

he will continue to play a policy role will be important for both of our nations and for all of us who care about maintaining democratic values. I know that his passion for public service, his commitment to internationalism, and his insightful analysis are ending here after his time in Washington.

In closing, on behalf of my colleagues in the Senate, I extend my profound thanks to Ambassador Rudd. I thank him for his steadfast service, for the wisdom he has shared, and for the friendship he has offered. The bonds between our two nations are stronger because of his work. I wish him and Therese every success and happiness in the journey to come.

I yield the floor.

I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The senior assistant legislative clerk proceeded to call the roll.

Mr. WHITEHOUSE. Mr. President, I ask that the quorum call be rescinded.

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

CLIMATE CHANGE

Mr. WHITEHOUSE. Here in this Temple of Mammon, we only seem to care about what we can monetize. So as Budget chair, I drilled hard into how climate change is coming at American family finances.

Some of it comes at families through grocery costs as climate disruptions disrupt agriculture. Some of it comes through construction costs as climate disruptions disrupt lumber markets and supply chains. Some of it comes through outdoor sports industries—hunting, fishing and scuba and skiing—as climate disruptions disrupt the natural environments that they need.

The first biggest shock will come through insurance markets as climate risks make real estate uninsurable. This disruption kicks off a cascade: Climate risk collapses insurance markets; insurance collapse cascades into mortgage markets; mortgage collapse cascades into property value losses; and the combination of insurance cost, mortgage collapse, and home value losses thrashes the entire economy.

Don't believe me. Believe the chief economist of the mortgage giant Freddie Mac who said exactly this. He said it would be as bad as the 2008 recession based only on coastal flood risk. And, of course, now we have wildfire risk as well. And by the way, investor David Burt, who predicted that 2008 recession, is now making bets predicting this one. In a joint editorial, Senator SHEEHY and I warned of a "torpedo to the hull" of our economy from extreme weather, whether floods or wildfires, triggering exactly this cascade.

As the climate danger looms closer, more and more studies are monetizing that danger. Mammon Hall may have to wake up. Let's go through some of the recent reporting.

First off, this isn't later. This is now. On home insurance, look no further

than Florida's teetering home insurance market where average premiums now have soared to over \$14,000 or look westward from there where 92 percent of Texans now are worried about homeowners insurance costs. The insurance peril comes as no surprise because insurance, to quote First Street, "directly prices expected loss."

First Street describes how insurance is often the first transmission channel for climate risk into markets through premium increases, tighter terms, higher deductibles, nonrenewals, and I would add mandates like homeowners having to build a new roof on their home to get insurance coverage.

It matters what insurance companies think about this because those insurance companies have both a fiduciary duty and a financial incentive to predict well to make that an accurate transmission channel of climate risk into markets. And they are predicting storm clouds ahead, and they are battling down.

Other reports show climate change is already reducing Americans' wealth and income. One study estimated that incomes in the United States are already lower by around 12 percent since 2000 from where they would have been if fossil fuel emissions were not causing climate disruptions. That 12-percent estimated income reduction was a midpoint in an estimated range between 2-percent income reduction and 22-percent income reduction.

That study, by the way, looked at general temperature effects, not at the costs of specific extreme weather effects like hurricanes, sea level rise, or wildfires. So the actual number is obviously worse.

As to those uncounted extreme weather effects, First Street reports that natural disaster damages have risen more than tenfold since the 1980s and now cost the global economy over \$200 billion per year. NOAA's 5-year average of billion-dollar disasters in the period from 1980 to 2024 averaged nine of them per year; 1980 to 2024 averaged 9 billion-dollar disasters per year. From 2020 to 2024, that segment, the average has soared to 23 per year.

Another report notes that the greatest impact of climate change is from "the frequency, magnitude, and duration of extreme events." So if you start with 12-percent income reduction and then you add in the greatest impact of climate change on top of that from extreme events, well, it is not just obviously worse; it is obviously a lot worse counting those extreme weather effects.

The study notes that climate change has altered weather in all recent years and all places. It is everywhere, not just where storms hit or wildfires burn. So that is now. That is what is already here. What are we in for? A 2024 study published by the National Bureau of Economic Research found that each added degree centigrade of warming results in a 12-percent reduction of GDP. Extrapolate that out, and the numbers

get huge. The World Meteorological Organization estimates that the global cost of failing on climate, of letting the polluters continue to run roughshod over policy, is as much as \$1,200 trillion by the end of the century—\$1,200 trillion.

