



A Small Business Blueprint for Climate Policies that Bolster Job Growth and Economic Opportunity:

An Assessment of the EPA's Proposed Clean Power Plan



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About Small Business Majority

Small Business Majority was founded and is run by small business owners to focus on solving the biggest problems facing small businesses today. Since 2005, we have actively engaged small business owners and policymakers in support of public policy solutions, and have delivered information and resources to entrepreneurs that promote small business growth and drive a strong, sustainable economy. We are a team of 35 working from our 14 offices in Washington, D.C., California, Colorado, Illinois, Missouri, New Jersey, New York, Ohio, Oregon, Virginia and Washington state.

We regularly engage our network of 30,000 small business owners and 6,500 business organizations, along with a formal strategic partnership program of more than 110 business organizations, enabling us to reach more than 400,000 entrepreneurs. Our extensive scientific polling, focus groups and economic research help us educate and inform policymakers, the media and other stakeholders about issues including taxes, healthcare, access to capital, clean energy, immigration, entrepreneurship and workforce development.

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Executive Summary

On June 2, 2014, the U.S. Environmental Protection Agency (EPA) proposed the first national standards to limit emissions of industrial carbon pollution from existing power plants. Overall, EPA projects the rule—known as the Clean Power Plan—will, by 2030, achieve a 30 percent reduction in carbon dioxide (CO₂) emissions, from 2005 levels, and a 25 percent reduction by 2020. Small Business Majority believes this standard is an essential step toward addressing the threat of climate change while bolstering small businesses and unleashing new economic opportunities by:

- Spurring innovation and investment in low and no-carbon technologies;
- Helping create new energy infrastructure and energy efficiency technologies, as well as services;
- Providing the market signals businesses, entrepreneurs and investors need in energy and environmental policies; and
- Mitigating the effects of climate change and extreme weather events by reducing carbon emissions.

Small businesses are a significant part of the American economy. For every large business in the country, there are more than 1,400 small businesses. Since 2010, Small Business Majority has polled these small business owners to understand their positions and attitudes on environmental and clean energy policies. These surveys inform policymakers, advocates and others on the small business sector's perspective, which is broadly supportive of clean energy and carbon mitigation policies. Of note, small businesses believe climate change and extreme weather events, like Superstorm Sandy, are linked and causing serious problems that can disrupt the economy and hurt their bottom lines. Extreme weather events associated with climate change pose a variety of direct and indirect risks to small businesses that vary by geographic region, proximity to coastlines, and the nature of the affected business. Lacking access to the capital resources of large corporations, small businesses can suffer lasting economic damage from a single extreme weather event. Notably, an estimated 25 percent of small to mid-sized businesses do not open following a major disaster.¹ While small businesses are critical to the U.S. economy, they are also uniquely vulnerable to damage from unchecked climate change. Accordingly, small business owners are closely assessing policies to advance action on climate change and extreme weather.

This white paper highlights why small businesses are concerned about climate change and extreme weather and demonstrates the range of economic opportunities and savings associated with carbon mitigation strategies, such as the Clean Power Plan. Small Business Majority finds that EPA's proposal is a win-win for small businesses looking to maximize investment around a clean energy economy through demand- and supply-side job opportunities in construction, manufacturing, strategic consulting, energy efficiency and green marketing, to name just a few. The paper also highlights examples of existing state policies that have been successful in reducing emissions, spurring innovation and providing cost savings. Small Business Majority is a resource for state governments and regulators as they seek to develop compliance plans for submission to EPA that take into account the unique needs and interests of the small business community.

Small Business Majority Recommends States Implement Innovative and Smart Policies under the Clean Power Plan

On behalf of small businesses, Small Business Majority recommends final EPA guidelines, complemented by state compliance plans, supporting:

- (1) Meaningful reductions to address climate risk** - Small Business Majority supports EPA's Option 1 reduction plan. EPA's Option 2, which proposes a shorter compliance time frame with less stringent emissions reductions standards, creates less opportunity for job creation and less opportunity to mitigate the risks associated with extreme weather and a changing climate over the long-run. Furthermore, we believe it may be prudent for EPA to consider increasing targets to leverage further reductions available through energy efficiency.

(2) Smart policies to mitigate rate impacts, including energy efficiency - Small Business Majority recommends that states implement targeted energy efficiency education programs for small businesses; utilize resources to help subsidize the purchase and installation of energy efficient technologies by small businesses; and partner with utilities, regulators and consumer advocates to develop targeted energy assistance programs for vulnerable or at-risk small businesses.

(3) Smart policies to drive innovation and job opportunities while mitigating risks - Small Business Majority is supportive of federal and state policies that will help bolster investment in renewable energy resources and energy efficiency, such as the Production Tax Credit and similar state-level incentives, as well as state Renewable Portfolio Standards and Energy Efficiency Resource Standards. Small Business Majority further recommends that states consider allocating resources towards small businesses for facilitating the development of disaster recovery or risk mitigation plans in order to help safeguard investments in energy efficiency, renewables and other small business infrastructure that may be vulnerable to the threat of extreme weather.

Key Findings

Small businesses are the backbone of the American economy.

- For the past two decades, small businesses have been responsible for creating two out of every three new jobs.
- Currently, there are 28 million small firms in the U.S. that employ roughly 60 million Americans.² For every large business in the country, there are more than 1,400 small businesses.
- Given their significant role in the nation's economy, it is important that decision makers take into consideration the needs of small businesses and how proposed policies, such as EPA's Clean Power Plan, will affect them.

