

Testimony of
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Chairwoman Murkowski, Ranking Member Cantwell, and Members of the Committee: on behalf of NRDC’s more than 1.5 million members and activists I want to thank you for the opportunity to testify today. Today’s hearing considers a topic of vital importance to our nation and presents the committee with some clear choices. Some bills would accelerate our shift to a clean energy economy, combatting climate change, protecting health and our natural heritage, and create jobs. Others would aggravate climate change and the human and economic costs that come with it, and threaten our environment and public health.

In this testimony, I will focus on the proposed Renewable Energy Standard (S.1264) and the suite of proposed offshore oil and gas drilling legislation as examples of the clear choice facing this committee, Congress at large, and the nation.

The Climate Imperative

Climate change is the greatest environmental challenge of our time. On our current trajectory, we are creating for ourselves – and even more so for coming generations – a future of extreme and catastrophic risks from a dangerously disrupted climate. We must protect them from the worst impacts of climate disruption, and that means starting to cut carbon pollution now.

America has the world’s best climate scientists. And America’s climate scientists are sounding the alarm, as evidenced by the short, 8-page summary of scientific consensus published by the American Association for the Advancement of Sciences, called *What We Know: The Reality, Risks, and Response to Climate Change*.¹ The summary states:

The science linking human activities to climate change is analogous to the science linking smoking to lung and cardiovascular diseases. Physicians, cardiovascular scientists, public health experts, and others all agree smoking causes cancer. And this consensus among the health community has convinced most Americans that the health risks from smoking are real. A similar consensus now exists among climate scientists, a consensus that maintains that climate change is happening and that human activity is the cause. The National Academy of Sciences, for example, says that “the Earth system is warming and that much of this warming is very likely due to human activities.”

This committee has the opportunity, on a bi-partisan basis, to heed these warnings before it is too late. Here is what the vast majority of climate scientists – 97 percent of those scientists – are telling us. They are telling us that the build-up of carbon pollution is having a wide range of dangerous consequences.

More heat in the atmosphere worsens other kinds of air pollution and leads to higher levels of natural allergens. Together, greater pollution and allergens triggers more asthma attacks and respiratory disease. And as the climate changes, disease-carrying insects and pests move into new territories, spreading illnesses to new populations.

More heat in the atmosphere contributes to more frequent, destructive, costly, and deadly storms and other extreme weather events. It also means deeper and longer droughts, like the one now afflicting California, with huge tolls on agriculture, and mortal threats to the water supplies that are the lifeblood of many of our western and southwestern states.

More heat in the atmosphere causes the seas to expand and ice to melt, raising sea levels on coastlines around the world. It is no exaggeration to say that the fate of Miami, or Virginia Beach, or New York or Boston, depends on the fate of the Greenland ice sheet. For all of human history, Greenland has safely stored enough ice on land to raise the level of all the world’s oceans by 10 feet or more. And Greenland is melting at an unprecedented rate, releasing that meltwater back into the oceans.

And climate change is a national security issue. The AAAS paper “*What We Know*” cites Defense Department and National Academy of Sciences studies.

For example: “Climate change could have significant geopolitical impacts around the world, contributing to poverty, environmental degradation, and the further weakening of fragile governments. Climate change will contribute to food and water scarcity, will increase the spread of disease, and may spur or exacerbate mass migration.”⁴⁵ In the context of other global dynamics that give rise to political instability and societal tensions, changes in climate are considered as potential threat multipliers or instability accelerants, according to the CNA Military Advisory Board—a panel of our nation’s highest-ranking retired military leaders.⁴⁶ Further, national security assets are often global first responders to humanitarian needs associated with natural disasters including typhoons, hurricanes, and flooding.

The AAAS paper cites one chilling example in particular: “There is a growing recognition that

the displacement of large numbers of people because of water scarcity and agricultural failure, as in the recent history of Syria, can exacerbate tensions that lead to civil unrest.”²

We are already living with tangible climate disruption and its consequences. It will only get worse and worse, unless action is taken.

According to the overwhelming scientific consensus that means the world must reduce total emissions by at least 80 percent by 2050 to avoid inflicting these impacts on future generations.³

These reductions are achievable—if the proper choices are made. And as the single largest historical emitter, the United States has both the responsibility and the opportunity to continue leading the fight against global warming.

