

# Conclusion

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## National recommendations

America is an enormous country made up of varied and diverse regions with their own natural resources, infrastructure, and energy consumption patterns. The diversity of our regions means we need a multifaceted energy strategy that leverages the best of what each area has to offer—one that puts our country squarely on the path toward long-term competitiveness, energy security, and climate stability.

Just as the oil industry has relied on government investment and targeted policies since the early 1900s to secure its place in the U.S. energy market, so do alternative energy industries need support from both the public and the private sector to get to scale across America today. Some of these supportive policies must happen at the national level to provide consistency and regulatory certainty across every region of the country. Others are more specific to particular regions or technologies.

What follows is a list of some of the most important policies we need to get America onto a more diverse, more stable, and more sane energy path.

## Internalize the actual price of pollution

Right now, fossil fuels enjoy an unfair advantage in the energy market because their price doesn't reflect the actual health, environmental, or social costs of burning the dirty fuels for energy. Take coal, for example: According to Harvard Medical School researchers, the average “external cost” of coal is around 18 cents per kilowatt hour.<sup>254</sup> Add this to the U.S. average energy price of around 10 cents per kilowatt hour, and suddenly every region has Hawaii-level energy bills. Putting a price on pollution—whether through a carbon tax, an emissions reduction and trading system, traditional regulatory structure, or other means—puts all energy technologies on a level playing field with regard to their ability to meet our energy and environmental needs.

A clear carbon price provides market-based incentives that complement and speed (rather than undercut) the deployment of the clean energy and efficiency technologies and policies we discuss throughout this report. It gives businesses the long-term certainty they need to invest in new technology and infrastructure. Putting a price on carbon would help shift the burden of paying for pollution (and paying for the solutions to pollution) from taxpayers to polluters, as well as level the playing field for the energy sources of the future.

### Ensure a diversity of sources through a clean energy standard

Putting a price on pollution won't necessarily lead to energy diversity, though it's a great start. One thing we must certainly avoid is an energy future that's just as unbalanced and tilted toward one set of industries and energy sources as the one we have today. That's why we need a national clean energy standard that calls for 80 percent of the country's utility-scale energy to be produced using a diversity of low-carbon energy sources. To guard against natural gas taking over the low-carbon energy market, we need a carve-out for renewable energy within such a standard.<sup>255</sup>

### Make a commitment to energy diversity on public lands through a clean resources standard

If the country is committed to moving forward into the advanced energy future, we should model that commitment on our public lands. Right now, more than 65 percent of the electricity generated from resources mined on public lands comes from coal, and only 1 percent comes from renewable sources such as wind, solar, and geothermal energy.<sup>256</sup>

We support a clean resources standard that would require a better balance of resources produced on public lands—much as the clean energy standard would do for private utility-sector energy.

## Stand behind strong American standards that provide the certainty to drive innovation, investment, business, and job creation

As we have seen vividly in the auto industry, our current and long-term prosperity depend in part on strong, smart standards that give corporations the certainty they need to build the plants of the future here in America. These standards align the huge U.S. market with global demand, helping spur innovation and manufacturing here and exporting it abroad, rather than leaving our industries subject to a long, slow decline while American consumers buy the best products from countries that had greater foresight. Nowhere is this more critical than in the environmental and energy standards and policies we set. There is growing pressure on all types of resources worldwide, and the products that best protect water, air, and climate and that deliver the greatest quality of life with the least or cleanest energy will serve a global market of billions.

To protect both our economic and environmental future, Americans should strongly reject attacks on existing landmark standards such as the hugely effective Clean Air and Clean Water Acts and new fuel economy standards. Policymakers should act on new standards such as the clean energy standard recommended above that would jumpstart forward-looking investment and growth in more industries.

## Give renewable energy investors and developers certainty by extending the production tax credit and investment tax credit

Without a level playing field and with artificially low fossil fuel prices competing with renewable energy prices, it's been difficult to get private investors interested in building renewable energy projects at scale. But they've invested anyway, in large part because of the production tax credit and investment tax credit, which provide developers an incentive to build wind and solar projects. But these credits have always limped along, only extended for short periods and always after a battle in Congress.

Despite very strong bipartisan support, the production tax credit is set to expire at the end of this year and the investment tax credit at the end of 2016, resulting in tens of thousands of workers potentially losing their jobs in nearly every state across America. Until we can level the playing field for renewable energy, we need these tax credits to be extended—ideally for long enough to give investors real certainty that America is committed to a sustainable energy path.

## Promote U.S. competitiveness through clean energy research and development, commercialization, and domestic manufacturing

We have focused throughout this report on the ability of advanced energy projects to create jobs across industries and occupations, from invention and manufacturing to installation and operations. Because the advanced energy infrastructure is not yet built out (unlike the fossil fuel infrastructure), these projects create a disproportionate number of jobs in construction and manufacturing, which are good for middle-skill workers looking to make a decent wage. To capture these jobs, however, it is imperative that we stay at the cutting edge of advanced energy technology development, which means we need to invest in our labs and universities. To keep these new inventions from being developed and manufactured overseas, we need to invest in our commercialization and manufacturing programs.

