

the old bug hit Hazen again right then and right there. I am sure it didn't hurt when we actually won the majority that year, too.

So this policy mastermind and peerless budget expert came on board. Keep in mind that this is the guy who has only worked for two bosses in his whole life—Don Nickles and his own father. I got to be lucky No. 3.

Just a couple of things have happened since then: the early wins, like the 2015 highway bill, paving the way for reconciliation with a quick turnaround on the 2017 budget, getting tax reform off the white board and on to the President's desk, walking the narrow bipartisan balance beam of this past winter's funding agreement, and scoring a win for defense funding.

During each of these battles and many others, Hazen was right there at the center of the action. But I can't think of a single time when he himself sought to be the center of attention. As far as Hazen was concerned, his accomplishments were not Hazen Marshall's. They were the accomplishments of the leader's office, the conference, and the Senate. His victories were all team victories.

You couldn't succeed at a job like Hazen has without having thoroughly mastered the machinery of Congress, but you wouldn't be as happy doing it or make nearly so many friends along the way, unless you were in it for the right reasons.

This is a town where many folks will try to parlay any proximity to power into black-tie invitations and jump at any chance to self-promote—not Hazen. It probably doesn't hurt that he would probably rather be in the seats at Nat's Park, anyway, at his kids' performances, or on the river than at most high-society functions. But even more than that, selfishness is simply not in the man's character.

He is just rock solid, completely confident, and utterly reliable.

When I or any other Member or any staffer brought a question or problem to Hazen, we knew we would get a straight answer and we would get it fast, and it was guaranteed to be right. In every meeting, on every hard day, there was Hazen at the end of the table reassuring me and everyone else with a smile and his trademark encouraging words: "It's all good. It's all good."

He is one of the seniormost staffers in the Senate, still totally humble, still trying to buck everyone up and squeeze some smiles out of the work. And, frankly, with Hazen at the negotiating table, it almost always was "all good."

Of course, we will miss more than just Hazen's professional excellence. His humble, hard-working spirit isn't the only way he remains less of a beltway operator and more of that farm boy from Hennessy, OK. He may be one of the most savvy and well-connected guys in this city, but you had better believe that while colleagues would compare notes about the dif-

ferent trips they had taken over recess, Hazen would grin ear-to-ear while describing the latest Indy car race he had taken in.

To be fair, this is also a man of high culture. His affinity for music and theater includes the artistic pursuits of his children, Madeline and Max, and practically everything else under the sun as well.

So I don't suspect Hazen will have a hard time filling his days when the Senate reconvenes without him in January. Maybe he will dive even deeper into his CrossFit habit and convert to "two-a-days."

Certainly, his devotion to the Washington Nationals will ensure that he still faces many frustrating, stressful situations come springtime, but unlike many legislative challenges, he will be able to shoulder that burden with a cold beer in his hand.

I can't wait to see you in the stands, buddy, but I will miss you here.

Thanks so much for your service to me, to your colleagues, and, most of all, to your country.

The PRESIDING OFFICER (Mr. TILLIS). The Senator from Oregon.

#### CLIMATE CHANGE

Mr. MERKLEY. Mr. President, I am pleased to come to the floor with my colleagues from Massachusetts and Delaware to address the grave threat to America and to our planet from carbon pollution and climate chaos.

Over the last 2 weeks, representatives from nearly 200 countries have gathered together in Poland to continue the fight against climate chaos. They know that in each and every country we are seeing the impacts across this planet. There are more powerful hurricanes, like we have seen here in the United States, more destructive wildfires, like those we see in the Northwest of the United States, record breaking heat waves, air quality deterioration, loss of glaciers, loss of global ice, Arctic ice, insect-borne diseases that spread, and coral reefs dying. We are in trouble.

The scientists tell us we are now driving the sixth great extinction on planet Earth. It is being driven by human conduct, and a big factor in that is our burning of fossil fuels. We are, in fact, facing the greatest threat humankind has known on the planet. When you begin to damage your own home, you really are in a situation that needs to be immediately addressed.