Under President Obama’s leadership, the United States has already made significant strides. Fuel efficiency standards have reduced carbon emissions while saving consumers money at the pump. President Obama’s proposed Clean Power Plan would reduce carbon emissions 30 percent below 2005 levels by 2030. It is also expected to result in reductions in smog and soot that will prevent 470,000 to 490,000 missed school and work days, 2,700 to 6,600 premature deaths and more than 140,000 asthma attacks in children by 2030.⁴

Much more can and must be done to build on this foundation and an essential part of the climate solution will be establishing federal policy that significantly accelerates the deployment of clean energy while making smarter choices regarding the source and extent of fossil fuel extraction.

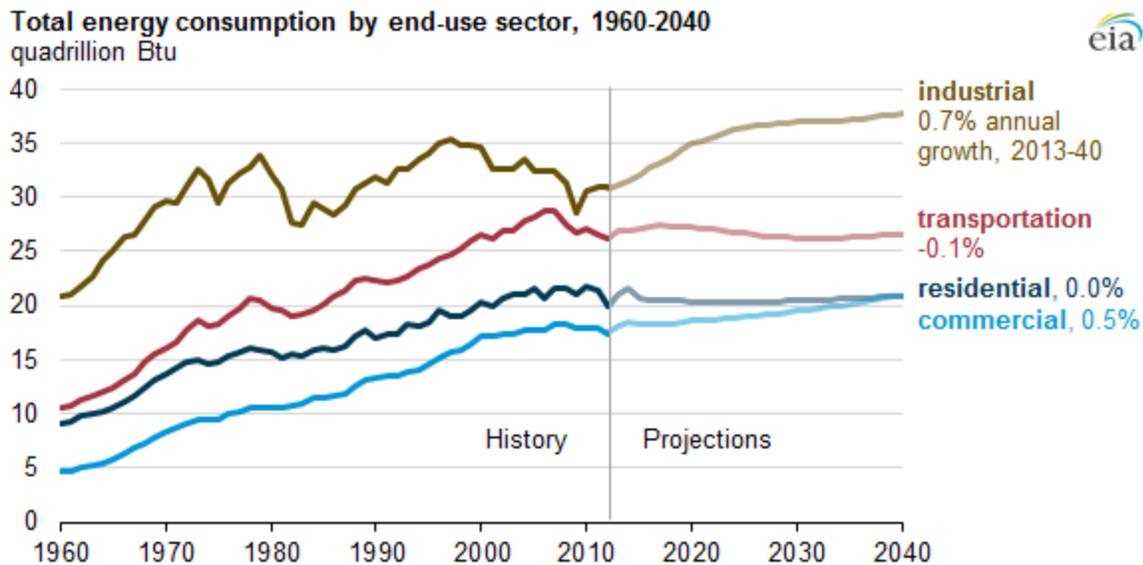
Clean Energy is an Abundant Resource and Growth is Surpassing Expectations

Clean energy—from solar to wind to energy efficiency—represents an abundant resource, demonstrating a rapid growth and surpassing most expectations. Its potential is enormous.

Energy Efficiency

Energy efficiency is an energy resource capable of yielding energy and demand savings that can displace electricity generation from coal, natural gas, nuclear power, and other supply-side resources. Defining efficiency as a resource and integrating it into regulatory and policy decisions is critical as improving energy efficiency is the cheapest, cleanest and quickest way to meet our energy needs.

Total U.S. energy use peaked in 2007 and has trended downward since. Despite a small 2.8 percent uptick in 2013, total consumption was still below the level recorded a full decade earlier.⁵ Any lockstep linkage between economic growth and total energy use ended almost 40 years ago. According to EIA’s projections in the [Annual Energy Outlook 2015](#), domestic consumption is expected to grow at a modest 0.3 percent per year through 2040, less than half the rate of population growth.⁶



Source: U.S. Energy Information Administration, [Annual Energy Outlook 2015](#)

The American Council for an Energy-Efficient Economy estimates that efficiency improvements saved American consumers and businesses roughly \$800 billion in 2014 and have also contributed to increased employment and economic growth, reduced energy imports, and a cleaner environment.

