CLIMATE CHANGE

Mr. WHITEHOUSE. Mr. President, each week that you see me standing here means another week in which the Senate of the United States has sat out doing anything to address climate change and another week of carbon pollution streaming into our atmosphere and oceans. Carbon dioxide from burning fossil fuels is changing our atmosphere and our oceans. We see it everywhere. We see it in storm-damaged homes and flooded cities. We see it in drought-stricken farms and raging wildfires. We see it in fish disappearing from warming, acidifying waters. We see it in shifting habitats and migrating contagions.

All these harms we see carry costs—real economic costs—to homeowners, business owners, and taxpayers. That cost to homeowners, business owners, and taxpayers is known as the social cost of carbon pollution. It is the damage that people and communities and States suffer from carbon pollution and climate change. The Office of Management and Budget last calculated the social cost of carbon to be around $49 per ton of carbon dioxide emitted. If you just do some simple math, you can multiply the total measured U.S. emissions coming from energy production alone in 2016—that is emissions of over 5.7 billion tons of CO_2—by the $49 cost per ton. It is pretty simple math: $49 times 5.7 billion tons gives you about $280 billion. So $280 billion is the annual cost that the fossil fuel industry offloads onto the American public in harm from the carbon dioxide emissions. That is a big number and a big consequence—$280 billion per year.

There was a more complex analysis than my simple math that was done by the International Monetary Fund. The International Monetary Fund has a lot of smart people. They don't have any conflict of interest that I am aware of in dealing with this issue. Their calculation puts the annual subsidy just in the United States of America for the fossil fuel industry at $700 billion per year.

So is it my simple math where the social cost of carbon is $280 billion per year or is it what the International Monetary Fund calculated at $700 billion per year? Whichever it is, it is a big enough harm to the American public that you would think we might do something about it here in the Senate. But of course, we don't because that huge social cost of carbon, that huge subsidy gives the fossil fuel industry the biggest incentive in the world to—instead of fixing up its situation and cleaning up its mess—come over here and instead mess with our politics so that our ability to deal with this issue is silenced by their political muscle and manipulations.

One way in which they play this game is to populate the climate denial machinery with one-eyed accountants—accountants who can only see the pollutants' side of the ledger. Honestly, we hear their testimony. The only thing they see is the cost to polluters of reducing their pollution. They don't see the public harm side of the ledger. They pretend it is a liberal conspiracy cooked up by the Obama administration. Or say you are the Republican chairman of the House Science Committee and you say: The social cost of carbon is a ''flawed value . . . to justify the [EPA's] alarmist reasoning for support of the Clean Power Plan and other climate regulations.''

Actually, if you take away the bad words ''flawed'' and ''alarmist'' and all of that stuff, the statement is actually true. There is a value to avoiding carbon pollution, and defending that public value from the polluters does justify the Clean Power Plan. This is the social cost of carbon. Let's go back for a minute to 2006, when the Bush administration's National Highway Transportation Safety Administration put out a rule for vehicle fuel economy standards. There was some dissatisfaction with that rule. States and other stakeholders complained that this rule failed to take into account the social cost of carbon emissions from cars—something that should matter for a rule that is looking to reduce emissions from cars. Well, that went up on appeal to the U.S. Court of Appeals for the Ninth Circuit, and in 2007, the Circuit Court of Appeals agreed. The court acknowledged that there is a cost of carbon pollution, and that cost is ''certainly not zero.'' So it told the agency to go back, redo the rule and to come up with a real social cost of carbon. Thus was born the legal requirement that agencies consider a social cost of carbon in decisions.

Because of this decision, the Bush administration produced a wide range of numbers up to $159 per ton of carbon emissions. The Obama administration continued the effort to calculate a social cost of carbon. An interagency working group, including scientists and economists from across the Federal Government, relied on existing scientific literature and on well vetted scientific models to produce a first standard in 2010, with additional updates in 2013, 2015, and 2016.

When Federal agencies didn't apply any social cost of carbon, courts corrected them. In 2014, a Federal judge in Colorado faulted the Bureau of Land Management for failing to account for greenhouse gas emissions when it approved an Arch Coal mine expansion in the Gunnison National Forest. The court suspended the approval until the Bureau of Land Management either used the social cost of carbon or gave a valid explanation as to why not. When agencies did use the social cost of carbon, their decisions were upheld. In 2016 the U.S. Court of Appeals for the Seventh Circuit upheld the Department of Energy's use of the social cost of carbon in the agency's standards for commercial refrigeration equipment. The industry objected, and on appeal, the Seventh Circuit said: No, they did the right thing putting that in there.