It was back in 1959 that Edward Teller, a famed scientist, gave a speech to the 100th anniversary of the petroleum industry. He said: This energy that you have unleashed has done amazing things on the planet. It has given so much ability for humankind to magnify their efforts.

There was a lot of positive in that, but then the scientist, Edward Teller, went on to say: But there are a couple of challenges here, one of which is that

there are only so many fossil fuels in the ground and so, at some point, we will run out.

Of course, we know that there are a lot more fossil fuels in the ground now than we knew about in 1959.

He said that there is a second problem. When you burn this stuff, it creates an invisible, odorless gas. So it doesn't really sound like a challenge, but it traps heat. He said that because it traps heat, it will melt the poles, it will raise the oceans, and that will be a problem for humankind because humankind lives along the waterways.

He didn't go into more details than that, but it was one of the first direct commentaries—in 1959—about how the age of fossil fuels was going to produce significant problems for human kind.

Now, that speech he gave in 1959. That was 59 years ago, and what have we seen in the ensuing period? We have seen a roughly 100-point increase in carbon pollution on the planet. Or to take my lifetime, for example, in 1956, when I was born, we had about 312 parts per million of carbon.

I will just put this chart up. What we see here on the red is the rising line of carbon, going back to roughly when I was born. About in here, 1956 until now, we see that it is accelerating, but essentially there is a 100 parts-per-million increase. We started at about 312 when I was born. We are at about almost 412 now at the very peak. That is a 30-percent increase in my single lifetime, just a little flash of time in terms of the life of this planet—a 32-percent increase in carbon in the atmosphere, and it is having a significant impact.

The most obvious way to look at this impact is the global temperature year after year. So here we see the 10 hottest years on record. We see that only one of those years, 1998, was before the turn of the century. The rest of them have all been since the turn of the century. In fact, 17 of the 18 hottest years on record have occurred since the year 2000. Not only that, but look at the dramatic, dramatic change for 2014, and 2015, and 2016, and 2017—these last four years—and how much hotter the planet is than it was just a few years before. That should trouble all of us.

We have seen all of this when global leaders came together in 2015 in Paris—the largest gathering of world leaders in human history. They said we have to put limits on what we are doing. We all have to apply a strategy of each reducing our carbon dioxide production. I would like to say that they have been successful, but they have not. Total global carbon production is still going up and, because of that, we are still in deep trouble.

If we didn't have the information just from these bars of the hottest years on record, we could turn to a more complicated analysis, or several of them, that have come out just recently. Just back in October, we had the Intergovernmental Panel on Climate Change, bringing the work of scientists across

the planet together, and it painted a very stark picture of where we are right now and how this will only get a lot worse in the years ahead.

Or we can turn to the Trump administration's report that came out the day after Thanksgiving. On Thanksgiving, we give thanks for a lot of things. The day after, the administration informed us that we here on the planet have a big problem. What did they say in that report? Again, this is the Trump administration speaking: "Earth's climate is now changing faster than at any point in the history of modern civilization, primarily as a result of human activities."

Or we could turn to a third report that just came out called the "Global Carbon Project," and it says that after plateauing for several years, in 2018, global carbon emissions rose 2.7 percent. So we are back on an upward trajectory. We hit a recordbreaking 37 billion metric tons.

How did the United States do? Well, similarly, our carbon emissions here in the United States went up about 2.5 percent.

Over the last 2 years, the Trump administration has tried to do everything it can to make the situation worse. There were rules in place to cut methane leaks because methane is much more of a potent global warming gas than is carbon dioxide. So you never want to let it out of the pipe. But they worked to weaken those rules. They worked to weaken vehicle emission standards so we get more pollution for each mile, rather than less pollution.