Federal programs are succeeding. The Department of Energy’s appliance standards program, first authorized by Congress in 1987 and improved through numerous bipartisan bills over the years saved American consumers \$58 billion on their utility bills in 2014 and \$1.8 trillion on their utility bills through 2030 while cutting 2.3 billion tons of carbon pollution, equivalent to the annual CO₂ emissions from nearly 500 million automobiles.⁷

Much greater savings are possible—a [2011 ACEEE report](#) estimates that widespread use of energy efficiency technologies and practices can reduce US forecasted energy use by at least 40 percent by 2050. Studies by organizations such as the National Academies of Sciences (NAS) report that currently available technology has the potential to save 30 percent by 2035 and would save money compared to business-as-usual.⁸ This is an extreme conservative estimate, an observation the study itself recognizes and discusses.

The country’s energy efficiency resource is vast, and grows continuously as new technologies are developed. However, according to IEA projections to 2035, as much as two-thirds of energy efficiency potential will remain untapped unless policies change. The report also noted the many barriers to investment that necessitate these policies, such as lack of information or financing.⁹

Energy efficiency is one of the fastest growing sectors of the U.S. economy. It creates jobs that require a broad range of homegrown expertise, including for electricians, heating/air conditioning installers, carpenters, construction equipment operators, roofers, insulation workers, industrial truck drivers, construction managers, and building inspectors. Many of these jobs cannot be exported and represent an important and dynamic driver of new economic opportunities.

Making improvements that increase building efficiency is an even bigger job creator. Between 2009 and 2020, the consulting firm McKinsey found that energy efficiency building retrofits could create between 600,000 and 900,000 American jobs. This job growth would be spurred in two ways – from labor-intensive retrofits in the residential and commercial sectors, and from implementation and enforcement of energy efficiency codes and standards.

All this illustrates that energy efficiency represents a major untapped supply to meet our energy demands.

Solar and Wind

The renewable energy industry has experienced explosive progress over the past 6 years. Costs are plummeting, capacity is skyrocketing, and technological advancements are occurring at a rapid pace. In fact, current U.S. utility-scale solar PV capacity has already *surpassed* the Energy Information Agency's AEO 2012 estimates for 2030— by 227 percent^{10,11}. Total solar capacity has increased at an astronomical rate from less than 1 GW in 2008 to over 20 GW in 2014. Since 2009, the cost of electricity from utility-scale solar PV projects has declined by nearly 80 percent.¹² Meanwhile, a new Deutsche Bank report predicts that distributed solar power will be cheaper than average retail electricity prices in 36 states by the end of 2016.¹³ NREL estimates that the technical resource potential of solar power is enormous,¹⁴ and with costs falling precipitously, there is no reason not to tap into this clean, abundant, and increasingly cost-competitive resource.

Wind's success story is similar, as is its potential. Between 2008 and 2014, installed wind capacity has grown dramatically from about 25 GW to nearly 66 GW.¹⁵ Wind prices have also sharply declined. The capital cost of developing onshore wind has dropped from \$2260/kW in 2010 to \$1750/kW on average in 2014, and performance improvements have further increased the competitiveness of wind power.¹⁶ NREL has recently announced funding to try to scale turbines up to 140 m (from an average of 80-90 m today), which it estimates would result in an additional 1800 GW, or 237,000 sq. miles, of wind resource potential nationwide, and would significantly expand the geographic diversity of wind resources.¹⁷ Additionally, the resource potential for offshore wind in the United States is vast and adjacent to many metropolitan areas with high electricity demand. The Department of Energy recently found that providing 35 percent of our electricity from wind power (combination of onshore and offshore) is not only technically achievable, but also economically beneficial – creating jobs and lowering pollution at little to no cost to consumers.¹⁸ Further illustrating its potential, just one quarter of our nation's offshore wind potential would match our nation's entire existing fossil fuel-based electricity generating capacity¹⁹.

