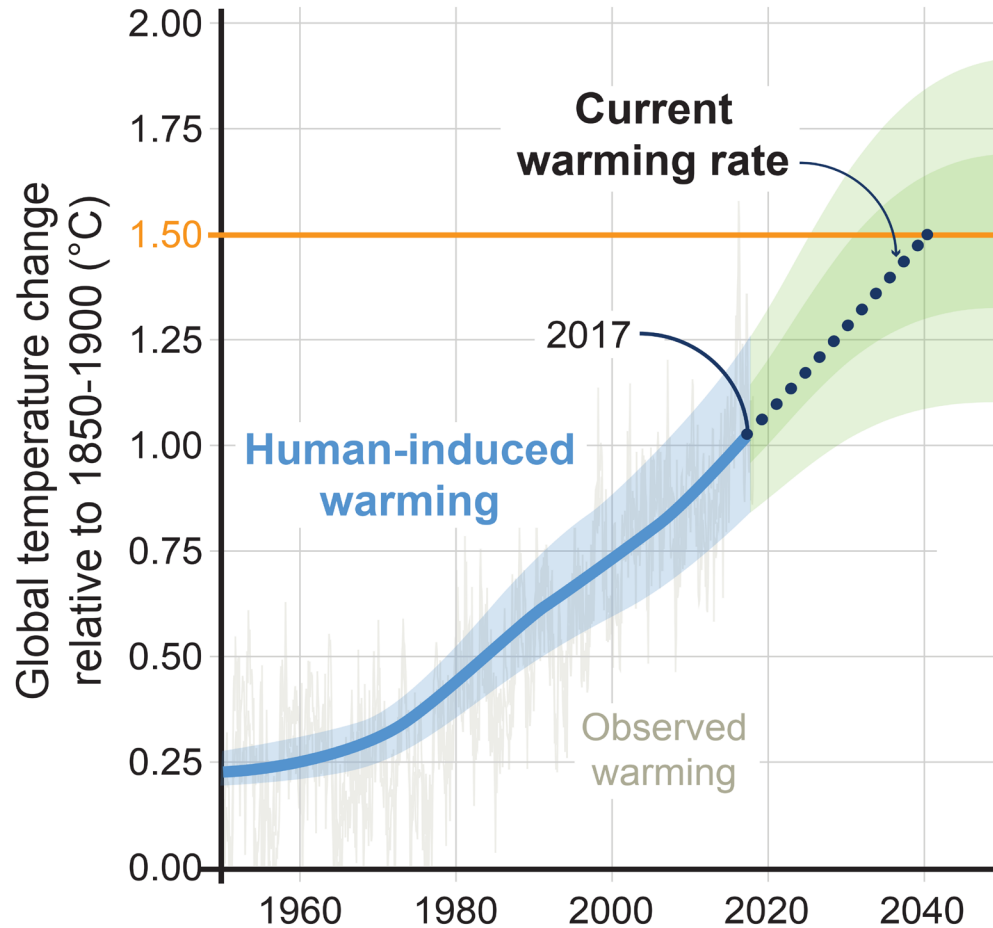
<https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks>

Controlling Methane is the Quickest Way to Mitigate Global Warming



Shindell et al., Science 335, 183-189 (2012)

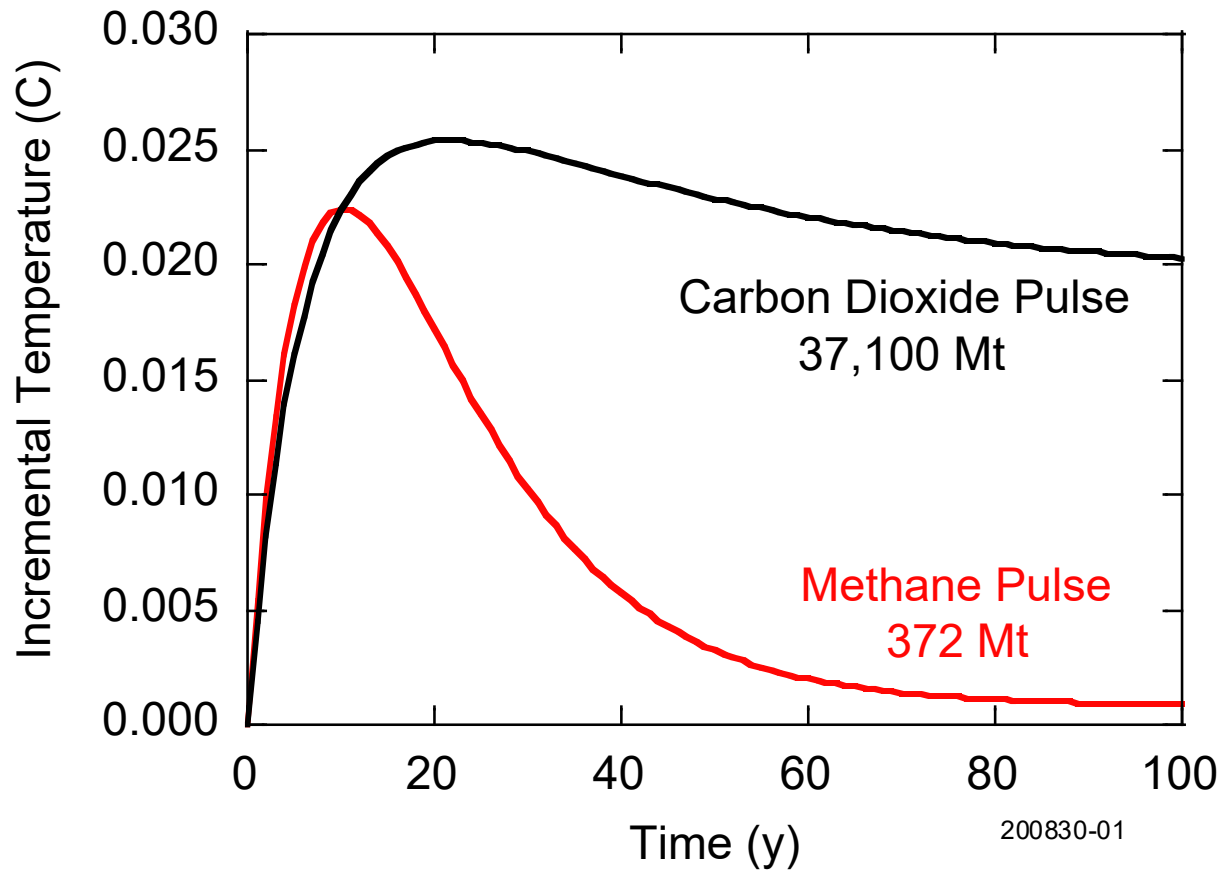
IPCC 2050 Target: Average Temperature Less Than 1.5°C Above Pre-industrial Level



