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Taking Action on Clean Energy and Climate Protection in 2012

A Menu of Effective and Feasible Solutions

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Introduction and summary

Last year threw into stark relief America's interlinked economic, energy security, and climate crises. On the economic front Americans called out those lawmakers who work relentlessly to build an economy that works for the wealthy few rather than for all of us, but faced determined resistance from conservatives bent on preserving the status quo. At the same time our nation's debilitating dependence on fossil fuels and the damages caused by climate disruption became ever more obvious. Yet here too conservative resistance was implacable. Backed by climate-science deniers and opponents of clean energy—generously funded by their industry backers—conservatives ramped up their campaign of disinformation about dirty energy to push their pollution-promoting policy advocacy work in Washington and around the nation.

The result: seemingly insurmountable gridlock.

And yet 2011 also was a year of historic clean energy investments. The United States passed China to become the global leader among nations in clean energy investment,¹ and new data revealed the startling growth of several clean energy sectors in years of sluggish growth for the overall economy. These trends are further evidence of how our economic, energy, and climate crises offer enormous opportunity to build a clean energy economy that makes America more secure, competitive, and equitable. By transitioning our energy infrastructure from capital-intensive, risky, and often highly polluting energy sources to clean, labor-intensive energy sources we can create many new jobs, grow our middle class, ensure greater energy security, and protect our nation and planet from the predictable ravages of unchecked climate change.

In fact, as we argue in this paper, we can take steps today that will get us on the path toward achieving three critical goals:

- Producing more clean energy to grow the economy
- Reducing pollution while saving energy and dollars
- Building more resilient and balanced economies and communities

These goals remain achievable even in today's gridlocked political environment.

The U.S. Department of Labor's Bureau of Labor Statistics just released data showing 3.1 million jobs in the United States associated with the production of green goods and services in 2010, accounting for 2.4 percent of total employment. Of those 3.1 million jobs, 2.3 million were found within the private sector, with 461,800 in the manufacturing sector alone.² An earlier Brookings Institution report produced similar numbers and showed that the newest renewable energy industries grew at a "torrid pace" annually between 2003 and 2010: Solar thermal expanded by 18.4 percent; wind power by 14.9 percent; solar PV by 10.7 percent; and biofuels by 8.9 percent. Overall these newer "clean tech" sectors grew by 8.3 percent annually, double the growth rate for the national economy over the same period.³

But we need to do much more. We must accelerate the economic transformation that has already begun and move forcefully into a completely new clean energy economic era defined by stronger industries, better infrastructure, and a steadily growing middle class.

In this paper we propose how to do just that. We identify clean energy and climate solutions that are effective, strategic, and winnable this year. We focus on public policies at the global, national, regional, state, and local levels as well as on private-sector actions that simultaneously address our three broad goals. In the pages that follow we will detail how to achieve these goals this year, but here are our proposals in brief.

Produce more clean energy and grow the economy

- Generate a significant percentage of energy in our nation from renewable and low-carbon sources
- Reduce the cost of clean energy deployment by attracting private investment
- Strengthen our economy by helping our industries and workers capture the economic opportunity of clean energy

Reduce pollution by saving energy and dollars

- Realize significant energy savings in all sectors of our economy
- Reduce greenhouse gas pollution with carbon prices and smart clean energy standards
- Achieve oil savings

Build more resilient and balanced economies and communities

- Ensure climate resiliency and restoration
- Balance energy production with other economic and conservation priorities on public lands and waters

The significance of each of these goals, and the strategies that underlie them, is explained in the main pages of this report. For a more visual representation, see a chart of our solutions menu on pages 66.

Building this clean energy economy will yield benefits far beyond the jobs and businesses it creates. We will ultimately become more secure as a nation as we depend less and less on inherently volatile commodities such as oil, whose price is set by a global market that is increasingly vulnerable to extreme weather events, political unrest, and sudden price spikes caused by shifting global demand exacerbated by speculation. And we will finally begin to chip away at the threat of climate change, with all the economic, environmental, and national security nightmares that come along with rising global temperatures.

We do not pretend that the strategies we lay out here will fully save our climate or our economy. These strategies will not get us to a 17 percent reduction in carbon emissions by 2020, which is what the United States agreed to in global climate negotiations in Copenhagen. They will not replace the millions of jobs lost during the Great Recession. But they will begin that process.

Some of the strategies we lay out here can be won at the federal level, but we are fortunate that Capitol Hill does not define the parameters of what is possible. Many of the most important solutions can be advanced at local, state, regional, and international levels, and in the private sector. As Environment America showed in their 2011 report, “The Way Forward on Global Warming,” an ambitious set of clean energy policies at the federal, state, and local level can actually bring U.S. carbon emissions down by as much as 20 percent by 2020.⁴

Some of the most important policy solutions are not possible in 2012, but if we start to implement the most feasible of them this year, we can maintain the momentum needed to effectively meet our clean energy and climate protection goals in the future. And we can set the stage for 2013 and beyond to take advantage of what we hope will be a more favorable political and policymaking terrain on which more transformational victories can be won.

We do not pretend that the strategies we lay out here will fully save our climate or our economy. But they will begin that process.