2014 marked a major milestone as wind and solar energy made up about 55 percent of all new installed capacity in the U.S.²⁰ This is not an anomaly – many industry analysts predict that wind and solar will become increasingly competitive with new NGCC plants and will make up a major market share of new U.S. demand.^{21, 22, 23}

Importantly, recent analyses also show that high penetrations of renewable energy can be integrated into our existing grid at little to no additional costs. Detailed analyses performed on the PJM grid (the nation's largest grid operator), the Eastern Interconnect, and Western Interconnect have all found that renewables can provide up to 30 percent of total generation with only minor adjustments to the existing grid and proper system planning.^{24,25,26}

Renewable Energy on Federal Lands

In short order our nation has also witnessed a sea change in the amount of clean energy that has been permitted and sited on our public lands. Starting from scratch in 2009, the nation has now six utility scale solar projects operating on federal lands. These six operational plants along with a number of newly constructed wind and geothermal plants will soon be joined by an additional eight solar projects under construction that will in total produce 4.7 gigawatts of clean energy.²⁷ And this is just the start. The Department of Interior making significant strides in meeting the goal of permitting 20,000 megawatts of renewable energy on federal land by 2020.²⁸

But as our nation strives to meet its clean energy goals, it is imperative that wind, geothermal, and solar development go forth in a manner that safeguards our natural resources, while still allowing the recreation and tourism that sustains local communities. Congress should consider additional measures that will further modernize clean energy development on public lands and provide tools and guidance necessary to meet our growing demand for clean energy in an environmentally responsible and efficient way. But unlike other pieces of legislation being contemplated by the Committee, the permitting and management of renewable energy on federal lands lack the financial mechanisms and assurances that are necessary to address and mitigate the impacts of development to local communities and natural resources. Absent legislative intervention, this imbalance will further undermine the widespread adoption of these promising technologies.²⁹

Fuel Efficiency and Clean Vehicles

The U.S. has started to reverse a dangerous, decades-long trend of rising oil consumption and accompanying carbon pollution by the transportation sector. From 1985 to 2005 U.S. oil demand rose approximately 32 percent, driving up greenhouse gas emissions in the sector.

However, cars and trucks are consuming less fuel and belching less pollution in more recent years thanks to clean vehicle and fuel efficiency standards. Since 2005, gasoline consumption has decreased 8 percent and the average efficiency of new U.S. automobiles is up 25 percent.³⁰ When fully implemented, the federal 54.5 mpg fuel efficiency standards are expected to save 12 billion barrels of oil over the life of vehicles made between 2012 and 2025.³¹ We can do more. By continuing to advance efficiency and implement new transportation policies designed to reduce driving and accelerate electric vehicle sales, the U.S. could save nearly 4 billion barrels of oil annually by 2035.³² Notably, that's almost the same amount of oil, in a single year, as the Interior Department estimates can *ever* be recovered from drilling all our offshore waters from Florida to Maine.³³

Renewable Energy Standard: A Critical Tool for the Clean Economy

S. 1264 to establish a Renewable Electricity Standard (RES) would put in place key tools in the fight to cut carbon pollution, by transitioning from fossil fuels to clean energy sources like wind, solar, and geothermal energy. The RES will continue to build our clean energy future by setting a national target of 30 percent renewable energy by 2030 (30x30).

The legislation also provides additional support for distributed resources. The RES offers three times the Renewable Energy Certificates (RECs) for electricity generated by distributed resources such as solar photovoltaics (with administrative adjustments over time) and two times

the RECs for renewable electricity on tribal lands. Depending on location, clean, distributed renewable resources offer benefits to both the local electric grid and local air quality.

The 30x30 RES will promote clean energy source that cut carbon pollution, further expand our powerful clean energy economy which currently employs hundreds of thousands of American workers, drive innovation, and provide a strong market signal that the future lies in renewable energy developed here in America.

State-level success stories

Renewable portfolio standards have been critical to driving the recent growth of the wind and solar industries. Across the country, 29 states and D.C. have mandatory renewable energy targets in place, providing strong market signals to drive investments in clean energy. Seven more have non-binding goals. Between 1998 and 2013, approximately 68 percent (51 GW) of non-hydro renewable capacity additions have occurred in states with binding renewable portfolio standards.³⁴ A recent analysis by the Lawrence-Berkeley National Laboratory (LBNL) found that many states are on track to successfully meet their *2035 requirements* within the next few years.³⁵

State-level renewable energy standards have been found to generate a wide range of benefits, including emissions and human health benefits, wholesale price suppression, and job creation, while the cost impacts have been minimal (1-1.5 percent of retail rates).³⁶ In fact, a recent analysis from DBL Investors found that there is no correlation between increased renewable energy penetration and retail electricity prices, with many of the leading clean energy states experiencing lower electricity price increases than the rest of the country over the past decade.³⁷

