Goals

In 2015, the US 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. However, in June 2017 the US announced it is withdrawing from the Paris Agreement and will cease implementation of its pledges to reduce carbon emissions. Under the terms of the Agreement, US withdrawal will take effect in November 2020. In the interim, the US may still participate in the negotiations. You must now decide on the following:

1. **US actions to reduce carbon emissions, if any.** In recent years US emissions have fallen, and are now ~14% below 2005 levels. However, US emissions are expected to grow modestly over time without further action and given current administration 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.

2. **Whether to reduce deforestation or to increase reforestation or afforestation.**

3. **How much to contribute, if at all, to the Green Climate Fund.** The fund is intended to provide at least $100 billion/year by 2020 for developing countries to reduce their emissions and adapt to climate change. In June 2017, the US announced that it will no longer contribute to the Fund.

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 government research 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. Meanwhile, entrenched fossil fuel interests continue to sow doubt about climate change causes and action.

Opportunities

Despite these challenges, the bipartisan “Risky Business” report (http://riskybusiness.org), endorsed by former US Treasury Secretaries of both parties, shows that the costs of delay are high while most states and regions in the US will benefit from emissions reductions policies.

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. However, the Administration is taking steps to roll back those federal policies while stating that fossil fuels will be needed for the foreseeable future. Its position is supported by some elected officials in the US Congress and business interests with a stake in the fossil fuel industry.

Forests and land use

Though we can pledge reductions in emissions from deforestation and land degradation (REDD) within our country, doing so would address only a small portion of US emissions.

*Developed by Climate Interactive, MIT Sloan, and the UML Climate Change Initiative. Updated June 2017*
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 about 30% of global CO₂ emissions. In Paris, China pledged to peak its CO₂ emissions by 2030, when its emissions are projected to be >2.5 times those of the US, but made no commitment to reduce emissions. China must cut their emissions for the US to consider action.
• Meanwhile, emissions from rapidly developing countries, such as India, continue to grow. While the US remains committed to efforts to protect the environment, it cannot agree to targets that harm its economy. Without emissions cuts from other developing and less developed nations, by 2050, their combined emissions will rise to almost three times 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 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. They may also emphasize forestry policy over cutting fossil fuel emissions, which, while important, is insufficient for meeting the climate challenge.

**CO₂ Emissions from Fossil Fuels and Cement**

[Graph showing CO₂ emissions from different regions over time]

**GDP per person (2011 PPP US Dollars)**

<table>
<thead>
<tr>
<th>Country</th>
<th>GDP per person (2011 PPP US Dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
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<td>EU</td>
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<tr>
<td>Other Developed</td>
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<td>India</td>
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<td>China</td>
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</tbody>
</table>

**Population Wealth and Cumulative Emissions**

[Bar chart showing population, wealth, and cumulative emissions]

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. Under business-as-usual assumptions, cumulative emissions of all developed countries (US, EU, and other developed) are expected to fall to 37% of total by 2100.

Sweden sustained annual emissions reductions of 4.5% to reduce their dependence on oil (1976-1986). France and Belgium saw similar reductions around this time. Otherwise, most significant historical emission reductions have come from financial or political crises. According to UNEP, a 3.5% annual reduction rate is extremely ambitious.

Since 1980, emissions per person have risen dramatically in China and India (by 391% and 285%, respectively) but have fallen in the US and Europe (by 20% and 26%, respectively).