To be clear: The solutions we focus on in this paper are those that are effective, results-driven, and, most important, those that already have some momentum and can feasibly be won or advanced in 2012. Any victory in the current political environment is essential. After all, we won't achieve this clean energy transformation by hiding from hard facts. Consider some of the most significant indicators that emerged in 2011:

- The nation's unemployment rate at the end of 2011 was 8.5 percent, with rates significantly higher for some demographic groups, among them African Americans at 15.8 percent. About 23.8 million workers were either unemployed or underemployed, with 5.6 million out of work for longer than six months.⁵ And over the course of the year there were never fewer than four workers for every job opening.⁶
- Reflecting levels of income and wealth inequality in the United States not seen since the Gilded Age, the richest 1 percent of Americans claimed 40.2 percent of our country's wealth over the last quarter-century compared to a wealth loss of 1.4 percent for the middle of the middle class (the middle fifth of the population).⁷
- The five largest U.S. oil companies made a record-high \$137 billion in profits in 2011, while raking in \$2 billion in subsidies.⁸ At the same time those of us who pay the taxes that subsidize Big Oil continue paying out precious dollars at the pump and suffer from the ill-health effects of fossil-fuel pollution because we have very little choice in how we power and fuel our lives.
- According to the National Oceanic and Atmospheric Administration, the United States set a record with 14 separate billion-dollar weather/climate disasters in 2011, with an aggregate damage total of approximately \$55 billion. This record year breaks the previous record of nine \$1 billion weather/climate disasters in one year, which occurred in 2008. 2011's disasters resulted in the tragic loss of 669 lives.⁹ Human-induced climate change will continue contributing to these devastating extreme weather events. Perhaps most consequentially, weather/climate disasters are already impacting food security around the globe, and point to a future where it becomes impossible to feed the planet's 2050 population of 9 billion.¹⁰
- A report released by the Global Carbon Budget, an international collaboration of scientists, found that carbon dioxide pollution increased by 5.9 percent in 2010, likely the largest absolute jump in any year since the start of the industrial revolution.¹¹ This level of increase is higher than the worst-case scenario projected by the Intergovernmental Panel on Climate Change in their 2007 report.

- The International Energy Agency’s 2011 World Energy Outlook warned that the world is in danger of locking in to a path that leads to a temperature increase of 11°F unless dramatic changes are made to our fossil fuel infrastructure in the next few years. The report concludes, “Delaying action is a false economy: for every \$1 of investment in cleaner technology that is avoided in the power sector before 2020, an additional \$4.30 would need to be spent after 2020 to compensate for the increased emissions.”¹²

These are not indicators of a country or a planet heading in the right direction.

Overcoming conservative intransigence

Unfortunately, comprehensive energy reform continues to be blocked by conservatives in Congress who are far more responsive to fossil-fuel industries and status quo policies. In the face of such intransigence, and the urgency of the interrelated crises we face, it can be difficult to remain hopeful. Any realistic assessment of the current national political landscape must acknowledge that we won’t win a federal price on carbon anytime in the immediate future. A national clean energy standard seems more likely as a near-term solution, though this too is probably an unrealistic goal for 2012.

We make this judgment with the caveat that plans simultaneously released in 2011 by six of the nation’s leading think tanks, including the Center for American Progress, across the political spectrum to confront the nation’s fiscal challenges point to political possibilities on the horizon. With the exception of the conservative Heritage Foundation, all six included a price on carbon as an effective means of raising revenue. This bipartisan consensus can perhaps lay the foundation for future policy negotiations.¹³ A price on carbon would not only raise revenue to drive down our deficit, but would drive down greenhouse gas emissions by forcing fossil fuel-based energy producers to pay for the pollution that they create, which would also level the playing field for clean energy.

Regardless, political realism is no excuse for despair or inaction. The dysfunction of our national politics in the face of the urgency of the climate crisis and our mounting energy insecurity makes it all the more essential that we apply a laser-like focus to what is actually achievable in the short term. While our three achievable goals are each individually critical to the stability and security of the clean energy economy, they are also crucially interrelated. We should not think about scaling up our invest-

ments in renewable energy without also thinking about the jobs and industries that will benefit from those investments. We should not focus on reducing pollution in our current power sector without also thinking about building a smarter, and more balanced, infrastructure for the future.

One thing we've learned from countries such as China and Germany, both of which are taking clean energy and climate solutions seriously, is that the best policy approach to these issues is one that combines environmental strategies with those more traditionally found in economic and workforce development.¹⁴ It would be a huge mistake for us to take a less integrated approach and focus only on one technology, sector, or policy solution as if it alone could solve our climate, economic, or energy security challenges.

The critical question is not if we must pursue these strategies, but rather when we will achieve them. Our choice is between achieving them now—when they are eminently affordable, putting the United States in the pole position to win the most important global economic development race of the 21st century, and not incidentally save the planet—or achieving them later, when they will be expensive, possibly too late to avoid the worst impacts of climate change, and leave us playing economic catch up to China and other countries as everyday Americans suffer more and more.

Given that choice, we vote for now, or at least pretty darn soon. It is not too soon to pursue strategies that will move us further down a path toward a more sustainable energy future.

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