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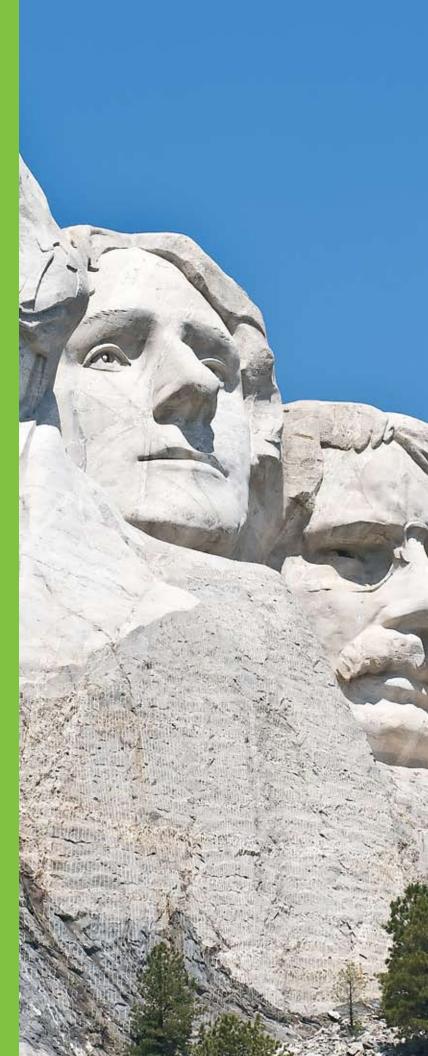


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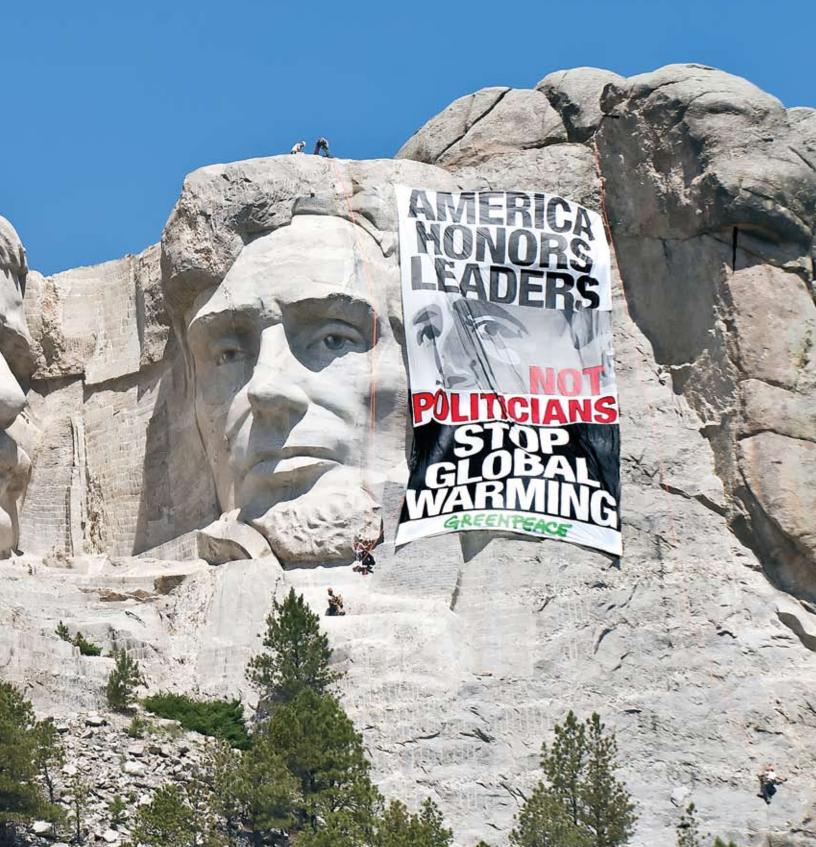
Casselman Ridge Wind Farm
Meyersdale, Pennsylvania, Feb. 6, 2009.
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Book design and illustration by: Andrew Fournier



Greenpeace climbers rappel down the face of Mount Rushmore National Memorial in Keystone, South Dakota, on July 8, 2009, to unfurl a banner that challenges President Obama to show leadership on global warming.

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Yes He Can:

How President Obama Can Solve the Energy Crisis, Help Reverse Climate Change and Rescue the Economy

This December, leaders from around the world will gather in Copenhagen to negotiate a new global treaty at the United Nations Climate Summit. President Obama has pledged that the US will lead on climate and energy, noting in a speech to the United Nations General Assembly that, "We must seize the opportunity to make Copenhagen a significant step forward in the global fight against climate change."