Small business owners consistently support policies that address climate change and other clean energy needs, especially if these policies include incentives for energy efficiency.³

- 52 percent support the EPA regulating carbon emissions from existing power plants⁴;
- 57 percent believe the EPA's regulation of carbon pollution and other emissions will impact their own business, and yet 56 percent support EPA's regulations even if it would cause utility rates to rise⁵;
- 65 percent believe clean energy sources, such as wind and solar, can strengthen their businesses by lowering utility bills and providing new business opportunities;
- 71 percent believe government investments in clean energy and energy efficiency will stimulate the economy;
- 87 percent believe improving clean energy innovation and energy efficiency are good ways to increase prosperity for small businesses through job creation and potential cost savings; and,
- The majority of small business owners want to be part of the nation's transition to a clean energy economy and welcome rules that clarify the risks and enhance the opportunities to compete in a clean energy market.
- It makes sense small businesses feel this way when available state research shows small firms create a substantial amount of clean energy jobs. For instance, nearly three-fourths of Massachusetts' clean energy employers have fewer than 25 employees (55 percent have fewer

than 5 employees),⁶ 62 percent of Vermont's clean energy businesses have fewer than 5 employees,⁷ and the majority of Florida's 14,000 clean energy businesses are small businesses.⁸

The Clean Power Plan rule will boost bottom lines and help create jobs as states look to comply with the standards and achieve reductions through various measures.

- Small Business Majority supports the compliance flexibility inherent in the rule. By setting a state-specific goal and giving states the choice about what to include in their plans, EPA is ensuring that states have the flexibility they need to drive investment in innovative technologies, while ensuring reliability and affordability.
- An American Council for an Energy Efficient Economy (ACEEE) report finds that energy efficiency investments alone could increase national gross domestic product by \$17.2 billion in 2030, and produce a net gain of about 611,000 jobs, with all 50 states seeing net job creation, all at no net cost.⁹
- EPA estimates that the proposed Clean Power Plan could result in an increase of approximately 25,900 to 29,000 supply-side electric sector jobs and an increase of approximately 57,000 jobs to 78,800 demand-side energy efficiency jobs in 2020 alone.
- A review of the Northeast's Regional Greenhouse Gas Initiative (RGGI) program by the Analysis Group found that over the first three years, the program created more than 16,000 additional jobs with each of the 10 states showing net job additions. Job opportunities occurred across the economy, ranging from engineers performing efficiency audits and workers installing energy efficiency measures in commercial buildings to staff performing teacher training on energy issues.
- Our own analysis of AB 32, California's landmark climate policy, further illustrates the opportunities we see in the Clean Power Plan, including: increased investment in energy efficiency; incentives for companies to go green, increased spending on non-energy purchases and spurring new innovations.
- Furthermore, increased investments and improvements in energy efficiency and demand response will amount to real cost savings – leaving more cash for consumers to spend on other goods and services that small business owners provide and reducing energy costs for small business owners, strengthening their bottom lines.
- While some may claim the new standards will drive up electricity costs for small businesses, EPA estimates that by 2030, when the plan is fully implemented, electricity bills will be roughly 8 percent lower than they would have been without the plan. Granted, there will be some costs associated with implementation of the plan. However, as noted, 56 percent of small business owners still support EPA's regulations even if it would cause utility rates to rise.

Small businesses cannot afford to ignore the risks associated with climate change and extreme weather.^{10, 11}

- 2011 and 2012 were the two most extreme years on record for destructive weather events, which caused a total of more than \$170 billion in damages, much of that to businesses.
- Small businesses are distinctly critical to the U.S. economy, and uniquely vulnerable to damage from extreme weather events: 25 percent of small to mid-sized businesses do not re-open following a major disaster.
- The majority of small business owners believe carbon pollution is linked to climate change and an increasing frequency of extreme weather events, which pose serious business concerns for small business that are not as financially resilient or as geographically diverse as their larger competitors.

EPA's Clean Power Plan is First National Standard to Limit Carbon Pollution from Existing Power Plants

As noted, on June 2, 2014, EPA proposed the first-ever national standard, the Clean Power Plan, to limit emissions of industrial carbon pollution from existing power plants.¹² Overall, EPA projects the rule will achieve a 30 percent reduction in power plant carbon dioxide emissions, from 2005 levels, by 2030 when fully implemented and a 25 percent reduction by 2020, when interim goal compliance is underway. This standard is an essential step towards spurring innovation and investment in low and no-carbon technologies as well as new energy infrastructure and energy efficiency. We believe the proposal will help provide the clear market signals businesses, entrepreneurs and investors are looking for in long-term energy and environmental policies.

The Clean Power Plan is designed to allow states to pursue carbon reduction and mitigation policies that:

- 1 Continue to rely on a diverse set of energy resources
- 2 Ensure electric system reliability
- 3 Provide affordable electricity
- 4 Recognize investments that states and power companies are already making
- 5 Can be tailored to meet the specific energy, environmental and economic needs and goals of each state

Coupled with existing measures currently being taken to cut other dangerous power plant pollutants—soot, smog, mercury and other toxic air pollutants—as well as the proposed carbon standard for *new* power plants, the Clean Power Plan will encourage a market based transition to a clean energy economy, which will boost investment and create jobs across the country. With EPA's flexible proposal, we can cut wasted energy, improve efficiency, and reduce pollution—while still having all the power we need to grow our economy and maintain our competitive edge. It will keep the U.S.—and our business community—at the forefront of a global movement to produce and consume energy in a better, more sustainable way.