Michigan is a prime example of a state that is beginning to seize the economic opportunities and benefits of a clean energy economy. The state's Renewable Portfolio Standard has spurred more than \$2.3 billion in new investments and created new clean energy jobs since its enactment.³⁸ Michigan ranked seventh among the states for wind-related jobs in 2014, employing between 2,000 and 3,000 permanent workers.³⁹ A poll of 600 Michiganders in December 2014 found that 75 percent support *tripling* the renewable energy target from 10 percent in 2015 to 30 percent by 2035.⁴⁰

Colorado also has very strong renewable energy potential and state policies have helped to begin to capitalize on this potential. Colorado was the first state to pass a voter-approved Renewable Portfolio Standard (RPS). After recent amendments, the RPS is now set at 30 percent for investor-owned utilities and 20 percent for electric cooperatives by 2020 – the second highest standard in the nation.⁴¹ The RPS has already helped create 10,000 jobs – including between 6,000 and 7,000 wind jobs at 22 manufacturing plants, 29 operating wind farms, and many other companies up and down the sprawling supply chain and it's brought in millions from lease and property tax payments for rural communities.^{42, 43}

Montana is yet another state with outstanding renewable energy potential – it is ranked 3rd in the nation for wind potential, 2nd for geothermal potential, and 15th for solar potential.⁴⁴ Montana has taken steps to tap into this large potential, establishing a Renewable Portfolio Standard of 15 percent by 2015, which has already been met.⁴⁵ So far, 650 MW of wind has been installed in Montana – enough to power about 200,000 homes – bringing with it \$1.6 billion in new

investment, 1,500 high-paying construction jobs, and over 100 permanent jobs in rural communities. In addition, the leases for these wind turbines bring in property tax payments of \$2 million annually.⁴⁶

Similar success stories can be found all across the country, as 29 states and D.C. have shown leadership in promoting clean, zero-carbon energy, while bringing significant economic benefits into their states.

The Federal 30x30 RES

Implementing a federal renewable electricity standard would expand on the success of state-level policies across the country and ensure that our entire nation reaps the benefits of a clean energy economy. A strong federal RES would also secure America's place as a global leader in clean energy, providing policy certainty and a transparent market signal to drive investment in American companies and manufacturers.

Recent analysis from the Union of Concerned Scientists demonstrates the significant benefits of a federal RES. Specifically, the analysis found that renewable energy generation would increase 265 percent over today's levels, driving \$294 billion in cumulative new capital investments in the United States. By increasing the amount of clean, zero-carbon energy in our electricity mix, the electricity sector CO₂ emissions would decrease 10.8 percent below business-as-usual levels in 2030.⁴⁷

And consistent with the experience of 29 states and D.C., all of this could be accomplished with little impact on electricity prices compared to business-as-usual – the UCS analysis found that the maximum national average incremental increase in electricity prices in any given year would be only 0.2 percent. Combined with lower fuel prices as a result of less reliance on natural gas, UCS found that consumers would actually *save* \$25.1 billion (0.5 percent) in cumulative electricity and natural gas bills between 2015 and 2030, as a result of the RES.⁴⁸

Importantly, to fully capture these benefits any final RES legislation must recognize the importance of ensuring that the nation invests in truly low-carbon alternatives, by requiring that all biomass is responsibly sourced and meets greenhouse gas emissions standards as determined by the best available science.

Offshore Drilling: Dirty, Dangerous, Unnecessary

Proposals to incentivize and expand offshore oil and gas exploration have no place in any final energy legislation. More offshore drilling is dirty, dangerous, and unnecessary. It will keep our nation tethered to the fossil fuels of the past and threaten the health and economies of our coastal communities. These offshore areas are owned by the public and should not be developed at the behest of the fossil fuel industry in detriment to this and future generation's health and economic well-being.

S. 1276 would open additional areas in the Gulf of Mexico to drilling, bring offshore drilling closer to the Florida coastline, include Florida as a Gulf producing state and mandate three lease sales (in 2018, 2019 and 2020). It also would increase revenue sharing caps for several states, creating additional incentives for states to drill off of their coasts, introducing more risk to their coastal economies and quality of life. It is important to note the proposed legislation would also

undermine multiple bedrock environmental laws such as the National Environmental Policy Act (NEPA) and the Marine Mammal Protection Act (MMPA). It severely undercuts NEPA and would force the National Marine Fisheries Service to meet unrealistic deadlines when reviewing applications to harm marine mammals under the MMPA, threatening its ability to provide fundamental protections to marine mammals.