This briefing aims to highlight some of the key areas where the climate legislation in Congress falls short and outlines how Obama and the US can do more to deliver deeper emission cuts by harnessing the potential of renewable energy and energy efficiency. With the start of the Copenhagen Summit set to start in early December, Greenpeace and the rest of the world watches and waits to see if this really "is a new day... a new era" on climate change and if Obama is the leader he has promised he would be.

Leadership means guiding the world toward a means a strong, legally binding climate agreement. Failure to agree risks locking the planet into catastrophic, irreversible climate change. An effective deal would include:

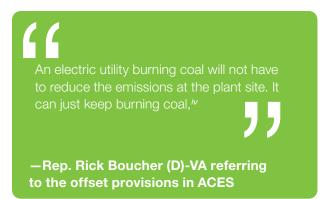
- 1. A commitment from developed countries to reduce their collective emissions by at least 40% by 2020 (from 1990 levels).
- 2. The creation of a global fund that will invest at least \$140 billion a year in developing countries to adapt to climate change, switch to renewable energy and stop deforestation.
- 3. Ending global deforestation by 2020.

2009—A lost year for the climate?

Under President Obama leadership, the US is a long way from fulfilling its commitment to dramatically slash greenhouse gas emissions. The incremental progress achieved by the Administration with the January stimulus package investments in renewable energy and energy efficiency and the improved fuel economy standards for new cars and trucks are great first steps; however, they are far short from the transformational change the president's principal climate adviser, Todd Stern, says is needed to tackle climate change and keep temperature rise as far below 2 degrees as possible. ⁱⁱⁱ

In his presidential campaign, Obama assured Americans he would be a leader on climate policy. However, in the run up to Copenhagen, he has punted climate leadership to Congress, which has stalled out domestic policy and drastically lowered the bar for the country's position in international negotiations. This inaction by the president comes despite the fact that he has both the authority to regulate greenhouse gas emissions under the Clean Air Act and an admitted moral responsibility to commit the US to an international agreement on climate change.

US climate legislation fails to deliver

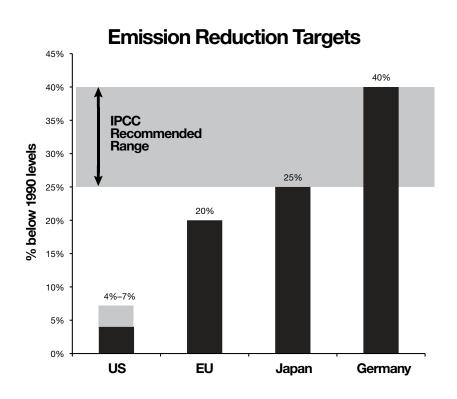


I won't vote for any climate change bill that doesn't allow a dramatic increase in nuclear power. I'm not going to vote for any climate change bill that doesn't allow us to use our coal deposits."

—Senator Lindsey Graham (R)-SC

In June of this year (2009), the House of Representatives passed the American Clean Energy and Security Act (ACES) and the Senate is currently debating a similar bill, entitled the Clean Energy Jobs and American Power Act (CEJAPA). Unfortunately, these pieces of legislation do less to tackle climate change than they do to support the pollution-as-usual framework that is at the heart of the problem.

Both domestic bills reflect the lobbying dollars spent by corporate interests to prevent meaningful action and make sure the US remains addicted to fossil fuels. If enacted, these bills will yield emission reduction of only 4–7% by 2020 (from 1990 levels). This is nowhere near what science says is needed and miles away from what the US is capable of achieving. It is no secret that ACES, and its Senate counterpart, are a source of international disappointment and will handicap America's ability to provide global leadership in Copenhagen and beyond.



Granted, this should come as no big surprise when you consider the power and influence corporate interests have had in drafting the bill. An analysis conducted by the Center for Public Integrity reveals that of the more then 1,150 companies and advocacy organizations lobbying Congress on climate change, the sectors with the biggest army of lobbyists are manufacturing, power companies and utilities and oil and gas. vi

Fossil fuel companies and industry front groups, in particular, have spent enormous sums of money to make sure Congress doesn't take legitimate action to curb global warming pollution.

In the first half of this year alone, American Electric Power, the American Petroleum Institute and the American Coalition for Clean Coal Electricity spent \$4.79 million, \$4.10 million and \$1.22 million, respectively lobbying members of Congress.

