

Instead of following normal procedure, the White House has nominated someone not fit to serve for a lifetime on the circuit court, but nevertheless will be confirmed on a party-line vote.

Mr. Kobes has demonstrated a hostility toward women's reproductive rights. His anti-choice activism is on par with so many other Trump nominees who are relatively young, as he is, and profoundly inexperienced.

In 2005, Mr. Kobes represented, as a volunteer, so-called crisis pregnancy centers, which were seeking to uphold the South Dakota law requiring doctors to inform women seeking abortions that "the pregnant woman has an existing relationship with that unborn human being and that the relationship enjoys protection under the United States Constitution and under the laws of South Dakota." That is not the state of the law, by the way.

Mr. Farr and Mr. Kobes are two of the worst of President Trump's judicial nominees, and that is saying a lot. They are two more examples of President Trump's relentless pursuit to pack the Federal courts with ideologues who will rule in favor of conservative causes. Clearly, Donald Trump does not believe in the independent judiciary envisioned by the Framers of our Constitution and respected by every President until now.

We see in his single-minded efforts to pack the courts that he is nominating judges who he believes will be his political allies. He tells us as much. He believes the judges he appoints are "Trump judges" and that they will be loyal to him, protect him and his policies when the time comes.

Chief Justice John Roberts could not have been clearer in his response last week to Donald Trump's criticism of judges who don't rule his way. The Chief Justice told the AP:

We do not have Obama judges or Trump judges, Bush judges or Clinton judges. What we have is an extraordinary group of dedicated judges doing their very best to do equal right to those appearing before them. That independent judiciary is something we should all be thankful for.

The independence of the judiciary is not something Donald Trump acknowledges, values, or even believes in. What he wants are Trump judges who will rule in favor of his policies and decisions and who will satisfy his ideologically conservative base. It is no wonder that Chief Justice Roberts felt it necessary to take the extraordinary step of reminding the President and the country that the judiciary must be independent.

I urge my colleagues to vote against the nomination of Mr. Farr and Mr. Kobes.

I yield the floor.

The PRESIDING OFFICER. The Senator from Rhode Island.

Mr. WHITEHOUSE. Mr. President, I ask unanimous consent to speak for up to 20 minutes as in morning business; further, that at the conclusion of my remarks, the Senator from Massachu-

setts, Mr. MARKEY, be recognized; that we have permission to engage in a colloquy; and that at the conclusion of Senator MARKEY's remarks, Senator SHAHEEN of New Hampshire be recognized.

The PRESIDING OFFICER. Without objection, it is so ordered.

CLIMATE CHANGE

Mr. WHITEHOUSE. Mr. President, a persistent argument of my climate talks is how corrupt climate denial is. The premise of that argument is that the fossil fuel industry denial apparatus is wrong about climate change and knows it is wrong. That is my case. The fossil fuel industry denial apparatus knows it is wrong about climate change.

Well, it is a beautiful world, and every once in a while, along comes something that proves my case. Last week, on the afternoon of Black Friday, the Trump administration released its National Climate Assessment by 13 Federal agencies describing the monumental damage the United States is facing from climate change. In more than 1,000 pages, the report contradicted nearly every fake assertion Trump and his fossil fuel flunky Cabinet have made about climate change.

Trump's pro-polluter policies are predicated on the lies and nonsense of this fossil fuel industry denial apparatus, and this report is devastating to those policies and to those lies.

So how did the fossil fuel apparatus respond? What did they do to rebut the National Climate Assessment? They did nothing. They did nothing. There was all that big talk from Scott Pruitt about how they were going to "red team" climate science. Well here comes the climate science. Where is your red team? Nothing. Instead of engaging with this devastating report by the U.S. Government's leading scientists, they tried to bury it, timing its release for a day of the year when it would be least likely to get public attention.

Consider for a moment the environment in which they backed down from this challenge—no red team, no nothing. They just whimpered and ran away and tried to bury the report on Black Friday. At a time when their industry populates the Trump administration, at a time when the President is in their pocket, at a time when both Houses of Congress are under fossil fuel industry control, their phony climate denial front groups wield more influence than ever. This should have been their moment.