I did find one thing of interest; that is, when Judith Garber, the Deputy Assistant Secretary of State for Oceans and International Environmental and Scientific Affairs, went over to Poland to give a report for the United States. She bragged about our carbon capture utilization and storage technology, and how one powerplant in Texas is capturing more than 90 percent of the emissions from its blue gas stream. So she was holding this up as a vision of what the United States is doing to contribute to the technology in the world and to help things be better.

What she didn't say is, the previous week, on December 6, the Trump administration issued a draft rule exempting new powerplants from carbon capture. That would have been a much more complete story about the record of this administration.

Of the 20 nations represented at the recent G20 summit in Argentina, only the United States refused to sign a nonbinding statement saying countries were committed to fighting climate chaos. All we had to do is say, yes, we are aware it is a problem, and we are committed to fighting it, but the United States turned that down. Over in Poland, we joined with Russia and Saudi Arabia and Kuwait—three oil-rich nations—to weaken a statement recognizing the international report about the challenges we face.

We need global leadership. Without our help, countries still came together

in Poland to write a rule book to try to go forward without the involvement and leadership of the United States. They worked very hard on that rule book, and it addressed things like transparency and accountability; it addressed issues related to carbon credits; it addressed issues that were designed to develop a strategy for technical experts and exactly how you count carbon in your country. It wasn't a perfect rule book, but we now have one, and we can make improvements on it in the future.

Think about how much faster we would go forward in tackling this problem if we had American leadership. We need this leadership. The world needs this leadership to tackle climate chaos. It is not something you can do just as good a job 10 years or 20 years from now as you can now because you can't get this carbon out of the atmosphere easily once it is in there. It stays for hundreds of years. It keeps adding to the trapping of heat for hundreds of years. We need to act now.

We are facing the big challenge of feedback loops. What do I mean? Up in the Arctic, when you have less ice, you have blue ocean, the sunshine goes into the water, and it heats it up more than if it were reflecting off ice. So it gets warmer and warmer and warmer.

How about this? Just a couple weeks ago, a picture was published of a lake in Alaska that was boiling—not with heat, but with methane; methane bubbling up out of the permafrost underneath the lake at such a rapid pace, it was a heavy boiling motion on the top of the water. That is a feedback loop that should scare us all because of the enormous heat-trapping properties of methane. All across the planet, as it gets warmer, permafrost and heat start off-gassing this methane.

So there we are. We have to move fast. We need American leadership to be fully engaged in the vision of Mission 100, going to 100 percent clean and renewable energy in the fastest possible time. We have to quit subsidizing fossil fuels and start subsidizing renewable energy or at least put them on a level playing field with each other. We need a green new deal to completely rebuild our energy economy in the United States of America and create all kinds of jobs—all kinds of working American jobs: sheet metal jobs, electrician jobs, pipefitting jobs, jobs of every kind—as we rework the energy economy to build that vision of 100 percent renewable energy. Think how many jobs you would create if you just proceeded to renovate your house. Now think of the tens of millions of jobs if you renovate the entire energy economy of the United States of America.

We need American leadership to work in partnership with other nations so every nation holds each other accountable to this vision of transitioning to renewable energy.

We need American leadership to say to Germany: Yes, you have done some things very well on solar, but why are

you building a Nord Stream 2 pipeline to bring massive amounts of natural gas from Russia for the next-generation dependence on fossil fuel?

We need to say to Japan: You are putting your entire energy economy onto liquid natural gas. How can you meet your Paris obligations? How can you be a partner with the rest of the world if you are not willing to pursue renewable energy?

We need leadership in America that says to Australia: You are doubling down on coal while your outback is burning in the middle of your winter, and your Great Barrier Reef is half dead over the last couple of years from water that is too warm and too acidic due to climate chaos.

We need American leadership to tell China: Yes, you are investing in renewable energy at home. Great. Speed it up, but why are you financing 200 coal-powered plants around the world? That is not acceptable. Shut that down.

We have to have American leadership. This is not a question between economic development and the environment. Quite the contrary. In this case, renovating our energy economy creates a strong environment. It allows us to go to the cheapest form of energy on the planet, solar and wind.