In House legislation, the end result of this corporate campaign against the climate was a bill that only reduces emissions 4% by 2020 (compared to 1990) and awards billions of dollars worth of free permits for to the corporate polluters that largely drafted the bill. Fifty two percent of these allowances go to utility and fossil interests while only 6% go toward renewable energy and energy efficiency. Viii The current version of the legislation in the Senate is only slightly better. If enacted, it will reduce emissions 7% by 2020 (compared to 1990) but, in some respects, is tilted even more heavily in favor of fossil fuels.



Obama must deliver more than 4–7% emission reductions by 2020



Historically, no nation has emitted more global warming pollution than the United States.* The US response to climate change will continue to lack credibility as long as the country shirks its moral responsibility to step up to the plate and deliver. Considering the commitments that other countries have put on the table—25% emission reductions (compared to 1990) by 2020 in Japan, as much as 30% emission reductions (compared to 1990) in the European Union and 40% emission reductions (compared to 1990) by 2020 in Norway—the 4–7% in the US climate legislation simply fails to pass muster.

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Our generation's response to this challenge will be judged by history, for if we fail to meet it — boldly, swiftly, and together — we risk consigning future generations to an irreversible catastrophe.^{ix}

- President Obama at the UN General Assembly

It is likely that between 2007 and 2009 US emissions will have already declined 9%, due to a variety of factors including growing deployment of renewable energy, increased energy efficiency and slower than expected economic growth resulting from the financial crisis. *i By implementing comprehensive climate policy now, the US can ensure that this emission trend continues. What's more, a strong federal climate policy will also help the economy get back on its feet. A recent report from the University of California—Berkley shows that under comprehensive energy and climate policy, the US could gain 918,000 to 1.9 million jobs and grow household income by \$488 to \$1,176 by 2020.**

The notion that the Legislative Branch has the corner market on climate policy is false as is the presumption that Obama cannot sign an international agreement without Senate pre-ratifying it. Under the Clean Air Act, President Obama has the authority to regulate greenhouse gas emissions as well as to implement an executive agreement at the international level. **iii* That means that when it comes to Copenhagen, treaty ratification by the Senate is not a prerequisite for the US to participate in an international climate regime. As noted in a report by the New York University Law School's Center for Policy Integrity, "Under either 'sole-executive authority', or pursuant to provisions of the Clean Air Act, the President has the power to enter into an international climate regime—the participation of the United States in international climate negotiations need not wait for approval of Congress." **iv**

Congress so far has been incapable of delivering policy that protects the climate and puts clean energy at the top of the agenda. Fortunately, Obama can nonetheless sign a strong agreement in Copenhagen.

Renewable energy can deliver more than 4–7% emission reductions by 2020

Despite having "clean energy" in their titles, the renewable energy requirements in the climate House and Senate bills do not contain adequate funding for renewable energy development and deployment. Renewable energy currently accounts for 8.4% of the nation's electricity.

**V* The renewable electricity standards in both versions strive for little more than that: ACES establishes a renewable electricity target of only 10% by 2020 while the Senate bill essentially requires nothing more than we have already achieved.

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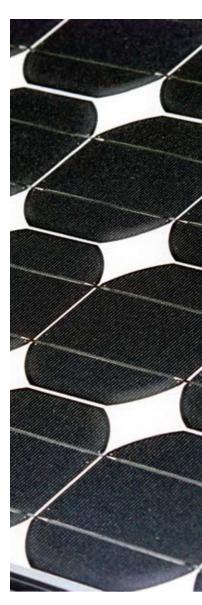
Notably, these targets will be quickly surpassed simply by the provisions already set by state governments and private enterprise. *vii Additionally, Asian country's have commitments to invest over \$500 over the next 5 years on clean energy research and deployment. *viii The US lack of ambition is unjustified in light of the numerous studies that how the US could easily achieve more:

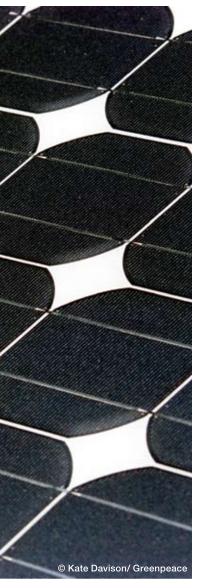
Wind energy potential— Despite being one of the most widely available energy resources across the country, wind only comprises a slightly more than 1% of US electricity. **ix* A study commissioned by the US Department of Energy (DOE) details how the country could meet a 20% by 2030 wind energy target and reduce cumulative CO2 emissions by 7.6 gigatons in the process.**x