Specifics of the Proposal

The EPA's Clean Power Plan proposal provides flexibility for states to build upon their progress (as well as the progress of cities and towns) in addressing carbon pollution. States can choose to act alone or collaborate with other states on regional multi-state plans that may provide additional opportunities for cost savings and flexibility. The Clean Power Plan has two main parts: (1) state-specific goals to lower carbon pollution from power plants; and (2) guidelines to help the states develop their plans for meeting the goals. EPA has set rate-based emissions reduction goals for each state, expressed in pounds of CO₂ per megawatt hour (lbs/MWh), based on carbon intensity and a number of other state-specific factors. However, in order to provide states with more flexibility, EPA is proposing that states have an option to convert the rate-based goals to mass-based goals (expressed in tons of CO₂ per year).^{13,14}

EPA proposes, under Option 1, that states meet their final performance goals in 2030, while making steady progress over the 10 year period from 2020-2029. EPA has also proposed a second, less stringent compliance option for comment, referred to as Option 2. Under Option 2, states would have a 5-year period for compliance, in combination with a less stringent set of emission performance levels, thus achieving interim goals over 2020 to 2024 and complying with the plan in full by 2025. Under both

options, states are required to develop plans to meet their performance goals; EPA is not prescribing a specific set of measures for states to put in their plans. The proposed standards are based on a suite of measures – or “building blocks” – that are in use today by many states and utilities and that together make up the “best system of emissions reduction” for carbon pollution from existing power plants. The four building blocks include: (1) making fossil fuel plants more efficient, (2) increasing utilization of low-emitting natural gas power plants, (3) expanding the use of zero emission renewables and nuclear power, and (4) increasing opportunities for demand-side energy efficiency investments. This gives states flexibility as states will choose what goes into their plans, describing how they will achieve the needed reductions.

States have up to two or three years to submit final plans depending on whether they work alone or in partnership with other states and up to 15 years for full implementation of all emission reduction measures, after the proposed Clean Power Plan is finalized. States can choose how to meet the goals through a range of approaches, such as those outlined below:

- Demand-side energy efficiency programs,
- Renewable energy standards,
- Efficiency improvements at fossil-fired power plants,
- Co-firing or switching to natural gas,
- Construction of new natural gas combined-cycle plants,
- Transmission efficiency improvements,
- Energy storage technology,
- Retirements of existing fossil plants,
- Expanding renewables (e.g., wind and solar),
- Expanding nuclear,
- Market-based trading programs, and
- Energy conservation programs.

We support the flexibility inherent in the proposed plan and the discretion afforded to states in developing their compliance strategies. By setting a state-specific goal and giving states the choice about what to include in their plans, EPA is ensuring that states have the flexibility they need to drive investment in innovation, while ensuring reliability and affordability. Additionally, states can go above and beyond what EPA has proposed in order to achieve even greater emissions reductions. These considerations are critical for small business owners, investors and entrepreneurs who depend on a reliable and affordable supply of power as well as opportunities for innovation in order to grow their businesses and boost their bottom lines.

Job & Economic Impacts of the Clean Power Plan



Small businesses are strategically positioned to help states achieve their carbon reduction goals, igniting job creation opportunities and cost savings along the way. For example, business opportunities exist with respect to modernizing inefficient power plants and buildings as well as operating new, cleaner and more efficient power plants; conducting energy audits and retrofitting residential as well as commercial buildings to be more energy efficient; and developing new and innovative technologies throughout the supply chain. Small Business Majority anticipates that many of these technologies will come from small firms and entrepreneurs, which are a significant source of innovation and patent activity. This innovative leadership positions small businesses to enter the clean energy market with new ideas, products and processes, and compete for venture capital dollars and increased consumer demand associated with more sustainable, efficient products.

Recent testimony before the House Energy and Commerce Committee from the American Council for an Energy Efficient Economy (ACEEE) confirms the vast range of economic and job growth opportunity associated with clean energy and efficiency investments, “As a simple measure, every \$1 million spent on energy as a whole supports about 4 full time jobs directly and through the supply chain. Investing that same amount of money in the construction sector to make homes and offices more efficient would support about 12 jobs, not even taking into account the beneficial impacts of increased productivity, reduced pollution, and increased competitiveness.”¹⁵ Furthermore, ACEEE conducted an analysis in advance of the Clean Power Plan’s release to estimate the impacts of a range of efficiency policies states could pursue and found that by 2030 the rule could induce over \$625 billion of investment in various energy efficiency industries and behaviors, and create an average of over 400,000 jobs per year both directly and throughout the economy.¹⁶ In drawing this conclusion, ACEEE did not assess the many additional resources states might use to reduce greenhouse gas emissions, such as renewable energy, efficiency upgrades at the power generator, fuel switching or dispatch shifting. Rather, ACEEE focused its assessment on the potential for states to implement energy efficiency savings targets, adopt national building codes, construct more combined heat-and-power systems, and adopt efficiency standards for products and equipment. Using this limited framework of emission reduction opportunities, ACEEE further finds that energy efficiency investments alone could increase national gross domestic product by \$17.2 billion in 2030 and produce a net gain of about 611,000 jobs, with all 50 states seeing net job creation.¹⁷

EPA’s Regulatory Impact Analysis (RIA) contains a modest attempt to examine the range of employment trends and impacts potentially associated with the rule.¹⁸ Of note, EPA reports that electric utilities may respond to the Clean Power Plan by placing new orders for efficiency-related or renewable energy equipment and services in order to reduce carbon emissions, by installing and operating new equipment or by improving heat rate efficiency. We agree with EPA’s assessment that these approaches could increase demand for labor in the electric power sector as well as associated equipment and services sectors. The direct employment effects of supply-side initiatives include changes in labor demand for manufacturing, installing, and operating higher efficiency or renewable energy electricity generating assets. Also important, demand-side energy efficiency policies and programs that typically influence energy consumption patterns of businesses directly affect employment by encouraging firms and consumers to shift to more efficient products and processes. Thus, we agree with EPA that employment in the sectors that provide more efficient devices and services will increase over the life of the program.