The tell here is that even in this environment, the fossil fuel industry and its bevy of stooges in the Trump administration got this report and did nothing. Why? Why nothing? There is only one answer. Because they know they are wrong. They know the real science is right. They know their science denial campaign is phony, so they backed down. They folded like a cardboard suitcase in a rainstorm.

That, my friends, is an admission. It is an admission by inaction. It is an ad-

mission that even the fossil fuel industry knows the climate science is irrefutable.

Interestingly, "irrefutable" is just what President Trump and his family said about climate science in this full-page advertisement they signed in the New York Times in 2009, saying that science of climate was "irrefutable" and that there will be "catastrophic and irreversible" consequences of climate change.

The new National Climate Assessment plus the recent Intergovernmental Panel on Climate Change report are both very clear. The irrefutable science that these two reports disclose couldn't be more clear: Damage from climate change is already occurring; there is no credible natural explanation for it; human activity is the dominant cause; future damage from further warming will be worse than we previously thought; economies will suffer; and we are almost out of time to prevent the worst consequences of climate change.

The Bank of England report on this—they are the biggest financial regulator in the UK, and they said: The financial risks are far-reaching in their breadth and magnitude, have uncertain and extended time horizons, are foreseeable, but these risk factors will be minimized if there is an orderly transition to a carbon economy, but the window for an orderly transition is finite and closing. We are almost out of time.

These two reports are tough stuff. As the Trump administration summary states, the "Earth's climate is now changing faster than at any point in the history of modern civilization, primarily as a result of human activities. The impacts of global climate change are already being felt in the United States and are projected to intensify in the future," which makes sense, since in the history of human civilization, the Earth has never seen atmospheric CO₂ concentrations like we have today.

Many scientists have said warming of around 3 degrees centigrade is now likely. What does that mean? Heating the planet well beyond 2 degrees centigrade would create a "totally different world," says Michael Oppenheimer, a climate scientist at Princeton University. He says:

It would be indescribable, it would turn the world upside down in terms of its climate. There would be nothing like it in the history of civilization.

Here is what the Trump climate assessment chronicles: From our Ocean State, we are concerned about sea levels, ocean acidification, and warming. We note sea levels are rising, as oceans warm and upland ice melts. If fossil fuels are not constrained, the reports says, "many coastal communities will be transformed by the latter part of this century." For my coastal State, that is a pretty ominous warning. Along coasts, fisheries, tourism, human health, even public safety are being "transformed, degraded or lost due in part to climate change impacts,

particularly sea level rise and higher numbers of extreme weather events.”

You get the sea level coming up, and that extreme weather event—which is stronger to begin with now—has a lot more ocean to throw at our shores.

Out West, “more frequent and larger wildfires, combined with increasing development at the wildland-urban interface portend increasing risks to property and human life,” the report says. By the way, from 2000 to 2016, wildfires have burned at least 3.7 million acres of the United States in every single year except for 3. From 2000 to 2016, more than 3.7 million acres burned in all years but 3. California still smolders as I speak.

More than 100 million people in the United States live with poor air quality, and climate change will “worsen existing air pollution levels.” Increased wildfire smoke heightens respiratory and cardiovascular problems. With higher temperatures from global warming, asthma and hay fever rise.

Groundwater supplies have declined over the last century, and the decrease is accelerating. “Significant changes in water quantity and quality are evident across the country,” the report finds.

Midwest farmers take a big hit: warmer, wetter, and more humid conditions from climate change; greater incidence of crop disease and more pests; worsened conditions for stored grain. During the growing season, the Midwest will see temperatures climb more than any other region of the United States, the report says. Crop yields will suffer—a warning that is echoed by grain giants like Cargill.

To sum it all up, the report says climate change will “disrupt many areas of life,” hurting the U.S. economy, affecting trade, exacerbating overseas conflicts for our military. Costs will be high: “With continued growth in emissions at historic rates, annual losses in some economic sectors are projected to reach hundreds of billions of dollars by the end of the century—more than the current gross domestic product of many U.S. States.”

Danger warnings already flash in some economic sectors. Freddie Mac has warned of a coastal property value crash, saying: “The economic losses and social disruption may happen gradually, but they are likely to be greater in total than those experienced in the housing crisis and Great Recession.” From a coastal State, that is an ominous warning.

