Climate Change

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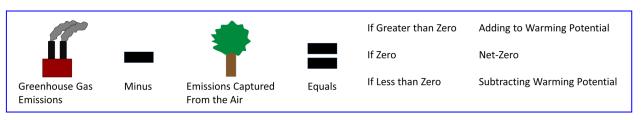
Climate Change impacts every sector within the United States. For that reason, it is widely discussed throughout the rest of toolkit. Perhaps the single most comprehensive resource on climate change is the International Panel on Climate Change (IPCC). Its latest report cited over 6,000 references with nearly a hundred authors from 40 countries. Following this page, the next section of the toolkit provides a climate overview for the introductory reader to better understand the concepts described in IPCC reports.

"The report finds that limiting global warming to 1.5°C would require "rapid and far-reaching" transitions in land, energy, industry, buildings, transport, and cities. Global net human-caused emissions of carbon dioxide (CO2) would need to fall by about 45 percent from 2010 levels by 2030, reaching 'net zero' around 2050. This means that any remaining emissions would need to be balanced by removing CO2 from the air."

- IPCC 2018 Summary for Policymakers of Special Report on Global Warming of 1.5°C

What are Climate targets?

A climate target is often used by politicians to discuss different dates for achieving net-zero greenhouse gas emissions. Net-zero is achieved when human emissions equal the greenhouse gases captured from the air by humans. This means it is possible to reach net-zero without eliminating industries, such as air travel, which no emission free alternatives exist.



Targets for achieving net-zero are a topic of debate among legislative candidates. The two dates most commonly referenced are 2030 and 2050, both draw from the IPCC report mentioned above. Keeping global warming at or below 1.5° C will substantially minimize climate consequences, while it is important to note that every fraction of a degree of warming brings additional damages. As such, new fossil fuel infrastructure could not be built for us to meet either target.

Net-zero by 2030

This date is the target described in the **Green New Deal.** According to the IPCC Special report, if human activities continue "business as usual," we are likely to reach 1.5° C between 2030 and 2052. This target ensures that climate consequences are minimalized even in the worst case scenario. Reaching net-zero by 2030 would also allow time to subtract warming potential (i.e. reverse global warming) before mid-century.

Net-zero by 2050

This date is the target described by legislation such as the **100% Clean Economy Act**. It falls in line with the target described in the IPCC report, given that 45% of emissions must be eliminated by 2030.

Key Resources

Intergovernmental Panel on Climate Change
Climate Stick
Interactive Carbon Brief
Stabenow: The Climate Crisis in Michigan

www.ipcc.ch www.climatestick.org/ www.interactive.carbonbrief.org www.stabenow.senate.gov