Solar energy potential— Resource calculations show that the US Southwest could provide more than 7 million MW of solar generating capacity—roughly 10 times the total US generating capacity from all sources today. A study by the American Solar Energy Society estimates that in combination, concentrated solar power and photovoltaics could cut CO2 emissions as much as 466 million tons per year by 2030.***

Geothermal potential— This dependable baseload power source has a stable cost and can be harnessed to provide both heat and electricity. The Geothermal Energy Association estimates that by 2025, US geothermal resources could provide more than 30,000 MW of power, enough to meet 6% of today's electricity demand.**

Hydropower— Water power accounts for 7% of US electricity generation.**xiii* The DOE notes that this contribution could readily be doubled. For example, simply by improving existing projects and installing generators at dams that do not have them, an additional 21,000 MW of capacity could be added.**xiv





The potential for renewable energy technologies to curtail CO2 emissions is vast. A 2007 study by the American Solar Energy Society outlines how deployment of a suite of clean energy technologies would cut US emissions by 1.9 gigatons by 2030—more than 15% of current annual US emissions.** What's more, other renewable energy forms, such as marine (wave and tidal) power, are nearing commercialization. When they become available, their deployment could allow the US to cut emissions even further and repower the economy even faster.

Issues related to the intermittency of some renewable energy sources need not stand in the way. By combining different renewable energy projects with complementary intermittencies, stable power can be delivered to the electricity grid. Case studies show how states such as California, could meet 80–100% of the electricity demand by 2020 with such approaches.**

Countries such as Norway, Denmark and New Zealand already derive a significant proportion of their electricity from renewable sources.

Yet even though a clean energy future is within our reach, the government must choose to set us on that path. Political will and special interests, not technical feasibility, are now the hurdles that must be overcome. As noted in a recent study from Stanford University, if the global political will existed, the technology exists to power our planet with 100% renewable energy by 2030. **xv*ii*

While both versions of the climate legislation give a nod to energy efficiency, they are a long way off from capturing its full potential. A study by the American Council for an Energy-Efficient Economy (ACEEE) notes that boosting several key energy efficiency provisions in the bill could save an additional 400 million metric tons of CO2.xxviii

A more detailed study by McKinsey and Company on the potential of energy efficiency cut emissions reveals that an integrated set of energy efficiency investments and solution would reduce non-transportation energy consumption 23%. This translates into a CO2 abatement of 1.1 gigatons. In other words, through energy efficiency alone, the potential exists to surpass the proposed carbon caps in both bills many times over. The icing on the cake is that these investments would come at virtually no cost.**

Conclusion

President Obama campaigned on a promise to bring change to Washington. When he was elected, he pledged US leadership on climate change, yet the world is waiting for Obama to follow through on this commitment.

Congress has demonstrated its inability to lead by producing climate legislation that registers a meager change in annual US greenhouse gas emissions (compared to 1990). Congress's response to the climate crisis is a far cry from what science says is needed to prevent dramatic temperature increases. President Obama need not limit himself to the 4–7% emission reductions in the climate bills nor wait for a final bill before committing the US to an international agreement.

The President has the legal authority to cut emissions and sign on to an international climate agreement, and he has the tools and technologies needed to get the job done. As the world's largest historical emitter, the US must do more.

The studies cited in this briefing demonstrate that the US has tremendous potential to cut emissions with greater use of renewable energy and energy efficiency. These same studies also show that by enacting strong climate legislation at the federal level that the US will in fact grow its economy, create new jobs, and save American consumers money. By fully harnessing the potential inherent in currently available renewable energy and energy efficiency technologies, the US could deliver emission reductions that beat the climate bills several times over.

Earlier this year, President Obama was awarded the Nobel Peace Prize, in part for his work on climate change. Hopefully, that award has given him the courage of his convictions on climate change. For the President to be a true Nobel Peace Laureate, he must commit to more than what Congress has proposed. Obama must reverse the United States' blocking role in the climate negotiations to secure a fair, ambitious and binding deal for the climate this December. Yes he can commit the US to clean energy future, and yes he must.



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Appendix

- President Obama in a speech to the UN General Assembly, 23 September 2009. Text available at: www.whitehouse.gov/the_press_ office/remarks-by-the-president-to-the-united-nations-general-assembly.
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