Why is it the cheapest? Because there is no fuel. The fuel for solar is the Sun. We don't have to pay for that. The fuel for wind are the breezes that blow. We don't have to pay for that. In fact, just a few months ago Xcel Energy did a request for proposals for new electric generating capacity, and it came out at 2 cents per kilowatt hour for solar and 3 cents for wind. That is less than burning coal in an existing fossil fuel plant.

If you believe nothing about the damage to our planet because it is just too terrifying, and you don't want to hear that bad news, then at least turn to the economic opportunity of taking America forward to the cheapest, cleanest energy we can possibly have.

Wells Griffith, the administration's top adviser cop, said: "We strongly believe that no country should have to sacrifice economic prosperity or energy security in pursuit of environmental sustainability." That is the big lie. That is the big Koch brothers lie to the planet; that somehow we must sacrifice our economy in order to pursue cleaner energy, when in fact the opposite is true.

American leadership has helped take the world forward in all kinds of technology. Some of those famous moments was our leadership in splitting the atom and creating atomic energy, putting a man on the Moon, creating the internet, taking on significant diseases, and leading the world in wiping them out—diseases like polio. We need that kind of leadership today, leadership to work in partnership with the world to save our planet.

I yield to my colleague from Florida. THE PRESIDING OFFICER. The Senator from Florida.

Mr. NELSON. Mr. President, I have been listening to our colleagues with

rapt attention at the excellence of their presentations and the depth of their understanding of this problem.

I couldn't help but notice on the charts of the Senator from Oregon, often the source was NOAA or NASA, two Agencies where we have had to worry, in the last 2 years, about the attempted muzzling of science, of scientists, and the seeming putdown of science—not by the Agencies themselves because they are such great experts. As matter of fact, when I have held several hearings at ground zero, which is South Florida, where we are seeing the effects of climate change in the rising of the seas and now are seeing a mean high tide and the water sloshing over the curbs of South Florida cities—having these hearings there, it is often NASA scientists and NOAA scientists who testify.

So I want the Senator from Oregon, the Senator from Delaware who preceded him, several others, and the Senator from Massachusetts to know how much I appreciate their taking up the banner and keeping on this matter.

I also want to say that if we do not change our processes of putting a lot of carbon into the air—and, as the Senator said, it is often methane, it is often carbon dioxide—the Earth will continue to heat up. If it gets heated up to something over 4 degrees Fahrenheit more than the average annual global temperature, that is the point of no return. At that point, you can't stop the heating up.

If we know the disaster now that we see in the sea level rising, the greater cost to government with the additional infrastructure, the moving of water wells further inland to keep away from the encroaching sea water and salt-water intrusion—if we know that, why in the world would we not contemplate the ultimate destruction of the planet if it gets too hot? I would love to get the Senator's comments.

Mr. MERKLEY. I appreciate so much the comments of my colleague from Florida.

I had the chance to go down to Florida at the end of October at a rally to address the challenge of red tide, algae that was growing in the ocean that produces a toxin. The toxin is so powerful that it was causing a lot of respiratory problems for people who live along the gulf coast, and it was killing a lot of animals. People were talking about manatees, dolphins, turtles, and fish washing up on the beach. Not only did they have the toxins from the red algae, but they had the stench from the dying sea life.

The sense of people who gathered to talk about this was that dramatic action is needed; that this was completely compromising the quality of life, the health of the oceans, and the ability to harvest food out of the ocean. People were saying they were actually taking inland vacations; that is, leaving the coast until the air would get better. They said that, unfortunately, the circumstances had been in

that bad condition for 10 months of the last 12 months—meaning they might not actually want to go back, at least not keep a home there.

I thought of the parallel from your State in Florida to my State in Oregon because we have an area in Southern Oregon that has been deeply afflicted by fire smoke the last two summers. The smoke has tainted furniture being sold. It has shut down outdoor events. It has stopped people from hiking the Cascade Trail. It is affecting the economy. House prices are changing. People are thinking twice about booking for—there is a different set of economic impacts. These are only the indirect impacts.