The insurance industry agrees. Trade publication Risk and Insurance has warned: “Continually rising seas will damage coastal residential and commercial property values to the point that property owners will flee those markets in droves, thus precipitating a mortgage value collapse that could equal or exceed the mortgage crisis that rocked the global economy in 2008.” By the way, the leading edge of this may already be upon us as coastal property values are beginning to lag inland property values, as reported by the Wall Street Journal.

Separate from the coastal property values threat is another warning about a carbon bubble in fossil fuel markets. Fossil fuel reserves, now claimed as assets, that are not developable in a 2-degrees-Centigrade world become what they call stranded assets. A recent economic publication estimated that collapse of the “carbon bubble” would wipe out “around 82 percent of global coal reserves, 49 percent of global gas reserves, and 33 percent of global oil reserves.” A separate economic review warns that \$12 trillion of fossil fuel industry financial value “could vanish off their balance sheets globally in the form of stranded assets.” Twelve trillion dollars is over 15 percent of global GDP, which is why the Bank of England—which I quoted earlier as a financial regulator—is warning of this carbon asset bubble as a systemic economic risk. That may be the blandest set of words in the English language that convey the worst threat. If you were to graph “blandness of language” and “seriousness of threat,” you would probably come up with systemic economic risk. It basically means economic meltdown. Well, that is what we are looking at.

This level of collapse could cascade beyond the fossil fuel companies. It is not just a question of their shareholders getting wiped out. It is such a crash that it cascades out into the global economy—a crash like that, unfortunately, hits the United States particularly hard because lower cost producers can hold on and unload fossil fuel reserves into the collapsing market at fire sale prices. When they do, the economists warn, “regions with higher marginal costs”—like the United States—“lose almost their entire oil and gas industry.”

The solution is to decarbonize, to invest in more renewables, to broaden our energy portfolio away from this asset collapse risk. One paper concludes that “the United States is worse off if it continues to promote fossil fuel production and consumption.” Another paper concludes—this is the good news:

If climate policies are implemented early on and in a stable and credible framework, market participants are able to smoothly anticipate the effects. In this case there would not be any large shock in asset prices and there would be no systemic risk.

So how do we get to eliminating this hazard of no systemic risk? How do we get to no systemic risk? We do what works for us anyway: move to renewables. As this graph shows, we have to make a big move to avoid this hazard. A carbon price—which is the remedy the fossil fuel industry pretends to support, while sending its political forces out to oppose exactly the laws it pretends to support—would allow this big move to happen, all while generating revenues that could be cycled back to States and citizens and help the hardest hit areas of transition.

The smart move we need to take to make this happen does not have to be painful. We avoid a lot of pain if we

make the move, but that doesn’t mean the move itself has to be painful. Nobel Prize winner Joseph Stiglitz says it is a win economically. He has testified:

Retrofitting the global economy for climate change would help to restore aggregate demand and growth. Climate policies, if well designed and implemented, are consistent with growth, development, and poverty reduction. The transition to a low-carbon economy is potentially a powerful, attractive, and sustainable growth story, marked by higher resilience, more innovation, more livable cities, robust agriculture, and stronger ecosystems.

We could do it the hard way—do nothing; get hit with those dire economic consequences because the status quo is not safe.

Fortune magazine summed up the Trump administration’s climate report quite beautifully, so I will quote them at some length: “The report catalogs the observed damage and accelerating financial losses projected from a climate now unmoored from a 12,000-year period of relative stability.”

What a phrase that is. The Earth’s climate, which we inhabit, is unmoored from a 12,000-year period of relative stability.

It goes on:

The result is that much of what humans have built, and many of the things they are building now, are unsuited to the world as it exists. And as time goes on, the added cost of living in that world could total hundreds of billions of dollars—annually.

Which way we now go depends on the Congress of the United States—on whether Congress can put the interests of our people ahead of the interests of the fossil fuel industry.

The record is not good. I will concede that. Since the Citizens United decision, the politics of climate change have turned into a tale of industry capture and control. So far, despite the fossil fuel industry’s obvious conflict of interest, could there be a more obvious conflict of interest, indeed? Despite their provable pattern of deception and despite clear warnings from, well, virtually everywhere now, the Republican Party has proven itself incapable of telling the fossil fuel industry: No, we tried our best for you. We held in for you as long as we could, and we did everything we could think of, but we are not going to wreck our economy, our climate, our oceans, our country for you.