S. 1278 would mandate oil and gas development in some of the most pristine and ecologically vibrant portions of the Arctic Ocean. It would also establish a revenue distribution scheme diverting funds from the Federal Treasury to various other sources.

S. 1279 would open up the Atlantic coast to drilling (from Virginia through Georgia) for the first time since 1983, mandate a minimum number of lease sales, and establish a revenue distribution scheme which would divert funds from the Federal treasury while creating perverse incentives for states to drill off their coasts. In addition, it will exacerbate climate change, threatening coastal communities and their economies which rely heavily on tourism, fishing and recreational industries.

Below are 7 reasons all of these proposals should be rejected:

Contradict Climate Science: New offshore drilling contradicts the international scientific consensus that in order to avoid the worst impacts of climate change, the vast majority of known fossil fuel reserves must remain undeveloped.⁴⁹ Let alone the oil and gas in the Atlantic and Arctic oceans. Illustrating this point, a study in the premier scientific journal, *Nature*, specifically found developing Arctic Ocean oil and gas incompatible with efforts to stay within our global carbon budget⁵⁰.

Further, oil industry claims that Arctic oil may be needed 30 years from now assume continued oil-dependence scenarios that the International Energy Agency says will result in an average global temperature increase of at least 6 degrees Celsius—three times what science states the planet can sustain.⁵¹ To avoid increased rates of asthma attacks and respiratory disease, degraded air quality, and more frequent, costly, and deadly extreme weather events we must protect--not drill--the Arctic and Atlantic coasts.

Risk Devastating Oil Spills: The risk of major oil spills is high and the impacts severe. In the Arctic, the Department of Interior's own assessment finds a 75 percent chance of a major oil spill should drilling under existing leases in the Chukchi Sea proceed⁵². And in the likely event of a spill, none of the three primary oil spill response methods - mechanical containment and recovery, *in situ* burning, or dispersants - have been proven effective in harsh Arctic conditions. In fact, in even far less challenging environments, less than 10 percent of the spilled oil has actually been recovered.

Almost no infrastructure exists in the Arctic to support emergency response. There is no backup in the American Arctic when systems fail. The nearest source of additional clean-up equipment is 2,000 miles away in Seattle. There are no major ports or landing strips near the lease sites, and bringing rescue crews and equipment to the Arctic would be a staggering challenge. If you knew there was a 75 percent chance risk that someday you'd have a devastating accident

that neither you nor first responders were equipped to deal with, wouldn't you start looking hard at alternatives?

A major oil spill off our Atlantic coast would also be devastating. The BP Gulf oil disaster impacted over 1,000 miles of coastline – an equivalent disaster in the Atlantic could coat beaches stretching from Savannah to Boston. A spill off Virginia's coast could threaten the Jersey Shore. From Miami Beach to Hilton Head to the Chesapeake Bay, many of America's most beloved beaches would all be vulnerable to the catastrophic effects of an oil spill.

Reflect No Revisions of Safety Laws: The BP Deepwater Horizon disaster demonstrated that spill impacts are both environmentally - and economically - devastating. The oil spill contaminated more than 1,100 miles of coastline, at least 1,200 square miles of the deep ocean floor, and 68,000 square miles of surface water. The Gulf of Mexico commercial fishing industry was estimated to have lost \$247 million as a result of post spill fishery closures. One study projects that the overall impact of lost or degraded commercial, recreational, and mariculture fisheries in the Gulf could be \$8.7 billion by 2020, with a potential loss of 22,000 jobs over the same timeframe. Following that spill, President Obama established the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling. The Commission found that "the central lesson to be drawn from the catastrophe is that no less than an overhauling of both current industry practices and government oversight is now required."⁵³ Yet there have been no major revisions to the law to increase safety since that disaster, throwing into severe doubt any claim that expanded drilling is "safe".