The EPA's illustrative employment analysis, contained within the RIA, also includes an estimate of projected employment impacts associated with these guidelines for the electric power industry, coal and natural gas production, and demand side energy efficiency activities. In the electricity, coal, and natural gas sectors, the EPA estimates that the proposed Clean Power Plan could result in an increase of approximately 28,000 to 25,900 job-years in 2020 for Option 1 or an increase of approximately 29,800 to 26,700 job-years in 2020 under Option 2. EPA also found that demand-side energy efficiency programs could result in an increase of approximately 78,800 jobs in 2020 for Option 1 and an increase of approximately 57,000 jobs under Option 2. Our outreach and engagement with small businesses and entrepreneurs suggests that they are well positioned to take advantage of these trends. Thus, Small Business Majority is supportive of policy measures that will help boost job growth in these sectors.

Economic Impacts of Other Clean Energy and Environmental Policies: Lessons Learned

States Have Been Successful in Reducing Emissions in a Manner that Benefit Small Business

States have been leaders in developing innovative programs to encourage the deployment of alternative energy sources and reduce GHG emissions. The Northeast states and California have taken the lead in adopting carbon mitigation policies, using market-based cap-and-trade systems. This report highlights examples of lessons learned through state experience demonstrating that small businesses can reap economic value as a result of carbon emission reduction policies. For example, the use of revenue generated through a market-based trading program for GHG emissions can be used for public purposes (e.g., giving customers a credit on their electricity bills, financing or subsidizing energy efficiency measures to help reduce electricity use and electricity bills). These uses lead to a variety of positive economic spillover effects such as the increased purchasing power associated with lower electricity bills, the economic impacts of spending money to hire people to perform energy audits or install solar panels, and the benefits to businesses of increased sales of energy efficiency equipment.

We often talk about the opportunities for going green and promoting sustainable goods and services. The Bureau of Labor Statistic's definition of clean jobs goes beyond direct clean energy-related investments and includes "those in businesses that produce goods and provide services that benefit the environment or conserve natural resources. These goods and services, which are sold to customers, include research and development, installation, and maintenance services for renewable energy and energy efficiency, and education and training related to green technologies and practices," but also include recycling and natural resource conservation, such as forestry management.¹⁹ Small business and entrepreneurs are well positioned to not only make their business operations more sustainable but to take advantage of increased consumer awareness and demand for more "green" or "clean" business services and technologies.

In its assessment of RGGI, the Analysis Group notes that, "[w]here energy efficiency is part of a State Plan, it will tend to increase economic activity in the local economy, through sales of efficient electric devices or insulation, and/or through jobs associated with audits, installations, and other parts of the energy efficiency supply chain. In some communities, there will be gains in manufacturing of energy-efficient equipment."²⁰ They also cite RGGI as an example of job growth: "Over the first three years, RGGI led to over 16,000 additional jobs (job-years) with each of the ten states showing net job additions. Jobs related to RGGI activities are located around the economy, with examples including engineers who perform efficiency audits, workers who install energy efficiency measures in commercial buildings, staff performing teacher training on energy issues, and other things."

Furthermore, the Analysis Group notes that RGGI produced in total \$1.6 billion in net present economic value for the ten-state region, representing on average approximately \$33 per capita in net economic benefits (i.e., taking costs into consideration). The use of auction proceeds for public purposes (e.g., giving customers a credit on their electricity bill, paying for energy efficiency measures to help reduce consumers' electricity use and electricity bills) offset the modest increase in electricity prices associated

with the RGGI program and led to myriad positive economic spillover effects. Examples included the increased purchasing power associated with lower electricity bills, the economic impacts of spending money to hire people to perform energy audits or install solar panels, and the benefits to businesses of increased sales of energy efficiency equipment.

Small Business Majority's 2010 analysis of AB 32, further illuminates the range of economic opportunities available to small businesses as a result of smart climate policies.²¹ The key findings, discussed below, mirror the opportunities we see in the Clean Power Plan:

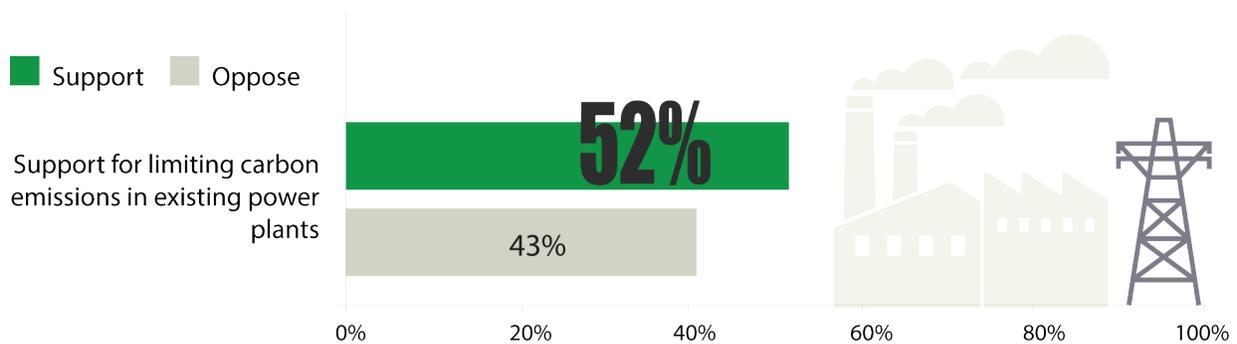
- **Increased investment in energy efficiency** will drive increased demand for energy efficiency goods and services, thus generating new prospects for small business owners. It will boost investment in building retrofits, new construction and renewable energy generation—industries primarily composed of small firms that do the majority of hiring. In fact, more than 80 percent of window manufacturers, 90 percent of HVAC equipment makers and 90 percent of contractors in the construction industry are small businesses that can benefit from climate reduction policies.
- **Incentives for companies to go green** will create savings and boost profit margins for new and existing small businesses that successfully go green and employ brand differentiation strategies to grow their businesses.
- **Increased spending on non-energy purchases** will help reduce spending on energy expenses and increase demand in many diverse sectors for goods and services provided by small businesses, such as retail goods and professional services. In fact, small businesses that are not tied to the clean energy sector will also reap rewards through indirect business transactions.
- **New innovations** will continue to occur as a result of carbon reduction policies that drive investment in new technologies. Billions of dollars have already been invested in California's clean technology firms sector and because small firms represent a significant source of patent activity, job growth potential is unlimited in this area.

