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A Framework for Achieving Energy Security and Arresting Global Warming

Ken Berlin December 2008

Center for American Progress



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Introduction

Global warming has the potential to cause serious, worldwide national security, economic, and environmental problems, including mass migrations, resource shortages, major environmental disruption and species extinction, changes in agricultural patterns, staggering economic and human losses from extreme weather events, and the spread of deadly diseases.¹ These dangers are closely linked with our dependence on foreign oil; at a price of \$75 a barrel, the United States sends about \$330 billion a year to other countries to pay for oil imports, some of which goes to hostile states, our enemies, and terrorist organizations.

Political leaders in the United States have so far failed to effectively address either global warming or our dependence on foreign oil. Federal and state governments have for decades proposed improving energy security by reducing dependence on foreign oil and boosting energy efficiency with almost no success. Ninety-six percent of the fuel we use today for transportation still comes from oil, about 60 percent of which is imported.²

The latest effort to reduce our dependence on imported oil, the Energy Independence and Security Act of 2007, or EISA, increases fuel economy standards and requires refiners to produce more biofuels. Yet in the absence of even greater rises in fuel prices than the rise that occurred in the first half of 2008, the bill's measures will reduce dependence on foreign oil only marginally between now and 2030 because most of its reductions in oil use will be offset by the growing demand for oil.

U.S. and world leaders have been equally unsuccessful in addressing global warming. The atmospheric concentration of the greenhouse gases that cause global warming, most significantly carbon dioxide, continues to accelerate from an average rate of increase of about 1.5 ppm per year in the 1980s, to 2.0 ppm per year from 2000 until 2006, and 2.4 ppm per year in 2007.³ The United States' failure to address global warming has contributed significantly to the problem. The United States generates 25 percent of the world's CO₂ emissions, and its CO₂ emissions have increased by about 19 percent since 1990, yet it has so far only set voluntary reduction targets.⁴

Voluntary reduction efforts in the United States, the emission reduction and trading scheme in Europe, and the Kyoto Treaty's entry into force—which only the United States among industrial nations has failed to ratify—have not been enough to reverse the trend of growing worldwide emissions and rising greenhouse gas levels in the atmosphere. This

failure is ominous. There is a significant risk that if we do not act quickly enough and if greenhouse gas levels become too high, global warming will become irreversible for centuries or longer.

Addressing energy security and arresting climate change will require a transition to a non-carbon based economy and more fuel-efficient vehicles. This will take decades, even with strong measures, so new initiatives will have to be durable enough to withstand political vicissitudes and arguments that regulations should be weakened during economic slowdowns. Because efforts to solve both issues are inextricably intertwined, they must be addressed together, and actions to solve one issue cannot compromise the ability to address the other successfully. Most importantly, political compromises that result in half measures, such as the EISA and many of the proposed limitations of global warming now being considered by Congress, are not equal to the magnitude of the problems and are thus likely doomed to costly failure.

The federal government will need to address five key sets of issues in order to confront global warming and reduce our dependence on foreign oil:

1. Identify and set goals that must be achieved to address these issues successfully and create a timetable for action.
2. Implement measures that will accelerate implementation of needed new technologies.
3. Set up a regulatory system that will withstand many decades of political pressures to weaken it.
4. Address the key sectors where CO₂ emissions are projected to increase most significantly and the programs necessary to prevent that increase.
5. Enact policies that will enable developing countries to set and agree to mandatory CO₂ reduction measures and significantly reduce their use of oil for transportation.

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