Threaten Coastal Communities, Economies, and Wildlife: Drilling off the Atlantic coast has been off the table since 1983. Tourism and recreation are major contributors to the Atlantic coast's economy and they rely on healthy oceans. In 2012, those two sectors alone generated \$40 billion in the Mid- and South-Atlantic regions⁵⁴. Communities in these regions should not have to risk their way of life - or their economic health - due to reckless offshore drilling.

The Atlantic region is home to extensive and diverse fish and shellfish populations. In 2012, the Mid-Atlantic and South Atlantic seafood industry supported over 244,000 jobs; fisherman landed over 850 million pounds of fish and earned more than \$650 million for their catch. Ocean tourism and recreational industries supported 76 percent of all Mid-Atlantic and 84 percent of all Southeast Atlantic ocean sector jobs in 2012. These regions host important and sensitive marine species, including endangered whales. Opening the Mid and South Atlantic would sacrifice economies, coastlines and fragile marine and coastal environments.

While the Arctic is sparsely inhabited, a major spill there would be no less disastrous. Some of the most productive marine ecosystems on Earth are found in Alaska's Arctic waters.⁵⁵ They are also among the most pristine.⁵⁶ The waters of the Beaufort and Chukchi Seas are home to one-fifth of the world's polar bears, as well as ice seals, millions of migratory birds from virtually all continents, bowhead and gray whales, belugas, walrus, and much other marine life.^{57, 58} Among the many species they support are numerous threatened or endangered species and both seas have numerous areas of heightened ecological significance.^{59, 60} An oil spill in the Arctic Ocean would decimate this rich ecosystem and the unique way of life it supports. Impacts would savage the Arctic's vulnerable food chain. Seals and seabirds would be coated in oil. Blowholes of

endangered whales would clog. And pristine beaches - potentially including the Arctic National Wildlife Refuge - would be fouled. Poisoning the seabed on which all marine life in the Arctic depends - particularly if dispersants that spread a toxic oil-dispersant cocktail throughout the water column are used - would threaten one of the most unique, pristine places on the entire planet. Cascading consequences would extend to human residents as well because “biodiversity and the natural environment remain integral to well-being of Arctic peoples, providing not only food but the everyday context and basis for social identity, cultural survival and spiritual life.”⁶¹ These foods also lower the risk of metabolic diseases in Alaska Natives.⁶²

Embrace the Folly of Revenue Sharing: The proposed offshore drilling legislation under consideration today creates perverse financial incentives that exacerbate the above risks by directly incentivizing increased drilling, in some cases even sending funds directly to states or coastal areas that pursue drilling closer to shore. Moreover, these schemes are often justified by arguing the funds are needed to mitigate the impacts of drilling, which some proponents argue don't exist in the same breath. We should not be incentivizing coastal states and local governments to allow increased and more environmentally damaging drilling. Encouraging additional risky drilling invites disasters for our beaches, coastal economies and marine life. Offshore ocean areas beyond state waters are owned by all of the people of the United States, which was confirmed by the Supreme Court in 1947.⁶³ As we saw with the BP oil disaster, offshore drilling can create extensive environmental and economic devastation that requires quick response. The federal government was responsible for addressing the BP disaster precisely because it occurred in federal waters. Revenue collected from federal waters funds federal departments and agencies that deal with such disasters when they occur. It would have been impossible for Louisiana to deal with the BP spill on its own - even if it had received additional funds from drilling. Incentivizing more drilling while simultaneously diluting the ability to respond to the inevitable spills is doubly irresponsible. The proposed revenue sharing schemes encourage drilling with less of a safety net, provide fewer resources from the federal government in the event of a disaster, and provide sweeteners that keep states and nation hooked on dirty energy.

Unnecessary for Energy Security: As the above sections summarized, the clean energy economy is booming. Even if Arctic and Atlantic offshore oil and gas were made immediately available, there is no current demand due to a global oil glut. In the midterm, its development is countermanded by the explosive growth in clean energy and effective fuel efficiency and clean vehicle policies. And over the long term, the only possible justification for exposing these unique ocean environments and vibrant coastal economies to the risk of devastating oil spills is to assume a total failure in addressing climate change. A responsible coastal plan would preserve the Arctic as our last pristine ocean and focus any Atlantic development on unlocking the vast potential of offshore wind, providing sustainable, clean energy that does not threaten the integrity of existing business or the health of our communities.