IPCC Global Warming of 1.5°C, FAQ 1.2

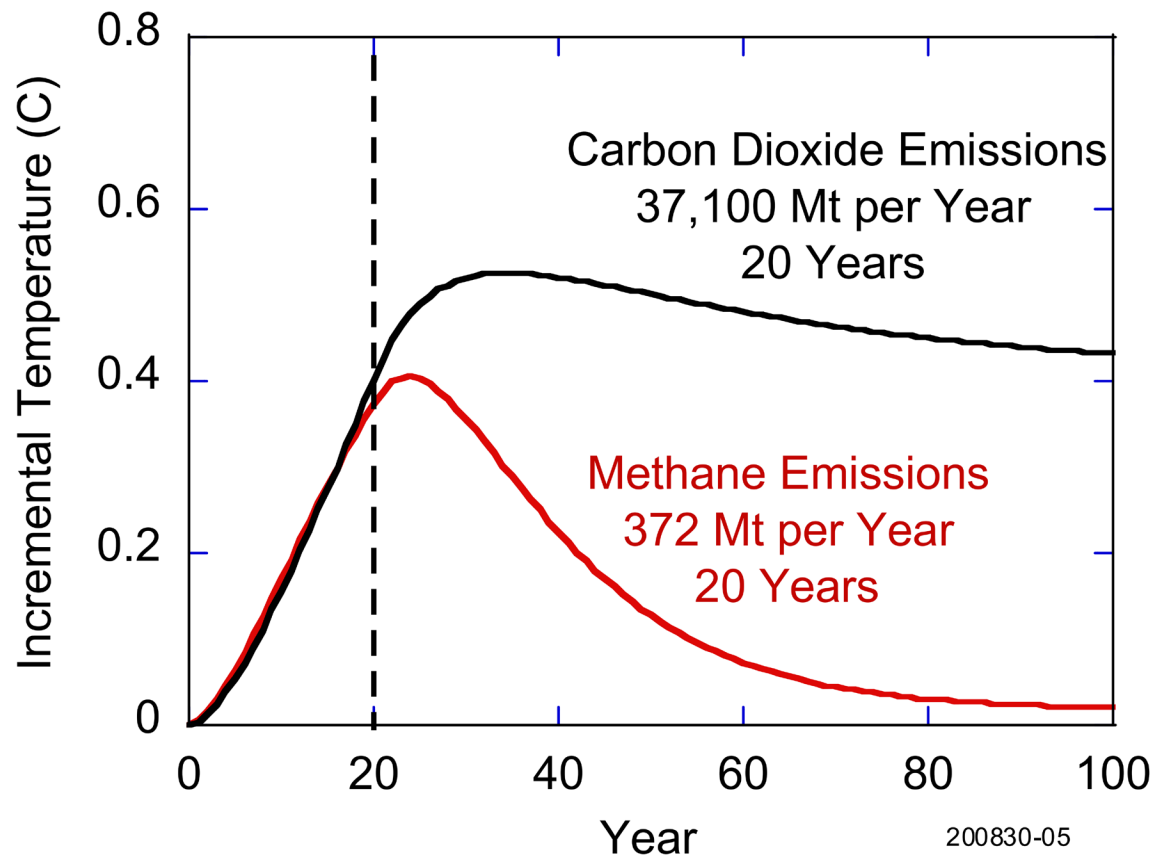
<https://www.ipcc.ch/sr15/faq/faq-chapter-1/>

Incremental Increase of Global Mean Surface Temperature Resulting from Emission of **Single-Year** Quantities of CO₂ and CH₄



R.L. Kleinberg, 2020. The Global Warming Potential Misrepresents the Physics of Global Warming Thereby Misleading Policy Makers
EarthArXiv: <https://doi.org/10.31223/X5P88D>

Incremental Increase of Global Mean Surface Temperature Resulting from Emission of **20-Year** Quantities of CO₂ and CH₄



R.L. Kleinberg, 2020. The Global Warming Potential Misrepresents the Physics of Global Warming Thereby Misleading Policy Makers
EarthArXiv: <https://doi.org/10.31223/X5P88D>