So it doesn’t look good, but the climate report does say we still have time if we act fast.

I ask unanimous consent that an article by Max Boot, titled, “I was wrong on climate change. Why can’t other conservatives admit it, too?” be printed in the RECORD at the conclusion of my remarks.

It concludes: Why haven’t other Conservatives owned up to this danger?

They are captives, first and foremost, of the fossil fuel industry. . . . It is a tragedy for the entire planet that the United States’ governing party is impervious to science and reason.

I will close with a reference to “The Gathering Storm,” which is Winston

Churchill's legendary book about a previous failure to heed warnings. Churchill quoted a poem of a train bound for destruction, rushing through the night, with the engineer asleep at the controls as disaster looms:

Who is in charge of the clattering train?
The axles creak, and the couplings strain.
. . . the pace is hot, and the points are near,

[but] Sleep hath deadened the driver's ear;
And signals flash through the night in vain.

Death is in charge of the clattering train!

I contend that we are now that sleeping driver, that the signals are flashing at us, so far, in vain, and that it is decidedly time to wake up.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

[From The Washington Post]

I WAS WRONG ON CLIMATE CHANGE. WHY CAN'T OTHER CONSERVATIVES ADMIT IT, TOO?
(By Max Boot)

I admit it. I used to be a climate-change skeptic. I was one of those conservatives who thought that the science was inconclusive, that fears of global warming were as overblown as fears of a new ice age in the 1970s, that climate change was natural and cyclical, and that there was no need to incur any economic costs to deal with this speculative threat. I no longer think any of that, because the scientific consensus is so clear and convincing.

The Fourth National Climate Assessment, released Friday by the U.S. government, puts it starkly: "Observations collected around the world provide significant, clear, and compelling evidence that global average temperature is much higher, and is rising more rapidly, than anything modern civilization has experienced, with widespread and growing impacts." The report notes that "annual average temperatures have increased by 1.8 °F across the contiguous United States since the beginning of the 20th century" and that "annual median sea level along the U.S. coast . . . has increased by about 9 inches since the early 20th century as oceans have warmed and land ice has melted."

The report attributes these changes to man-made greenhouse gases and warns: "High temperature extremes, heavy precipitation events, high tide flooding events along the U.S. coastline, ocean acidification and warming, and forest fires in the western United States and Alaska are all projected to continue to increase, while land and sea ice cover, snowpack, and surface soil moisture are expected to continue to decline in the coming decades."

The U.S. government warnings echo the United Nations' Intergovernmental Panel on Climate Change. In October, it released a report that represented the work of 91 scientists from 60 countries. It describes, in the words of the New York Times, "a world of worsening food shortages and wildfires, and a mass die-off of coral reefs as soon as 2040."

The wildfires are already here. The Camp Fire blaze this month is the most destructive in California history, charring 153,000 acres, destroying nearly 19,000 structures, and killing at least 85 people. The second-most destructive fire in California history was the one last year in Napa and Sonoma counties.

The Yale School of Forestry and Environmental Studies notes that climate change has contributed to these conflagrations by shortening the rainy season, drying out vegetation and whipping up Santa Ana winds. Massive hurricanes are increasing

along with wildfires—and they too are influenced by climate change.

It is time to sound the planetary alarm. This is likely to be the fourth-hottest year on record. The record-holder is 2016, followed by 2015 and 2017. A climate change website notes that "the five warmest years in the global record have all come in the 2010s" and "the 10 warmest years on record have all come since 1998."

Imagine if these figures reflected a rise in terrorism—or illegal immigration. Republicans would be freaking out. Yet they are oddly blasé about this climate code red. President Trump, whose minions buried the climate-change report on the day after Thanksgiving, told Axios: "Is there climate change? Yeah. Will it go back like this, I mean will it change back? Probably." And, amid a recent cold snap, he tweeted: "Brutal and Extended Cold Blast could shatter ALL RECORDS—Whatever happened to Global Warming?"

By this point, no one should be surprised that the president can't tell the difference between short-term weather fluctuations and long-term climate trends. At least he didn't repeat his crazy suggestion that climate change is a Chinese hoax. Yet his denialism is echoed by other Republicans who should know better. Sen. Joni Ernst (R-Iowa) told CNN on Sunday: "Our climate always changes and we see those ebb and flows through time. . . . We need to always consider the impact to American industry and jobs."