Just last month, a three-judge panel from another U.S. circuit court of appeals—in this case, the U.S. Court of Appeals for the District of Columbia Circuit—ruled that the Federal Energy Regulatory Commission has to consider the effects of carbon emissions that would result from building three pipelines in the Southeast. Specifically, the ruling directed FERC to either better calculate the project's carbon emissions, using the social cost of carbon, or explain why it didn't use it.

Also last month, another U.S. district court blocked another coal mine expansion in Montana, citing the agency's failure to assess the environmental effects of coal. Specifically, the judge referenced the agency's failure to include any social cost of carbon.

Just last week a Federal appeals court in Denver told the Bureau of Land Management that its lack of analysis on the climate effects of four coal leases in the Powder River Basin was ''irrational'' and told them to start over.

It is not just Federal courts. Agencies at the State level are also using the social cost of carbon pollution in their activities. The New York Public Service Commission affirmed the importance of the social cost of carbon in its zero-emissions credit program. The Illinois State legislature also incorporated a social cost of carbon into its zero-emissions credit program, and prevailed in a challenge in the courts. These State zero-emissions programs were the programs that were rolled out to help existing nuclear energy providers against competition by natural gas plants. The carbon price allowed carbon-free nuclear generation to better compete in the wholesale markets.

Up in Minnesota, since 1993, the Minnesota Public Utilities Commission has required utilities to consider the estimated cost of carbon emissions in planning for new infrastructure projects. This year, the commission voted to raise its social cost of carbon to $43 per ton.

The Colorado Public Utilities Commission recently ordered the local utility Xcel to use the social cost of carbon in its resource planning documents. Colorado told its utilities to use $43 per ton starting in 2022 and to ramp up to nearly $70 per ton by 2050.

It is not just Federal courts and State agencies. Private companies in the United States and around the globe are incorporating the social cost of carbon into their own operations and accounting. Investors are beginning to demand that corporations perform this kind of analysis in order to qualify for investment. Big investors like Black Rock have taken on big companies like Exxon in order to break through the denial.

Just last week, the Washington Post reported that 1,200 global businesses either have adopted or are adopting a carbon price in some form. The Center for Climate and Energy Solutions found that companies like Microsoft,

Disney, the insurance giant Swiss Re, Unilever, Shell, BP, the mining corporation Rio Tinto, and General Motors have all taken steps to put a price on their own use of carbon.

Courts have made it the law for agencies to use the social cost of carbon. States are deploying the social cost of carbon. The business community recognizes and is incorporating into its financial planning the social cost of carbon. Yet here in Congress and down at the Trump White House, the leaders of the Republican Party continue to ignore climate change, pretend it doesn't exist, and ignore the very real costs that society bears from carbon pollution.

It goes without saying that the storm that has just ravaged Florida was spun up by warmer ocean waters, carried more rain because of warmer air, dumped more rain, and pushed storm surge further into Florida because of risen seas and those other characteristics.

Are we seeing any action? No. The President in March issued a sweeping Executive order rolling back Federal energy and environmental standards. It disbanded the interagency working group, and it asserted that the social cost of carbon was ''no longer representative of governmental policy.'' Nice try with that, given where the courts are.

Of course, the House and the Senate Republicans followed suit by introducing a pair of bills by Congressman EVAN JENKINS on the House side and our colleague from Oklahoma, Senator LANKFORD, on our side that purport to prohibit the Federal Government from using the social cost of carbon in rulemaking and in regulatory processes. Of course, you can't do that, and those laws aren't going anywhere. Why? Because they violate a very basic principle both in courts and in administrative agencies. That very basic principle is at the heart of the rule of law, and it is that facts have to be factual and that conclusions have to be logical. Any decision that fails this standard—that is, to use the administrative law terms ''arbitrary and capricious'' or ''not based on substantial evidence''—fails as a matter of law. Although Congress, of course, is bound and gagged by the polluters and their front groups, it is going to be hard for those polluters to try to stop the social cost of carbon in courts and administrative agencies. Despite the efforts of ExxonMobil and the Koch brothers to make America their fossil fuel banana republic, we still are a rule-of-law country and those rule-of-law principles that facts must be factual and that conclusions must be logical are too basic for our courts and administrative agencies to ignore.