Small Businesses Support Policies That Mitigate Climate Risk

Small businesses make up a considerable portion of the U.S. economy and are our primary job creators. For every large business in the country, there are more than 1,400 small businesses. Across the entire supply and value chain, these small businesses stand to benefit from the Clean Power Plan, both directly and indirectly. Small businesses are strategically positioned to enter this market demand for clean energy and efficiency with new ideas, new products and processes, and compete for venture capital dollars as well as increased consumer demand associated with more sustainable, efficient products and services. In fact, the U.S. Small Business Administration finds that small firms are a significant source of innovation and patent activity; producing more patents per employee than large businesses. For these reasons, the values and opinions of the small business sector must be considered and acknowledged by policymakers when drafting regulatory standards.

Since 2010, Small Business Majority has polled small business owners on both national and state levels to understand their positions and attitudes on EPA's environmental policies and clean energy policies. These surveys help policymakers, advocates and others understand the small business sector's perspective, and show broad support from small businesses for carbon pollution reduction in the U.S. Additionally, Small Business Majority has also assessed the range of climate related risks facing small businesses across the country in order to bolster the case for strong carbon mitigation policies.

Small Business Majority’s scientific opinion polls of small employers found that 52 percent support the EPA regulating carbon emissions from existing power plants.²² Polls conducted over the past five years show small business owners consistently support policies that address climate change and other clean energy needs, especially if these policies include incentives for energy efficiency.²³ Climate policies can help mitigate risk and provide opportunities for job creation through the development of goods and services to support compliance and bolster clean energy infrastructure development.



Small businesses cannot afford to ignore the risks associated with climate change and extreme weather. According to the National Oceanic and Atmospheric Administration (NOAA), 2011 and 2012 were the two most extreme years on record for destructive weather events. These events caused a total of more than \$170 billion in damages, much of that to businesses. In fact, our analysis of climate change preparedness and the small business sector yielded a number of key findings.²⁴ Destructive events with direct impacts on small businesses include hurricanes, tornadoes, droughts, wildfires, floods, storm surge, and ice storms, as well as extremes of heat and cold. Indirect risks of extreme weather can include power outages, lack of access to water, increased demand for heat or air conditioning, rising insurance costs, supply chain disruptions, lack of access to natural resources and loss of work hours. Small employers are also increasingly cognizant of the effect of carbon pollution on climate change, and as a result, its link to extreme weather. According to the U.S. Small Business Administration, up to 90 percent of small businesses get the majority of their business from within two miles of their front door.²⁵ In fact, an estimated 25 percent of small to mid-sized businesses do not reopen following a major disaster.²⁶ Small businesses also lack access to the capital and resources of large corporations, causing them to suffer lasting economic damage as a result of a single extreme weather event. For example, of the 60,000 to 100,000 small businesses negatively affected by Hurricane Sandy, up to 30 percent are estimated to have failed as a direct result of the storm.²⁷ Furthermore, larger companies may have backup resources at alternate locations and can benefit from greater geographic diversity, while the majority of small business owners have one facility or location that represents most of their business’ book value. In fact, the median cost of downtime from a small business affected by an extreme weather event is \$3,000 per day.²⁸ Thus, direct damage from extreme weather events such as flooding, sea level rise, storm surge, and drought will impact vulnerable small businesses more severely than a larger business with more financial and human capital as well as geographic diversity.²⁹

The effects of extreme weather events can have devastating impacts on small businesses. Our most recent report—*The Toll Extreme Weather Takes on Small Businesses & the Economy*— released in March 2014, confirms that small business owners are making the connection between the economic impact of extreme weather events and carbon emissions.³⁰ The report found that 90 percent of small business owners impacted by extreme weather say the financial impact to their business was “significant,” with nearly 4 in 10 reporting damages ranging between \$5,000 and \$25,000. For more than 1 in 5 small business owners, extreme weather events resulted in their having to lay off employees, while 44 percent of respondents report they’ve had to close their business for up to one week after a storm, and some owners report they’ve had to close for as long as 14 to 30 days. The majority of small business owners believe carbon pollution is

linked to climate change and an increasing frequency of extreme weather events, which pose serious business concerns for small business that are not as financially resilient as their larger competitors.



As a result, small business owners want smart carbon reduction policies that will help mitigate business risks associated with climate change and extreme weather events. The EPA's proposed Clean Power Plan is an important step towards achieving this objective.

Small Businesses Want Access to Clean, Affordable and Reliable Power

The majority of small business owners want to be part of the nation's transition to a clean energy economy and welcome rules that clarify the risks and enhance the opportunities to compete in a clean energy market. In fact, 71 percent of small business owners feel that government investments in clean energy and energy efficiency will stimulate the U.S. economy, and 87 percent believe that improving clean energy innovation and energy efficiency are good ways to increase prosperity for small businesses through job creation and potential cost savings.³¹ For example, an October 2013 opinion poll in Ohio found that a majority of small business owners support the state's clean energy policies and believe they reduce energy costs, spur innovation and create business opportunities.³² A majority also believes Ohio electricity providers should be required to offer services that help small businesses increase their energy efficiency, including energy audits and rebates for installing energy-efficient products – with many businesses already reaping the benefits of lower utility bills. As previously noted, analysis by ACEEE also finds significant economic and job growth opportunity associated with clean energy and efficiency investments averaging over 400,000 jobs per year both directly and throughout the economy.³³

Access to affordable power is also extremely important for small business owners who are disproportionately impacted by risks associated with extreme weather events such as technological or telecommunications failures, the absence of employees, power failures, supply chain interruptions, and rising insurance costs. While the data shows that the majority of business owners believe regulating carbon emissions will impact their businesses, they still support EPA acting on climate despite potential utility rate increases.³⁴ Specifically, 57 percent of respondents believe the EPA's regulation of carbon pollution and other emissions will impact their own business, and yet 56 percent responded that they support EPA's regulations even if it would cause utility rates to rise.