Overlooks Widespread Opposition: Across the country the public has expressed its opposition to increased offshore drilling, preferring clean solutions over more dangerous, dirty, and unnecessary drilling. According to a running tally maintained by Oceana, more than 500 national, state and local elected officials have taken a public stance against offshore oil exploration and/or development, including more than 50 coastal towns, cities and counties that

passed resolutions opposing or voicing concern.⁶⁴ The environmental community, which collectively represents millions of members, provided more than 550,000 comments via email and petition drives. These comments were delivered electronically and in person on March 30th to a BOEM representative. Finally, a 5-state poll (including FL and VA) conducted by American Viewpoint and Hart Research Associates found that the public prefers federal investment in clean energy over dirty energy proposals like offshore drilling by an almost 2-1 margin.⁶⁵

Conclusion

There is an abundant supply of domestic clean energy that is already improving our nation's health and economy. Clean energy's remarkable growth in just the last decade has far surpassed what many estimated was achievable decades from now. Smart policies like federal fuel efficiency standards, tax incentives, and state-level Renewable Electricity Standards were integral to this explosive innovation and deployment. There remains an enormous potential to do much more. The choice before this committee, the Congress, and the nation is whether to put in place the policies that will further unlock this bountiful supply and harvest the economic and health benefits that flow from it, or remain tethered to the dirty fossil fuels of the past. For the sake of our climate, economy, and long-term security, the choice is obvious.

¹ http://whatweknow.aas.org/wp-content/uploads/2014/07/whatweknow_website.pdf

² Ibid.

³ <http://energy.gov/eere/buildings/appliance-and-equipment-standards-program>

⁴ <http://www2.epa.gov/carbon-pollution-standards/fact-sheet-clean-power-plan> and U.S. Submission to the UNFCCC, Intended Nationally Determined Contribution, available at:

<http://www4.unfccc.int/submissions/INDC/Published%20Documents/United%20States%20of%20America/1/U.S.%20Cover%20Note%20INDC%20and%20Accompanying%20Information.pdf>. Statement of the Group of Eight Leaders, Responsible Leadership for a Sustainable Future, available at:

http://www.g8italia2009.it/static/G8_Allegato/G8_Declaration_08_07_09_final.0.pdf

⁵ all data on U.S. energy production and use are taken from U.S. Department of Energy, Energy Information Administration, Monthly Energy Review (August 2014).

⁶ [http://www.eia.gov/forecasts/aeo/pdf/0383\(2015\).pdf](http://www.eia.gov/forecasts/aeo/pdf/0383(2015).pdf)

⁷ <http://energy.gov/eere/buildings/appliance-and-equipment-standards-program>

⁸ http://www.nap.edu/openbook.php?record_id=12621&page=95

⁹ Energy efficiency: a key tool for boosting economic and social development, International Energy Agency, available at

<http://www.iea.org/topics/energyefficiency/energyefficiencyiea/multiplebenefitsofenergyefficiency/>

¹⁰ GTM Research and Solar Energy Industries Association, *U.S. Solar Market Insight Report: 2014 Year in Review* (March, 2015), executive summary available at <http://www.seia.org/research-resources/solar-market-insight-report-2014-q4>.

¹¹ U.S. Energy Information Administration, *Total Energy Supply, Disposition, and Price Summary, Reference Case*, available at <http://www.eia.gov/oiaf/aeo/tablebrowser/>. (Accessed April 24, 2015)

¹² Lazard. *Levelized Cost of Energy - v. 8.0* (2014) available at <http://www.lazard.com/PDF/Levelized%20Cost%20of%20Energy%20Version%2008.0.pdf>

¹³ Deutsche Bank, "2014 Outlook: Let the Second Gold Rush Begin," January 6, 2014, [www.deutschebank.nl/nl/docs/Solar - 2014 Outlook Let the Second Gold Rush Begin.pdf](http://www.deutschebank.nl/nl/docs/Solar_-_2014_Outlook_Let_the_Second_Gold_Rush_Begin.pdf).

¹⁴ NREL, "U.S. Renewable Energy Technical Potentials: A GIS-based Analysis", available at: http://www.nrel.gov/gis/re_potential.html

¹⁵ AWEA, "Annual Market Report 2014," <http://www.awea.org/Resources/Content.aspx?ItemNumber=5059>

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