That means not only sustaining but also increasing support for the Department of Energy’s basic research and development and Advanced Research Projects Agency–Energy programs, which provide financing for innovative companies that are at the precommercialization stage. It means finally creating a Clean Energy Development Administration that can focus on commercializing the best products coming out of that research. And it means continuing to fund programs such as the so-called 48C tax credit for manufacturers, which allows our existing American firms to retool and expand to meet the needs of new clean energy industries. Finally, a true manufacturing renaissance requires that we develop proactive regulatory and manufacturing policy in tandem to ensure that the next generation of investment isn’t making yesterday’s goods and services.

These are some of the national priorities we must embrace if we want to diversify and sustain the American energy system.

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### Regional recommendations

There also are some specific regional priorities we recommend to accomplish and build on the projects discussed in this report.

## The Atlantic Coast

Along with extending the production tax credit and making it more readily available to offshore, as well as onshore projects, we recommend a continued commitment to the Bureau of Ocean Energy Management’s Smart from the Start program, which encourages stakeholder engagement and efficient development of new renewable energy projects on national waters.

## The Gulf Coast

We’d like to see those who were responsible for the massive Deepwater Horizon oil spill held accountable, and the damages they pay returned to the region to support coastal restoration projects. The recently passed RESTORE Act guarantees that 80 percent of Clean Water Act fines paid by the responsible parties will be dedicated to economic and environmental restoration projects in the affected states. We recommend that when these fines are actually in hand, the primary focus should be on investing in projects to restore ecosystem service benefits, especially for the economically and socially vulnerable communities that depend most on the region’s natural resources for flood protection and their livelihoods. Projects should create clear socioeconomic benefits by also investing in job training and promoting economic opportunities in contracting for local workers and businesses.

## The Southeast

For the Southeast, we recommend state-level action to truly embrace energy efficiency and the smart grid as core policy priorities and to engage major utilities in more rapid deployment. The southern states are behind the rest of the country in passing Energy Efficiency Resource Standards and updated mandatory building codes. Implementing these policies and others that incentivize industrial, commercial, and residential efficiency will create a market for energy efficiency products in the region—one that its strong manufacturing base is already poised to serve. This region can become a center of excellence for energy efficiency and for cutting-edge smart-grid technology, but it can only happen if there is a strong local market that can serve as an anchor.

## The Midwest

The industrial Midwest has recently been well-served by public policy decisions, which have worked together to support an auto manufacturing renaissance. Strong and well-developed emission standards pushed the auto companies to innovate; targeted loan and tax policies helped automakers retool and expand to serve these emerging efficient vehicle markets; and state economic and workforce development programs helped provide the infrastructure the auto sector needed to ensure these products were made in America. Voters need to reject attacks on these programs at the state and federal level, recognizing how important national policy can be to local gains. Similarly, states or cities may want to consider local measures and partnerships to expand the innovation, manufacturing clusters, and markets needed to grow this success.

## The Mountain West and the Pacific Coast

The national policies we discussed above will go a long way toward balancing our energy resources and supporting sustainable and smart low-carbon energy development. The states in these two regions of our nation are already models of promoting energy diversity through good public policy. Most of the western states have renewable energy standards, and California is pioneering the country's first economywide carbon reduction program, known in the state as AB32. These are states to watch, but without a strong and supportive set of national energy policies, they can only go so far.

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## One size does not fit all

It's true that these solutions are more diverse and varied than the American Petroleum Institute's recommendation to just "drill here, drill now." But we live in a diverse and varied country, and one size most certainly does not fit all—especially when it comes to building a sustainable, resilient, long-lasting energy economy.

Indeed, one size fits all has never applied to America, and the nation's energy policy is no exception. Our strength lies in our diversity and in the ability to find creative solutions to the next set of challenges. Seen through the lens of the American Petroleum Institute, America is one-dimensional and kept on an all-carbon diet of oil and gas. They offer one solution for creating jobs and addressing our energy

needs—one solution that ignores the devastating implications of climate change and the tremendous opportunity presented by the clean energy economy.

America is so much more than that. From powerful winds blowing off the Atlantic Coast to blazing sun in California, to the new generation of clean cars being manufactured right now in the Midwest, each state and region has a unique set of resources and strengths that will create the next generation of jobs, address the urgent need to dramatically reduce our carbon emissions, and take real steps toward achieving energy independence.

Only the most foolhardy investor puts all his money on one stock. Only the most desperate gambler bets the house on a single roll of the dice. We are not foolhardy, and we are not desperate. Our vision can't and shouldn't be simplified, for its biggest asset is its diversity, and its benefits extend from coast to coast.

Our vision relies on American resources and innovation to build strong, healthy, resilient communities and economies, weaving together a national energy fabric that is much stronger than one comprised of drilling alone. Because, as every American knows, our country is far greater than the sum of its parts.

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## About the Center for American Progress

The Center for American Progress is a nonpartisan research and educational institute dedicated to promoting a strong, just, and free America that ensures opportunity for all. We believe that Americans are bound together by a common commitment to these values and we aspire to ensure that our national policies reflect these values. We work to find progressive and pragmatic solutions to significant domestic and international problems and develop policy proposals that foster a government that is “of the people, by the people, and for the people.”



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## About the Center for the Next Generation

The Center for the Next Generation works to shape national dialogue around two major challenges that affect the prospects of America’s Next Generation—advancing a sustainable energy future and improving opportunities for children and families. As a nonpartisan organization, the Center generates original strategies that advance these goals through research, policy development, and strategic communications. In our home state of California, the Center works to create ground-test-ed solutions that demonstrate success to the rest of the nation.

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