This support comes as a result of the small business sector's belief in economic growth within the clean energy sector and their desire to protect themselves financially from future extreme weather events caused by climate change. Of interest, data also shows that 63 percent of small businesses believe clean energy sources, such as wind and solar, can strengthen their businesses by lowering utility bills and providing new business opportunities that facilitate compliance by affected entities.³⁵ In fact, EPA has indicated that due to improvements in energy efficiency and demand response, in 2030 when the proposed Clean Power Plan is fully implemented, electricity bills are expected to be roughly 8 percent lower than they would have been without the actions in state plans.³⁶ This amounts to real savings for both residential and business consumers – leaving more cash for consumers to spend on other goods and services that small business owners provide and reducing energy costs for small business owners, strengthening their bottom lines.

Access to a reliable supply of power is also critical for small business owners who often cannot afford to invest in backup power supply systems. Extreme weather events are more likely to jeopardize electric system reliability, through blackouts and brownouts that cut off power to small businesses, than climate regulation. In fact, EPA's analysis of the Clean Power Plan shows there will be enough capacity across the U.S. electricity system to meet the anticipated level of electricity demand without threatening reliability.³⁷

To ensure reliability is appropriately considered and addressed as states begin to develop compliance plans, EPA is continuing to rely on a broad variety of stakeholders including utilities, Regional Transmission Operators, and state public utility regulators. Additionally, states have an array of tools and compliance flexibilities under the proposed rule to appropriately manage any potential reliability concerns that may arise on a case-by-case basis. The Analysis Group's 2014 report on Options to Ensure Electric System Reliability concluded that, "there is no reasonable basis to anticipate that EPA's guidance, the states' SIPs [state implementation plans] and the electric industry's compliance with them will create reliability problems for the power system, as long as EPA and the states plan appropriately and take timely actions to assure electric-system reliability in their plans."³⁸ Ultimately, small business owners can have access to clean, affordable and reliable power if the Clean Power Plan is appropriately implemented.

Small Businesses are Active in the Clean Energy Economy

Glassautomatic Inc. / Rolf Glass – Mount Pleasant, PA



Rolf Poeting, owner of Pennsylvania-based Glassautomatic Inc., a specialty glass cutting and engraving manufacturer and market leader in quality tabletop giftware and personalized gifts, recognizes the value of strong clean energy standards. Glassautomatic first established a production facility in Mt. Pleasant, PA in 2003. Since then, the company has grown steadily, with 55 employees in total, including the office staff, working across three shifts each day. Another dozen employees work in the business offices.

As a small business, Glassautomatic does its best to reduce energy costs and adopt energy efficient practices. Rolf approaches his facility-based energy efficiency improvements with a global perspective. "There is a lot of discussion about how lower short term energy costs are making it possible to bring manufacturing jobs back to the U.S.," said Rolf.

"However, if we want to remain competitive in a global marketplace,

we cannot let today's energy costs lead us into complacency. We need to continue to up our game. This includes taking steps today to reduce energy consumption for the long haul – even if it affects my bottom line in the short term."

The company's primary energy consumption is for production activities – including the state of the art robotics equipment and compressed air that are essential to etching glass with precision and control – and the plant engineer and technology manager work closely with vendors and power providers to ensure the facility operates at peak performance. Lighting for the company's 60,000 square foot warehouse, production area and offices – which are accessed by employees 24-hours a day – was a very close second, until Rolf worked with the State of Pennsylvania and a utility partner to install fifty, motion sensor, advanced light bulbs that turn on only when they are needed. Through the partnership, Glassautomatic provided the installation labor while the utility partner provided reimbursement for a portion of the investment in new lighting equipment. More efficient warehouse lighting and a better ability to control them has resulted in Glassautomatic's electric consumption remaining constant, even while production output has increased.

Rolf welcomes EPA's Clean Power Plan rule establishing carbon emissions standards for power plants and considers it a victory for all small business owners and an opportunity to strengthen our international competitiveness. "I believe that strong clean energy standards are good for small business and the economy," said Rolf. "They help cut waste, reduce energy costs and create economic opportunities by making us more efficient and promoting innovation in clean energy technologies."

Green Cabs, LLC – Michigan



The economic impacts of extreme weather events are not lost on Jonathan Tobias, founder and owner of Green Cabs in Wixom, MI. Nor is the connection between extreme weather and unchecked carbon emissions. John experienced close to \$10,000 in damage in winter 2014 because of extreme weather and resulting road deterioration including snowbound roads and potholes that damaged wheel rims and bearings. “I’ve been a business owner in Michigan for some time now, and while you expect snow storms it’s clear the weather is getting more intense. I’m getting more and more concerned about the economic impact of these events.”

Founded in 2008 in response to dramatically changing environmental and economic demands, Michigan Green Cabs provides energy efficient and environmentally friendly transportation that has revolutionized taxi travel in Michigan’s two largest cities. The company is a story of

innovation. At the height of the great recession, Jonathan found himself unemployed for the first time in his adult life. In true entrepreneurial spirit, he embraced it as a golden opportunity to engineer a new company from the ground up – bringing clean, new hybrid technologies to an industry that has traditionally been slow to change. Jonathan is quick to point out, “Starting a company from scratch afforded me a terrific opportunity to not only improve upon the design of a traditional industry, but to build a company that is in alignment with my commitment to protect the environment and build the kind of world that I want to leave my nine grandchildren.”

