Goals

In 2015, the United States played a key role in negotiating the Paris Agreement, in which nations agreed to limit global warming to “well below 2°C” compared to preindustrial levels. In 2020, the US officially withdrew from the Paris Agreement and spent several years reversing federal regulations on carbon emissions from cars, trucks, and power plants. Under President Biden, the US is now rejoining the Paris Agreement. You must decide on the following:

1. **US actions to reduce carbon emissions, if any.** In recent years US emissions have fallen, and are now ~13% below 2005 levels. However, US emissions are expected to grow modestly over time without further action and given current policies to promote production of oil, coal, and natural gas. You can decide when US emissions will stop growing, when they will begin declining, and at what annual rate emissions decline, if at all. See the gray boxes on the next page for additional guidance.

2. **Whether to make commitments to reduce deforestation or plant new forest area.**

3. **How much to contribute, if at all, to a global climate fund.** The fund is intended to provide at least $100 billion/year for developing countries to reduce their emissions and adapt to climate change.

Context

The scientific consensus on climate is clear: over 97% of climate scientists agree that climate change is happening, that it is caused primarily by use of fossil fuels, and that the impacts could be devastating. [US research](https://climate.gov) has shown that climate change is harming all 50 states today and that without dramatic reductions in global emissions, the damage will become far more severe.

Public Opinion

A majority of the public in the US believes climate change is real and that human activity contributes significantly to it. Most support policies that could be implemented to address climate change but oppose those actions that raise the cost of living. Climate change ranks near the bottom of most people’s priorities, far below national security, the economy and jobs. Most people are opposed to any agreement that places undue burden on our own economy, while developing nations’ emissions continue to grow.

Opportunities

The World Economic Forum ranks climate change as the top global risk facing society. According to a report by the US government’s Commodity Futures Trading Commission, climate change poses a significant risk to the US economy and its financial system. Meanwhile, the costs of renewable energy have fallen substantially in the last decade and are cost competitive with fossil fuels in many areas.

National Action

In Paris, the US pledged a 26-28% reduction in US emissions from 2005 levels by 2025. Fulfilling this pledge depends on the successful implementation of federal policies to limit power plant emissions and improve fuel efficiency in cars, as well as action at the city, state and regional levels. After years of the Trump Administration rolling back federal policies that would reduce emissions it is unclear whether the US will be successful in maintaining steady emission reductions. Division among political parties and entrenched business interests with a stake in the fossil fuel industry make ambitious climate action challenging.

Forests and Land Use

The US has about 304 million hectares of forested land covering about a third of its territory. Protecting existing forests and promoting the growth of new ones could sequester carbon from the atmosphere and into forests.

Developed by Climate Interactive, MIT Sloan, and the UML Climate Change Initiative. Updated Mar 2022
Global Landscape

- China’s economy is approximately equal in size to that of the US, is growing far faster than that of the US, and generates over one quarter of global CO₂ emissions. China has pledged to peak its CO₂ emissions by 2030, when its emissions are projected to be over twice those of the US, but it continues to invest in the coal industry. China must cut its emissions for the US to consider action.

- Meanwhile, emissions from rapidly developing countries, such as India, continue to grow. Without emissions cuts from rapidly developing and less developed nations, by 2050, their combined emissions will rise to over twice those of developed countries. Emissions from these nations must fall. It is not acceptable for these nations to demand that the US and other developed nations cut their emissions while they continue to increase theirs.

- The less developed nations continue to emphasize that reductions in their emissions would require extensive financial assistance from developed countries, but corruption pervades many of these countries and financial assistance often fails to reach its intended use.

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**CO₂ Emissions from Energy Use**

- Baseline projections if no action taken

**GDP per person in 2018**

(2017 PPP US Dollars)

- US: $61,461
- EU: $43,985
- Other developed: $32,383
- China: $14,870
- India: $6,497
- Other developing: $10,305

**Population Wealth and Cumulative Emissions**

- US
- EU
- Other developing
- China
- India
- Other developing

- Cumulative CO₂ Emissions from Fossil Fuels (1850 - 2018)

**Emissions from energy per person**

2018 (tons CO₂ per year)

- US: 16.9
- EU: 7.3
- Other developing: 9.7
- China: 7.0
- India: 1.9
- Other developing: 2.5

While cumulative emissions so far have been higher in the developed countries (i.e., the US, EU, and other developed countries), the growth of population, GDP per person, and emissions in the developing nations far outpaces growth in the developed countries. If no action is taken, cumulative emissions of all developed countries (US, EU, and other developed) are expected to fall to 42% of total by 2100.

Since 1980, emissions from energy per person have risen dramatically in China and India (by 380% and 360%, respectively) but have fallen in the US and Europe (by 20% and 28% respectively).