We do need to consider the impact on U.S. jobs—but that's an argument for action rather than, as Ernst suggests, inaction. The National Climate Assessment warns that global warming could cause a 10 percent decline in gross domestic product and that the "potential for losses in some sectors could reach hundreds of billions of dollars per year by the end of this century." Iowa and other farm states will be particularly hard hit as crops wilt and livestock die.

Compared with the crushing costs of climate change, the action needed to curb greenhouse-gas emissions is modest and manageable—if we act now. Jerry Taylor, president of the libertarian Niskanen Center, estimates that a carbon tax would increase average electricity rates from 17 cents to 18 cents per kilowatt-hour. The average household, he writes, would see spending on energy rise "only about \$35 per month." That's not nothing—but it's better than allowing climate change to continue unabated.

I've owned up to the danger. Why haven't other conservatives? They are captives, first and foremost, of the fossil fuel industry, which outspent green groups 10 to 1 in lobbying on climate change from 2000 to 2016. But they are also captives of their own rigid ideology. It is a tragedy for the entire planet that the United States' governing party is impervious to science and reason.

Mr. WHITEHOUSE. I note that my distinguished colleague from Massachusetts has arrived. We have an order in place in which the Senator from Massachusetts is to be recognized at the conclusion of my remarks and that the distinguished Senator from New Hampshire, Mrs. SHAHEEN, is to be recognized at the conclusion of Senator MARKEY's remarks.

With that, I yield the floor to the co-author of the Waxman-Markey legislation, the person who had done the most successful work to try to solve this climate problem at a time when the situation was slightly less desperate.

The PRESIDING OFFICER (Mr. ROUNDS). The Senator from Massachusetts.

Mr. MARKEY. Mr. President, I thank Senator WHITEHOUSE, who has been out here on the floor, week after week after week, sounding the warning, like Churchill, that there is danger ahead, that there is a gathering storm. Yet it is not metaphorical as it was for Churchill. It is real. There is a gathering storm. What Senator WHITEHOUSE has been doing, year after year after year, is coming out on the floor to document this gathering storm and to warn that we have to take action.

I thank Senator WHITEHOUSE for his incredible, historic leadership because, between the U.N. and the U.S. scientists, all of the evidence is now there. My belief is, the failure that he talked about to heed the dire warnings on climate change is much more now than that figurative gathering storm; it is literally gathering much fiercer energy in super-charged storms that will bear down on our shores as a result of our warming crisis.

Scientists have shot off the warning flare. In the last 2 months, we have received two of the most alarming reports to date on the threat that climate change poses to our country, our economy, our security, and to our planet. It questions the morality of our country because ultimately that is what it is. It is a moral issue of whether we are going to leave this planet better than we found it.

Are we going to be the stewards of this planet and pass it on to future generations better than we found it? Right now, the gathering evidence from the United Nations and from our own U.S. Government's scientists is that we are not.

The Federal Government's National Climate Assessment that was released last week as well as the recent United Nations Intergovernmental Panel on Climate Change report are clarion calls. The science in these reports is clear. If we fail to act now, storms will grow more frequent and more powerful. Extreme weather events, like Hurricane Michael, which grew more quickly this October than any storm we have seen, will continue to cost the United States hundreds of billions of dollars in damage. The National Climate Assessment—the congressionally mandated report issued by 13 Federal agencies—underscores the specific impacts we are facing now and will continue to face in the future.

In our home region of the Northeast, which Senator SHAHEEN and Senator WHITEHOUSE and I have the privilege to represent, the impacts are going to be truly devastating. The Northeast region will surpass 2 degrees centigrade of warming beyond preindustrial levels by as soon as 2035—not 2050, not 2100 but by the year 2035—if emissions continue at their current pace. That would be the quickest warming in the contiguous United States and would occur as much as two decades before global average temperatures reach a similar point.

The real-world effects of this warming trajectory are shocking. Sea levels

in the Northeast could rise upward of 11 feet by the end of the century. Almost one-third of the sandy shorelines along the Atlantic coast could erode inland at rates of at least 3.3 feet per year. We will feel the impact on our economy, which is so strongly tied to fishing, to our beaches and tourism, and to our natural environmental resources.