Jonathan’s vision for the company is further grounded in his perspective on where he wants the energy to come from to power his vehicles. After thorough research, he selected the Toyota Prius for its durability, fuel efficiency and low environmental impact. Detroit born and raised, it was a difficult decision to choose a foreign import over an American built automobile, but until there is a transformation of our electric power sector, Jonathan considers it counterproductive to fuel his fleet by pulling electricity produced by coal plants from the grid. He continues to work with Ford and others to build a vehicle that can compete with the emissions reductions he is achieving today. Meanwhile, corporate clients seeking a transportation partner who aligns with their own sustainability initiatives have embraced his commitment to an energy efficient fleet.

Michigan Green Cabs knows how to drive change – the company has grown from an initial two cars in 2008 to a total of 30 across two fleets – with 18 vehicles in Detroit and 12 vehicles in Ann Arbor. The company’s strength and competitive edge is informed by John’s desire and ability to embrace and stay ahead of environmental and technological advancements. For each new hybrid cab that Michigan Green Cabs deploys, the company creates three new full time jobs. Furthermore, the company’s commitment to energy efficient technology in its cars and the latest technologies in electronic dispatch is driving bottom line savings that can be passed on in to employees – in both salaries and incentives like health care – that give them greater spending power in their local communities.

“Transportation is simply one part of the bigger picture,” says Jonathan, who sees many parallels with the electric power sector. “Antiquated power plants, built during an era in which no one was thinking about emissions or pollutants, are a similarly outdated technology long overdue for an overhaul. EPA’s Clean Power Plan is a golden opportunity for us to reengineer the electric power sector with the benefit of knowing what we know today.” Successful entrepreneurs like Jonathan know something about golden opportunities.

Policy Recommendations

We recommend meaningful reductions to address climate risk



Small Business Majority supports EPA's compliance Option 1.

Option 2, which proposes a shorter compliance time frame with a less stringent emissions reductions standard, offers less opportunity for job creation.

Small businesses want pragmatic, innovative policies that help guide them into a modern clean energy economy and help mitigate extreme weather events exacerbated by climate change. Establishing a strong reduction target for existing fossil-fuel power plants is a critical policy driver. Overall, EPA projects the rule will achieve a 30 percent reduction in power plant CO₂ emissions, from 2005 levels, by 2030 and a 25 percent reduction by 2020. This is equivalent to:

1. 18 percent below EPA's forecast of what would happen without the standards, under a business as usual scenario, by 2020 and 25 percent by 2030; or
2. 13 percent below 2012 emissions by 2020 and 17 percent by 2030.

Total U.S. CO₂ emissions peaked in 2007 and have fallen 9.8 percent since 2005. To date, the U.S. is more than halfway to achieving its goal of a 17 percent reduction in emissions by 2020, relative to 2005 levels, due primarily to the contributions of natural gas, renewable energy, and energy efficiency. While 2013 emissions actually slightly increased, they are expected to decline over the medium to long term as more coal plants retire and are replaced by lower-carbon alternatives. We believe that, once finalized, the rule will boost bottom lines and help create jobs as utilities look to comply with the standards and achieve reductions through various measures.

- While the Clean Power Plan calls for significant reduction goals, it is important to keep in mind that the more ambitious and flexible the standards, the greater the potential opportunity for innovation and economic growth. Some stakeholders point to the potential for achieving even stronger reductions, than those currently proposed, through increased investment in renewables and energy efficiency; which will have direct benefits for small business owners and operators. Importantly, more job opportunities are created under EPA's preferred Option 1 proposal, as previously discussed.³⁹ Therefore, Small Business Majority does not support consideration of Option 2, which proposes a shorter compliance time frame with a less stringent emissions reductions standard and therefore less opportunity for job creation.

We recommend smart policies to mitigate rate impacts, including energy efficiency



Small Business Majority recommends that states (1) implement targeted energy efficiency education programs for small businesses; (2) utilize resources to help subsidize the purchase and installation of energy efficient technologies by small businesses; and (3) partner with utilities and regulators to develop energy assistance programs for vulnerable or at-risk small businesses.

EPA has indicated in the proposal that due to improvements in energy efficiency and demand response, in 2030 when the plan is fully implemented, electricity bills are expected to be roughly 8 percent lower than they would have been without action. This amounts to real savings for both residential and business

consumers – putting more cash in individuals’ pockets for spending on other goods and services that small business owners provide, while also reducing energy costs for small business owners and delivering savings straight to the bottom line.

As previously discussed, EPA is giving states a choice to use the rate-based goals provided in the proposal or to use mass-based goals that can better facilitate interstate trading, such as under RGGI and AB32. A trading program enables states to generate a revenue stream that can be used for various complementary policies and programs, such as offsetting costs associated with electricity increases to consumers or investing in targeted programs that help reduce overall costs, such as energy efficiency. Furthermore, multistate trading or regional trading programs provide greater compliance flexibility, which can lead to lower program costs, improved efficiencies and further mitigate rate impacts. Lessons learned from RGGI demonstrate that states can save consumers money through the establishment of regional trading programs that generate revenue.

The Analysis Group has assessed states’ experience with RGGI and concludes that, “...the impacts on electricity rates and bills from well-designed CO₂-pollution control programs will be modest in the near term.”⁴⁰ They also found that while the RGGI program costs initially increased electricity rates, the impact of energy efficiency investments (using RGGI allowance revenues) significantly reduced commercial and residential electricity use, placing downward pressure on rates over time, and combined with lower consumption, tended to generate on average much lower electricity bills.

