# Greenhouse Gas Emissions Mitigation in the United States of America



# MAJOR ECONOMIES AND CLIMATE CHANGE RESEARCH GROUP

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## **EXECUTIVE SUMMARY**

This report examines the United States of America's greenhouse gas emissions profile and climate policies, identifies the barriers currently preventing effective action, and proposes recommendations to overcome these barriers.

The United States is one the world's primary greenhouse gas emitters, having produced over 6.5 gigatonnes of  $CO_2e$  in 2012. Cumulatively, the U.S. has released the largest amount of greenhouse gases of any country into the atmosphere; the nation is responsible for nearly 30% of the world's present carbon dioxide levels. While the nation's emissions are declining, there is still much that can be done to cut them more quickly.

The nation's transport and energy production sectors are the key sources of emissions. Together they produce well over one half of the nation's greenhouse gases. As a result, the main focus of this paper is on these two sectors.

#### **BARRIERS**

The report found that the United States' barriers can be divided into three categories - informational, cultural, and political as follows:

- **Informational Barriers:** The scientific community has found it extremely difficult to successfully communicate to the general public the risks and uncertainties associated with findings produced from climate models.
- Cultural Barriers: A widespread climate change countermovement has
  gained major momentum and funding through support from organizations and
  individuals who deny human-induced climate change. This has sparked a false
  debate over the validity of climate change as a real phenomenon, massively
  distracting the public from debating the optimum mitigation actions that are
  urgently needed.
- Political Barriers: A divided Congress makes it extremely difficult to pass any type of climate legislation, making the nation reliant upon much less powerful executive actions.

### **RECOMMENDATIONS**

Based on an analysis of current policy issues and barriers in the United States, the paper lays out the following recommendations for successfully moving forward with climate mitigation action in the United States:

- 1. **Federal Carbon Legislation:** While President Obama has used executive authority available to him to advance a climate mitigation agenda, more robust action will inevitably be required. While building a domestic working majority may problematic with the composition of the U.S. Congress circa 2014-2015, within a reasonable timeframe, the U.S. needs to move away from the Clean Air Act as a CO<sub>2</sub> emissions regulation vehicle and write legislation specifically targeting greenhouse gas production in the electricity sector. It must be flexible, attentive to states' specific needs, and the cap must be easily moved to stricter allowances.
- 2. Packaged Keystone Deal: The President should couple a Keystone XL approval with trade-offs that work in favor of environmental action. While a number of environmental groups opposing the pipeline will never accept such a trade, the president could drive a hard bargain and extract significant climate-friendly concessions. The pipeline has sufficient votes in the new 2015 Congress (though not enough to override a presidential veto), but the president could lock-in more significant changes in heavy vehicles, methane leakage, renewables tax credits, or possibly something even more ambitious with such a deal.
- 3. **Regional Climate Change Communication Initiatives:**Communication of climate change must take place on a regional level. Funding of state-level research efforts and marketing campaigns could have a greater impact on public engagement on the issue than reliance on national media outlets for communication.
- 4. **Targeted Methane Legislation:** The EPA should limit methane emissions in the oil and gas sector by mandating Reduced Emissions Completions on new rigs where it is technologically feasible. Additionally, the EPA should work with state commissions on environmental quality to significantly restrict flaring within the borders of the United States.
- 5. Continued Multilateral Climate Negotiations through the UNFCC: The bilateral agreement with China in late 2014 to restrain greenhouse gas emissions was a welcome development that put pressure on other states like India. However, while China and the US are the biggest emitters in the world today, bilateral agreements are no substitute for effective multilateral engagement through the UNFCCC for any significant long term global reductions. The Obama administration should strive to secure an agreement in Paris in 2015 that commits other countries with significant emissions like India to embrace a multilateral agreement based on national actions to reduce greenhouse gases.