In 2012, a 2-degree centigrade water temperature increase boosted lobster landings to high summer levels a month earlier than usual. The result was an early supply glut and a collapse in prices to the lowest level in almost two decades. This type of negative impact on our fishing industries will become more commonplace as the climate continues to warm and our marine life is forced to move to new areas.

Outdoor recreation in the Northeast, which will suffer the consequences of climate change, contributes nearly \$150 billion in consumer spending and supports more than 1 million jobs across our region. Climate impacts, like beach erosion, are an imminent threat to this economic powerhouse. Yet perhaps most devastating will be the impacts on the public's health. According to estimates, up to 10,000 people in Massachusetts could, by the end of the century, visit the emergency room annually due to the rising heat.

Despite these generational warnings from both the United Nations and the scientists in our own country, President Trump has continued to dismiss the impending disaster from our dangerously warming planet.

How did President Trump respond when asked about the conclusion that climate change could devastate the American economy?

His answer: "I don't believe it."

Well, it doesn't matter, Mr. President, if you don't believe it because the world's leading scientists have shown it to be true, and 70 percent of Americans believe it. They believe global warming is happening.

President Trump may deny climate science, but there is no denying the consequences of climate change. Yet the Trump administration will not stop at climate denial. It has a much more insidious scheme to block action on climate—deny, delay, and defund. The list of its climate sins is long, with each action more egregious than the last one.

First came the appointment of an all-star Big Oil Cabinet—Scott Pruitt at the EPA, former Exxon CEO Rex Tillerson at the State Department, and former Texas Governor Rick Perry at the Department of Energy.

Since Mr. Pruitt's ouster after numerous ethics violations, the Trump administration has nominated king coal's favorite son, Andrew Wheeler, to head the EPA. Mr. Wheeler is a former coal industry lobbyist and has downplayed the recent science on the devastating impacts to come from climate change. After these reports came out, he said: "I have some questions

about the assumptions." These are assumptions that have been vetted by 300 leading scientists in the United States and across the planet.

The only question, I believe, is why someone like Andrew Wheeler was put in charge at the EPA. A coal lobbyist is now the head of the EPA. The EPA just turned into every polluter's ally. That is the net result of what Donald Trump has done at the Agency.

The Trump administration is also moving to freeze fuel economy standards rather than pushing for the historic and technically achievable goal of 54.5 miles per gallon by the year 2025. I am the author of the 2007 law that required the first fuel economy increase in 32 years. Increasing our fuel economy standard to 54.5 miles per gallon is the single largest action that any nation has ever taken on climate—that one law. Yet the Trump administration is trying to make a U-turn on those standards that are saving customers money at the pump and reducing the emissions we pump into the air.

The Trump administration is also trying to repeal President Obama's Clean Power Plan. Turning our back on this roadmap for reducing pollution in the electricity sector will result in at least 12 times more carbon dioxide emissions over the next decade.

Why is the Trump administration taking us backward on climate in the face of these dire warnings? Just follow the money.

Yesterday, during the weekly Senate Climate Change Task Force meeting, Senator WHITEHOUSE, Senator CARDIN, other colleagues, and I heard about the complex funding behind the climate countermovement, which the fossil fuel industry has funded and used to mislead the American people and to hold this administration hostage.

The "web of climate denial" is nothing more than dirty energy corporations and their shady front groups spending over a quarter of a billion dollars each year to deceive Americans about climate change. These corporations distort scientific consensus and turn it into an artificial political debate. They produce sham scientific documents, such as "Why Scientists Disagree About Global Warming," a report published by the Heartland Institute and sent to over 300,000 science teachers across the country. Funding 300,000 documents to be sent to every science teacher in America over science that is patently untrue—that is how much money the fossil fuel industry has. That is how high they try to send up a smoke screen around this issue to terrify teachers that they might be getting in trouble if they actually teach accurate science rather than the bogus documents that are sent to them by the fossil fuel industry, by their handmaidens, the Heartland Institute.

These fossil fuel phonies are on a mission to sow doubt, and their efforts seem to be bearing fruit in this administration. The web of denial messaging

strategy is highly sophisticated, disciplined, and politically controlled. Conferences, advertisements, websites, talking heads—this fossil fuel-funded farce may be a well-oiled machine and well funded, but they are wrong.