States also have deep experience with setting electricity rates and are well equipped through long-standing utility ratemaking principles, practices and programs to help protect consumers from electricity price increases. Accordingly, we suggest the following recommendations to help safeguard against any potential increases that might disadvantage small business owners:

- We encourage states to establish targeted energy efficiency education programs for small business owners and operators. State facilitated partnerships between utilities, third party efficiency providers, local chambers of commerce and NGOs, for example, could help ensure that small business owners have access to information about individual state implementation plans and how best to utilize demand-side energy efficiency programs. Under AB 32, the CARB has focused implementation efforts on helping small businesses invest in better energy efficiency processes and products by creating information campaigns and resources that give small businesses numerous no- and low-cost ways to save money through reductions in energy use. For example, modest investments such as occupancy light sensors or larger investments in new Energy Star appliances or equipment will lead to reductions in the amount of energy used for overall maintenance and operations. These savings accrue to the bottom line, where small business owners can reinvest them into their business enterprise.
- We further recommend that states consider utilizing revenue from any trading program to help small businesses subsidize the costs of energy efficiency audits, purchases and installations, further offsetting any costs of going green. Even in the absence of a trading program, we recommend that utilities establish energy efficiency programs and incentives or bolster existing programs and incentives to more aggressively target small business owners.
- While small business owners have expressed support for climate policies even if they increase electricity rates,⁴¹ we recommend that as a potential safeguard, states, utilities and regulators collectively define what an “at-risk” or “vulnerable” small business is and identify an appropriate form of energy assistance to help offset some of the potential costs associated with this clean energy transition. States or regions that implement revenue-generating trading programs should consider allocating a portion of the generated revenue towards these types of energy assistance programs. A certain level of electricity price increases will actually help drive behavioral changes around energy consumption patterns, resulting in reduced demand and leading to investment in more responsible forms of generation that in turn help offset costs for businesses; however, these increases should not be excessive. States, utilities, regulators and consumer advocates are the

most appropriate entities to determine what constitutes excessive and devise responsible safeguards.

We recommend smart policies to drive innovation and business opportunities for small businesses while mitigating risk



Small Business Majority is supportive of federal and state level policies that will help bolster investment in renewable energy resources and energy efficiency, such as the federal Production Tax Credit and similar state-level incentives for clean energy, as well as state Renewable Portfolio Standards and Energy Efficiency Resource Standards. Small Business Majority further recommends that states consider allocating resources towards small businesses for facilitating the development of disaster recovery plans in order to help safeguard investments in energy efficiency, renewables and other small business infrastructure investments.

State level policy support has been essential to clean energy growth in the U.S. Twenty-two states and the District of Columbia have enacted binding Renewable Portfolio Standards (RPS). Seven additional states have established non-binding renewable energy goals. For example, 17 states require utilities to provide at least 20 percent renewables by 2020.⁴²

Relatedly, 22 states have enacted Energy Efficiency Resource Standards (EERS), which require utilities to achieve a specified amount of energy savings – typically one to two percent of annual electricity sales; while 5 have voluntary energy efficiency goals.⁴³ Increased energy efficiency investments have helped keep electricity demand relatively flat. The Clean Power Plan will encourage additional state investments in renewable energy and energy efficiency in order to achieve the emission reduction targets. Small businesses stand to benefit from further development and expansion of these policies.

Achieving the goals outlined in the Clean Power Plan will require reductions in carbon emissions that can be advanced through development and implementation of new and more efficient technologies as well as improvements and innovations in existing technologies and infrastructure. New technologies will present numerous opportunities for small businesses and – based on a track record of leadership and innovation – we can anticipate that many of these technologies will come from small firms and entrepreneurs, which as we have previously noted are a significant source of innovation and patent activity.

To help drive additional opportunities for innovation among small business entrepreneurs, we recommend that state and federal regulators consider promoting additional policies that will drive investment in clean energy sources, such as wind and solar power. For example, Small Business Majority is supportive of extending the federal Production Tax Credit as a tool to help promote innovation and development in the renewable energy space as well as similar state-level incentives for clean energy. Clean energy standards and energy efficiency resource standards will also help further these investments.

Additionally, states should consider allocating resources to small businesses in order to help facilitate preparation of disaster recovery plans (also commonly referred to as continuity or risk management plans). Our research found that 57 percent of small businesses have no disaster recovery plan and, of those that do, 90 percent spend less than one day a month preparing and maintaining them.⁴⁴ The majority of small businesses have not closely analyzed the potential for economic losses from extreme weather events or other climate-related risks, in part due to a lack of resources to do so. Accordingly, we think it would be prudent for states to help inform and facilitate small business development of disaster recovery plans.

Conclusion

Small businesses are the backbone of the American economy. For the past two decades, small businesses have been responsible for creating two out of every three new jobs. Currently, there are 28 million small firms in the U.S. that employ roughly 60 million Americans.⁴⁵ Given their significant role in the nation's economy, it is important that decision makers take into consideration the needs of small businesses and how anticipated policies, such as EPA's Clean Power Plan, affect them. A majority of small businesses support EPA's regulation of carbon emissions even if it would cause utility rates to rise. Even so, it will be important for states to develop new policies and strengthen existing programs that will help further position small businesses to take advantage of the opportunities incumbent in the transition to a low-carbon economy.

Small Business Majority is a resource for state governments and regulators as they seek to develop compliance plans for submission to EPA that take into account the unique needs and interests of the small business sector. Small business and entrepreneurs are well positioned to not only make their business operations more sustainable and efficient but to take advantage of increased consumer awareness and demand for more "green" or "clean" business services and technologies.

Furthermore, as experience with existing programs has shown us, smart climate policies lead to a number of economic benefits, such as increased purchasing power associated with lower electricity bills, the economic impacts of spending money to hire people to perform energy audits or install solar panels, and the benefits to businesses of increased sales of energy efficiency equipment. We believe that the EPA's Clean Power Plan proposal will help provide the clear market signals businesses, entrepreneurs and investors are looking for in long-term energy and environmental policies. Once finalized, the rule will boost bottom lines and help create jobs as states look to comply with the standards and achieve reductions through various measures.

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