There is the direct impact on the Panhandle of Florida. I just saw the pictures of complete devastation when the hurricane came across earlier this year. Of course, we saw the pictures of complete devastation for some of the communities that the forest fires on the West Coast burned to a crisp.

So our two States and our citizens know there is a problem. Not everyone wants to face the underlying cause of methane and carbon pollution driving it, but everybody knows there is a problem.

We are fortunate to have your scientists—your NOAA scientists, your NASA scientists—and all the satellite information they are feeding us so we can study it and stand on the floor of the Senate and say: We do know the cause, and it is our responsibility as leaders of this Nation, leaders in the Senate, to proceed to make sure we act aggressively in partnership with the world.

I just want to say I thank you so much for your service in this Chamber and your knowledge about the scientific facts and willingness to never look away from them and to confront what those facts mean for the policies we need to adopt.

Mr. NELSON. Mr. President, I will conclude my remarks by just bringing you back to the vision that I had in the window of a spacecraft orbiting the Earth every 90 minutes. An hour of that was in the daylight of the sun and about a half-hour of that in the shadow of the Earth, which is the nighttime, looking at how beautiful the Earth was, and yet it looked so fragile. You could look at the rim of the Earth, that bright blue band, but right underneath it you could see that very thin atmosphere that supports all of our life. With the naked eye, from that altitude in the spacecraft orbiting the planet, you could actually see how we are messing it up.

You could see this in flight 34 years ago. As a matter of fact, our first launch attempt, 34 years today, took us five tries to get off the ground, but once we did, we could see with the naked eye how we are messing it up. Coming across Madagascar, the island nation off the southeast coast of the continent of Africa, you could see they had cut down all the trees. You could

immediately see the effects because when the rains came, there was no vegetation to hold the topsoil, and the topsoil was all running down. From that altitude, looking down, you could see that silt going out into the bright blue waters of the Indian Ocean. With the naked eye, you can see that. It is such a beautiful planet. We best take care of it.

Indeed, that was the effect upon me of having gone into space. I decided I wanted to be a better steward when I came back to Earth. Here we are, 34 years later, still fighting—fighting and fighting—to try to get people to understand what we are doing to ourselves. I thank this Senator, and I thank all the Senators who have spoken here, and I want your voices to keep strong and keep consistent and keep at it because sooner or later—hopefully, not after a catastrophe—the world's population is going to come around and understand that we have to be better stewards of our home.

I yield the floor.

The PRESIDING OFFICER. The Senator from Florida.

#### U.S. TROOP WITHDRAWAL FROM SYRIA

Mr. RUBIO. Mr. President, earlier today, this morning, the administration announced the intent to remove all American troops—not a large presence, but all Americans troops—from Syria. I want to be clear, as I have been all day about this, that I believe it is a catastrophic mistake that will have grave consequences for the United States, for our interests, and our allies in the months and years to come. I want to take a moment to come here and explain why.

The rationale behind the decision we were given today by the administration is that there is no longer a need for U.S. presence in Syria because ISIS has been defeated. Just a week ago, the President's own envoy to the global coalition on ISIS said this, and I want to quote from the statement that he gave last week to the press. He said:

[T]he end of ISIS will be a much more long-term initiative. Nobody is declaring a mission accomplished. We know that once the physical space is defeated we can't just pick up and leave.

This was a quote from the President's own envoy to the global coalition on ISIS—not 6 months ago, 6 days ago. We don't have time here or I could take up all the time of the Senate to outline statement after statement from military and diplomatic officials in the administration basically echoing the same point.

The point that we are making is this. ISIS still controls territory, particularly, in the Euphrates River valley of Syria. From the territory they still control, they generate money, they control the population, and they produce propaganda videos. Even if that is taken away, ISIS is on its way to turning into an insurgency—meaning, no longer an organization that