Another study has monetized ocean damages. Rhode Island is The Ocean State. My wife is a marine scientist. I tend to pay attention to ocean things. But we do tend to overlook ocean damage. It is worth looking out for the oceans, though, because 90 percent of the excess heat caused by fossil fuel emissions and 30 percent of the excess carbon dioxide from those fossil fuel emissions have all been absorbed by the oceans—90 percent of the excess heat, 30 percent of the carbon dioxide, all absorbed by the oceans. Without that ocean effect, fossil fuel emissions would likely have already made planet Earth unlivable for humankind.

When you account for ocean impacts, when you monetize those ocean impacts, it nearly doubles the social cost of carbon to humankind. The effects come through higher ocean temperatures, reduced ability of the ocean to hold oxygen, acidification of the ocean, increased severity of extreme weather events, and accelerated sea level rise. Specific dangers to God's creation include mass mortalities of organisms, large-scale bleaching of coral reefs, and the loss of sea grass beds and kelp forests.

Putting numbers to all of that gave this:

Market use damages are the largest in absolute terms, totaling global annual losses of . . . \$1.66 trillion in 2100, followed by damages in non-use values amounting to . . . \$224 billion, and non-market use values adding up to \$182 billion in annual losses. That sums to over \$2 trillion a year, and it is for sure an undercount.

Again, there is a lot here that is not yet included in ocean social cost of carbon calculations, damages that the EPA acknowledges as important but has not yet included in social cost of carbon calculations. It includes some pretty prominent impacts like on fisheries and mariculture and tourism and recreation and, of course, aesthetic values. That is a pretty big suite of harms.

At the end of the day, the oceans damage report prices 2020's "blue social cost of carbon" at \$48 in harm per ton of CO₂ emissions. By 2030, 4 years from now, it is up from \$48 per ton to \$72 per ton. The trajectory is not good.

Remember that these numbers are an attempt to monetize a looming natural systems disaster. As another report pointed out, some of the benefits that our natural systems provide to humankind "are not substitutable, meaning they must be protected as they cannot be replaced by technology when they are gone." Irreplaceability is one danger; irreversible acceleration is another.

Some of the harms fossil fuel emissions cause hit tipping points that kick

off “a cascade of accelerating and unmanageable damage”—“a cascade of accelerating and unmanageable damage” leading to dramatic worsening for humankind in a worsening trajectory of damage.

Tippling points can have a profound effect on markets. Markets are built around expectations, and one of the main expectations around which they are built is the expected lifetime of assets. Well, as of today, the central case estimate for sea level rise is around 3 feet by 2100—not good for homes or businesses that lie around or below 3 feet above sea level, not great for homes or businesses that are within range of ocean storms swamping ashore above the 3 feet of sea level rise, but manageable with respect to considerable amounts of real estate.

Now, imagine that tomorrow we learn that we have permanently destabilized the Greenland ice sheet or the aptly named “doomsday glaciers” in West Antarctica. Suddenly, the expected sea level rise by the end of the century doubles or more, and we know that we are eventually in for between 12 and 36 feet of sea level rise. Market expectations around the valuations of trillions of dollars of real estate will suddenly change, provoking massive value destruction that will cascade through markets. It will make 2008 look like child’s play.

On a more immediate scale, that is what is happening in insurance markets right now, as homeowners along the gulf coast in Florida and in wildfire country out West are finding out that the property that they thought had a certain value is not worth so much any longer. If they can afford insurance, but it has doubled or tripled, then the present value of that heightened insurance cost over the time that they hold the property suppresses the property’s value. Their property values go down. Florida led the country in property value reduction last year—I think as a result of this.

If you can’t get insurance at all, then you have trouble getting a mortgage on your property, which means, if you are not selling to a hedge fund or a billionaire, you have to mark your property down; you have to sell it for cheap because there simply isn’t a mortgage available for it.

Jay Powell, who is useless on climate but knows a little bit about mortgages and markets and the economy, has predicted that whole regions of the United States will shortly be unmortgageable. And, of course, when insurance gets out of control and mortgages become unavailable and property values crash, that cascades into very a significant and painful recession.