In our courts and administrative agencies, lying and misleading can be exposed on cross-examination, for instance, and lying and misleading gets you punished, unlike in Congress where lying and misleading have been fossil fuel tactics for decades and sickeningly successful ones backed up by huge political muscle.

The failure in Congress and the remedy in the courts is one reason the Founding Fathers designed our government that way so that even where political branches of government were captured by special interests, there would still be a path for the truth, and there would still be a means for justice to have its way.

If the courts and the States and so many major businesses are all behind recognizing the social cost of carbon, who is behind the President and our Republican colleagues in denying that it is real? In my experience, it is powerful trade associations like the American Petroleum Institute, the American Chemistry Council, the National Association of Manufacturers, the U.S. Chamber of Commerce, and others that have a distaste for any honest assessment of the social cost of carbon.

Right now, since the costs of those industries' pollution is offloaded onto the rest of us for free, why not? Why would they want to start paying for the harm they cause right now?

Think tanks and front groups funded by the Koch brothers and other polluters have vigorously fought against recognizing the fact of the social cost of carbon for years. These groups have neutral sounding names—maybe even friendly sounding names—like the Competitive Enterprise Institute, the American Energy Alliance, the Heritage Foundation, FreedomWorks—my personal favorite—the Heartland Institute, a group so good that it put up billboards comparing climate scientists to the Unabomber. It is really a classy contribution to the debate.

One thing this crowd of bad actors does know is how to throw its weight around, especially since the Citizens United decision threw open the floodgates of special interest money into our politics. That is what has put Congress in the thrall of the polluters. It is an indecent and wrong place for us to be, but with any luck, the adherence of courts and administrative agencies to the rule of law—the principles that facts must be factual and conclusions must be logical—will help us get out of the political trap that the fossil fuel industry has constructed.

With that, I yield the floor.

The PRESIDING OFFICER (Mr. KENNEDY). The Senator from Florida.

HURRICANE IRMA RECOVERY

Mr. RUBIO. Mr. President, 2 weeks ago this very evening, I had just finished my time as Presiding Officer over the Senate, and I made the decision that early the next morning I would be returning to Florida instead of staying here the following day. The reason was that at that time and in that moment, the strongest storm ever recorded out of the Atlantic was bearing down first on the Caribbean and headed not just toward Florida but actually toward the city in which I live. Then the Nation and State watched over the next few days as that storm took its track.

There has been a lot said about Hurricane Irma since that time. I have heard some say that it could have been worse, and I imagine in some particular instances perhaps that is true. Had that storm entered through Tampa Bay, FL, the loss would have been incalculable. Had it hit directly throughout the southeast coast, right through the major metropolitan areas of Miami-Dade, Broward, and Palm Beach Counties, the economic costs would have been very significant. So it is possible that the storm could have had an even greater impact, but it is difficult to say that to the people who were impacted by it.

It was a unique storm in a lot of different ways, like the sheer scope of it. One of the things that really perplexed people in Florida, including myself—we were thinking perhaps we should move our families to another part of the State. We have a very good building code in Florida, but there are no structures under our building code that can withstand the hurricane winds of a category 4 storm. It is very difficult to do that, given the height and level of construction.

One of the difficult things about figuring out where to go is that the whole State was covered by it. It was a huge storm in its size and an enormous storm in its impact. I know for a fact that dozens of people left South Florida, as an example, and drove to another part of the State, only to find themselves actually worse off than they would have been had they stayed home. There was no way to know that at the time.

I can tell you, maybe it is because of our history with hurricanes. Obviously, in 1992, as a student at the University of Florida, I was home, the semester was about to begin, and Hurricane Andrew came barreling through there. It fundamentally altered what South Dade looked like.

Whether it was the impact of the storms in 2004 or 2005 or perhaps it was the images from Harvey from just a few weeks ago and the impact it has had on Houston and the State of Texas, people took the threat incredibly seriously, and there was a massive evacuation, perhaps the single largest evacuation in the history of the United States.

In any event, the storm did come. We measure the impact of the storm first and foremost by the loss of life, and there were 59 people who lost their lives—directly related to the storm in one way or another. Eleven of those people died after the storm from carbon monoxide poisoning. When power is lost, people run generators, sometimes even running them inside their homes. Carbon monoxide gets on them, and before you know it, they are dead. At least a dozen more didn't die, but they had been poisoned. It is an incredible threat after storms that we see every single time.

Nine people died in Monroe County, some from natural causes, although it