What do we do in the face of this web of denial? We need to look at the dollars and cents of it all—not the Big Oil and King Coal greenbacks but the success of green energy.

We are ushering our power sector into a clean energy future that is good for our environment and good for our economy. Coal cannot compete against wind, solar, and other renewables and natural gas in the free market. By the early 2020s, it could be cheaper to build new renewables from scratch than to continue operating old, dirty, coal-fired powerplants. That is not a conspiracy; that is called competition. Adam Smith is smiling in his grave, watching this market force begin to take over. And that is why this renewable revolution has become unstoppable. It is because the cost of renewables is plummeting. The cost of solar has fallen 50 to 60 percent over the last 5 to 6 years. In fact, wind and solar are generally cheaper than coal and nuclear energy right now. Coal is losing the war against wind and solar in the free market. That is what we call it—the free market. The War on Coal is a war that has been declared by the free market on coal, and it lost that war.

It is not just happening here in the United States; it is happening all around the globe. Mexico had a power auction at the end of November 2017 where the average price for solar was 1.9 cents per kilowatt hour. In 2017, solar in Saudi Arabia came in at 1.8 cents a kilowatt hour. In Dubai, it is 2.4 cents a kilowatt hour.

Half of all electricity installed around the world last year was renewable. Let me say that again. Half of all new electrical generation capacity in the world that was installed last year was renewable. So it is not just the United States; this is happening globally. The revolution is on.

Renewable energy deployment around the world has increased by 8 percent a year for 7 years in a row. Globally, more than \$330 billion was invested in clean energy last year. This is a global clean energy race. It is a global job-creation race. It is a global clean energy investment race. We are going to save all of creation by engaging in massive job creation, as we have all of these people who are hired in order to install these new technologies.

Right now, we have more than 50,000 megawatts of solar installed here in the United States. By 2020, we are projected to have more than 90,000 megawatts of solar. Solar is projected to add another 35,000 megawatts combined in 2021 and 2022. That means that by the end of 2022—4 years from now—we are going to have 250,000 megawatts of wind and solar in the United States.

If you think of a nuclear powerplant having 1,000 megawatts—the Seabrook

nuclear powerplant, the Diablo Canyon nuclear powerplant—think of 250 solar and wind facilities. That would be the equivalent of each one of those nuclear powerplants. That is what we are talking about.

By the year 2020, we will have 500,000 people employed in the wind and solar industry. Contrast that with the 50,000 people in the coal industry. By 2020, there will be 500,000 in wind and solar. Who are they? They are roofers. They are electricians. They are engineers. They are people who are working with their hands to install all of this equipment.

The President doesn't seem to really care about those blue-collar workers—upwards of 500,000 by the year 2020—but they are working hard, they are working for good wages, and they are also not running the risk of inhaling dangerous air that can be dangerous to their health. That is where we are. We have this incredible opportunity that is before us. It is already happening. The President is in denial.

The climate change fight is not just a question of job creation or economic imperative; it is about the moral imperative we have to act. We know climate change will get worse. We know lives will be lost. We cannot sit back and do nothing.

In 2015, Pope Francis came to Capitol Hill, and he delivered his environmental “Sermon on the Mount.” He told us that mankind created this problem of climate change and now mankind must fix it. With the world's poorest and most vulnerable suffering the worst consequences of climate change—extreme poverty, famine, disease, and displacement—we have a moral obligation to act.

I agree with Pope Francis that the United States and the Congress have an important role to play. We have a responsibility to help those less fortunate amongst us who will be harmed the most by rising seas, a warming planet, and more pollutions spewing into our air and water. That is why, right now and in the next Congress, I am standing here with my colleagues in this fight to ensure that we take climate action, for a price on carbon, for investment in clean energy, for resilient infrastructure, for 100 percent renewable energy in our country.

If there is a tax extenders bill, we will be fighting for clean energy tax credits and for extenders to help reduce our carbon emissions, including for offshore wind, for storage of electricity, and for clean vehicles. We will be standing side by side in that fight in 2019 on the Senate floor so that we continue this revolution.

If there is an infrastructure package, we will be fighting for aggressive renewable energy standards for utilities and the Federal Government and for coastal infrastructure needs.

As we work on appropriations, we will fight for more funding for energy efficiency and programs that protect the health of children and families from climate change.