What else do we know? We know that our estimates of the worst kinds of damage that fossil fuel emissions are causing humankind have been wrong. They have been too low. I quote:

The severity and frequency of extreme events are unprecedented and beyond model projections.

It is worse than we thought, and it is going to get worse faster than we thought. Remember that, just by its nature, monetizing the human harm caused by fossil fuel emissions disrupting our climate and natural systems is an almost disgraceful undercount of the actual damage to what one writer called our “planetary solvency.” As another author wrote:

While the social costs—understood as costs to people—of untrammelled pollution are colossal, the ecological costs, those borne by nonhuman entities, are almost too vast to grasp.

When you monetize things, you blind yourself to those costs that are almost too vast to grasp because looking at them through the lens of money blinds you to them. There are losses, massive losses—and I quote again here—that “appear only in [nature], almost never in a form that capital can see.”

That is the defect of trying to monetize the harm we are causing to the natural systems that sustain us. Monetization, by definition, fails to acknowledge most of the harm and the danger. It fails to acknowledge most of the harm and danger to our species, and it fails by a mile to acknowledge the harm and danger to the rest of God’s creation.

Even so blinkered, the numbers are colossal, and the threat looms. All this has caused the World Economic Forum to elevate “ecosystem collapse as a mid- to high-level global risk.” Other studies advance the concept of planetary insolvency. Others warn about our continued fossil fuel pollution: If left unchecked, “then mass mortality, involuntary mass migration, severe economic contraction, and conflict become more likely.” Heading into a world of more mass mortality, more involuntary mass migration, more severe economic contraction, and more conflict, it is worth paying a little more attention.

Existing modeling practices understate economic impacts, and further, as one study pointed out, at the extreme, they “do not recognize the risk of ruin.” They presume that this damage will fall into a predictable center-case scenario. But there are outer-case scenarios—nontrivial ones, real ones—that create the risk of human ruin.

Researchers have not only looked at the costs of climate change; they have also studied the economic benefits of eliminating carbon pollution. An OECD—Organisation for Economic Co-operation and Development—study suggests that the most advanced economies on our planet would enjoy an increase of 60 percent in GDP by 2050—those societies, 60 percent richer by 2050—from getting climate right. And they suggest that lower-income countries would enjoy an increase of 124 percent in GDP—more than doubling their wealth—from getting climate right. So this is a two-sided equation: Continue to fail and ignore it and these warnings of economic calamity become our future. Be responsible and

get it right and greater wealth and prosperity become our future.

A third of global GDP lost in this century if the climate crisis and the polluters causing it are allowed to run unchecked is a pretty dire scenario to subject the people we represent to.

Anyway, back to Mammon Hall. Here we are, where none of this discussion is taking place, where these risks and dangers are simply treated as if they don’t exist because of a different monetization—the monetization of our politics defending a \$700 billion annual subsidy, powered by unlimited dark money spending. The fossil fuel industry and its vast array of front groups have used the power of money in politics to strangle this discussion.

In our new American petrostate, the power of petromoney and our corrupted petropolitics have turned this supposedly greatest deliberative body into a tomb of silence about this danger, a mortuary of democracy.

I yield the floor.

I suggest the absence of a quorum.

The PRESIDING OFFICER (Mr. CURTIS). The clerk will call the roll.

The senior assistant legislative clerk proceeded to call the roll.

Mr. THUNE. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

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

ORDER OF PROCEDURE

Mr. THUNE. Mr. President, I ask unanimous consent that notwithstanding rule XXII, all cloture time be expired and the Senate vote on confirmation of the Peterson nomination at 11:30 a.m. tomorrow; further, that the cloture motions filed during Monday’s session of the Senate ripen following disposition of the Peterson nomination; further, that if cloture is invoked on the Benton nomination, the Senate vote on confirmation of the nomination at 2:15 p.m. tomorrow; finally, that if any nominations are confirmed during Wednesday’s session of the Senate, the motions to reconsider be considered made and laid upon the table and the President be immediately notified of the Senate’s action.

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

LEGISLATIVE SESSION

Mr. THUNE. Mr. President, I move to proceed to legislative session.

The PRESIDING OFFICER. The question is on agreeing to the motion.

The motion was agreed to.

EXECUTIVE SESSION

EXECUTIVE CALENDAR

Mr. THUNE. Mr. President, I move to proceed to executive session to consider Calendar No. 613.