The climate challenges facing our Nation and the entire world are indeed great, but the United States has the technological imperative to lead on solutions. We have the economic imperative to create opportunities and jobs for all people, and we have the moral imperative to protect our planet for future generations.

The rest the world will not listen to us and follow us if we do not, in fact, take these actions. You cannot preach temperance from a barstool. You cannot ask other countries to act when we ourselves are walking away from the responsibility. That is the moment we are in.

By January 1, 2019, this battle is going to be on. We have been given the warning, and we are heeding it. We are going to have mighty battles up here on the floor to make sure that future generations do not look back at us and wonder why we didn't heed all of those warnings that were given to us by the smartest scientists on the planet.

Now I would like to yield to my great colleague from the State of New Hampshire, a woman who has dedicated her career to the issues of clean energy up in her home State. I give you the great Senator from New Hampshire, JEANNE SHAHEEN.

The PRESIDING OFFICER (Mr. TILLIS). The Senator from New Hampshire.

CLIMATE CHANGE

Mrs. SHAHEEN. Thank you, Mr. President.

Thank you to my colleagues Senator MARKEY and Senator WHITEHOUSE. I am pleased to join both of you, who have done such a tremendous job in leading on this issue of trying to get everyone to wake up to the challenges that we face in climate change and what that is going to mean, not just for us in New England but for people across this country and across the globe.

Maybe the reason we feel so passionate about this is because we see it. We already see it happening in New England, as my colleagues detailed so well. We are on the cutting edge of these changes. You don't have to have lived in New Hampshire for very long to have seen what is happening as a result of climate change.

Last week, the U.S. Global Change Research Program released its fourth National Climate Assessment, and that details the profound effect climate change is having and is going to continue to have on the environment, on the economy, and on our public health. The report makes it abundantly clear that every American—every American—is affected by climate change and that the threat it poses will get worse unless we take action.

As I said, people in my State of New Hampshire have no doubt about the reality of climate change because we have been seeing it for years now. We have been experiencing it.

The steady increase in temperatures and the rise in annual precipitation are already affecting New Hampshire's

tourism and outdoor recreation economy. Each year, hundreds of thousands of sportsmen and wildlife watchers come to New Hampshire to enjoy our mountains, our lakes, and all of our beautiful natural resources. The outdoor economy—hunting, fishing, and outdoor recreation—contributes more than \$4 billion to New Hampshire's economy each year, but this is threatened now because rising temperatures are shortening our fall foliage season, and they are negatively affecting our snow- and ice-related winter recreation activities. That includes skiing, snowboarding, and snowmobiling. The New Hampshire ski industry employs 17,000 Granite Staters, and the New Hampshire Department of Environmental Services warns that these jobs are threatened by climate change.

New Hampshire's—in fact, all of New England's fall foliage is at risk. This is climate modeling by the Union of Concerned Scientists that shows that by the end of this century, New Hampshire's summers will feel like present-day summers in North Carolina, 700 miles to our south. While the Presiding Officer certainly understands that this works great for North Carolina, it changes dramatically what happens in New Hampshire.

What this shows is that—this red color, which are the maple and beech and birch trees—the maple trees in particular that produce our maple syrup—that make such a difference in our fall foliage—those are going to be gone by 2070—by the end of this century. All of this red that we are seeing throughout—from Pennsylvania, New York, across Northern New Hampshire, Vermont, and Maine—that will all be gone by the end of this century.

Again, this underscores that if we fail to act on climate change, we are going to see a steep loss of jobs and revenue. That is going to affect our outdoor recreation industry, and it is going to affect our traditional maple syrup industry.

New Hampshire produces more than 100,000 gallons of maple syrup annually. That makes it the third largest maple syrup producer in the United States. Maple syrup is entirely dependent on weather conditions. We are already seeing the impact these changes are having because as we get into spring, the temperatures are not getting cold enough at night to make the sap run in the maple trees, and during the day, we are not seeing the fluctuation in temperatures that allows maple syrup to be produced.

The National Climate Assessment notes that the changing climate is putting more and more stress on sugar maples. If we fail to act on climate change, this could destroy New Hampshire's multimillion-dollar maple syrup industry.

Now, it is also affecting our wildlife. It is affecting their habitats.

Probably one of the most iconic symbols of New Hampshire is our moose. Yet they are being threatened. Because