

March 25, 2024

The Honorable Charles E. Grassley
Ranking Member
U.S. Senate Committee on the Budget
Washington, DC 20510

Dear Ranking Member Grassley and Republican Members of the Senate Budget Committee,

I write to you all in response to your frequent complaints about our Senate Budget Committee hearings examining the economic dangers and budgetary costs associated with climate change. As I have said before (and will undoubtedly say again), when at least \$10 trillion of our national debt stems from two exogenous shocks to the economy—namely, the 2008 Financial Crisis and Covid—it would be folly for this Committee not to focus attention on dangers that portend the biggest systemic shock to the economy yet.

Climate change alarm bells for the economy are being rung by economists, central bankers, financial experts, insurance and mortgage industry leaders, and many others. Because Congress has been irresponsible, economic damage from climate change is now a virtual certainty. It is not a question of if, but when, and how bad.

The most obvious risk is rising seas making large swaths of coastline less and less habitable. As the decades unspool ahead of us, more and more coastal communities will be at risk, eventually rendering trillions of dollars in real estate virtually worthless. We have heard similar testimony about property becoming uninsurable in wildfire-risk areas. We've heard about insurance market collapses and the "carbon bubble" bursting. If you were listening, you heard real warnings from highly credible sources. Things will likely get ugly.

We can still take forceful action to zero out carbon pollution and begin to pull massive amounts of already-emitted carbon dioxide out of the atmosphere. In case it isn't obvious, that's the purpose of these hearings: alerting Congress and the public to the enormous potential costs we face in order to build the case for preventative action.

It might have been helpful had this Committee held hearings before 2008 on the looming troubles in the mortgage market. But this Committee did no such thing, instead holding hearings on things like the President's international affairs budget, the President's homeland security

budget, and mad cow disease—worthy topics all, but not what ultimately blew a \$5 trillion hole in the national debt.¹

It might also have been helpful had the Committee held hearings before the Covid pandemic on the potential economic threat posed by novel pathogens with the potential to cause a global pandemic. But this Committee did no such thing, instead holding hearings on things like ways to run the government for less money, reducing federal duplication and overlap, and the defense budget—again, worthy topics all, but not what ultimately blew another \$5 trillion hole in the national debt and killed well over a million of our fellow citizens.²

Let’s look at the record of our hearings. Since I began holding this series in February of last year, many of the things our witnesses warned us about have come true. We have held more than a dozen hearings on the economic risks and budgetary consequences of climate change, including:

- On March 1, 2023, a hearing entitled, *“Rising Seas, Rising Costs: Climate Change and the Economic Risks to Coastal Communities”* to warn of the risks and costs to the economy, financial markets, coastal properties, infrastructure, and government budgets from rising sea levels, coastal inundation, and extreme weather events.
- On March 8, 2023, a hearing entitled, *“A Burning Issue: The Economic Costs of Wildfires”* to warn of the risks and costs to the economy, financial markets, infrastructure, communities, and government budgets from wildfires.
- On March 22, 2023, a hearing entitled, *“Risky Business: How Climate Change is Changing Insurance Markets”* to warn of climate-related risks to insurance markets, and how they might cascade out into the economy, financial markets, homeowners, communities, and government budgets.
- On March 29, 2023, a hearing entitled, *“Left Holding the Bag: The Cost of Oil Dependence in a Low-Carbon World”* to warn of what the “carbon bubble” bursting would do to the economy, financial markets, communities, and government budgets.
- On April 26, 2023, a hearing entitled, *“Under the Weather: Diagnosing the Health Costs of Climate Change”* to warn of climate-related health damages, the associated economic costs of those health damages, their cost to federal programs, and the communities bearing the brunt of climate-related health costs.

¹ Between CBO’s September 2008 budget baseline and their January 2010 baseline, projected revenues fell by \$4.4 trillion and projected spending rose by \$800 billion. That difference includes both the economic effects of the Great Recession as well as enacted measures to spur the recovery.

² Alicia Parlapiano, Deborah B. Solomon, Madeleine Ngo and Stacy Cowley, “Where \$5 Trillion in Pandemic Stimulus Money Went,” *New York Times*, March 11, 2022, <https://www.nytimes.com/interactive/2022/03/11/us/how-covid-stimulus-money-was-spent.html>.

- On June 7, 2023, a hearing entitled, “*Cultivating Stewardship: Examining the Changing Agricultural Landscape*” to warn of climate risks to the agriculture sector and the associated economic and budgetary costs.
- On October 25, 2023, a hearing entitled, “*Bottlenecks and Backlogs: How Climate Change Threatens Supply Chains*” to warn of the ways climate change affects global supply chains and how climate-related supply chain disruptions affect inflation and the economy.

The witnesses were serious. The Committee heard expert testimony from economists, industry leaders, academics, elected officials, community representatives, medical professionals, scientists, a retired head of state, and even a former Republican Senate Majority Leader. These witnesses emphasized the severe *and* “*systemic*” risks that climate change poses to our economy. Time and again, these experts warned that the consequences of climate inaction are already burdening communities, local governments, and our federal budget—and, if we do not change course, it will get much worse, perhaps very suddenly.

The pattern is that we bring serious witnesses before the Committee with serious warnings; Republicans try to mock the problem or change the subject; and then news reports confirm the accuracy of the warnings.

Our second, third, and fourth hearings focused on property losses in coastal and wildfire-adjacent communities and homeowners’ insurance. Dr. Benjamin Keys warned that climate change is “simultaneously inducing heightened risk of flood, storm damage, chronic inundation, drought, excessive heat, and wildfires.” The U.S. president of Aon, one of the world’s largest insurers, joined by a principal at Milliman, the insurance industry consulting firm, testified about the struggles of an industry facing increased and unpredictable risks at the scale posed by climate disruption. Dr. Sean Beckett, the former chief economist at Freddie Mac, warned of coastal residential property values crashing, as homes become uninsurable and therefore unmortgageable. Similarly, for wildfires, Dr. Michael Wara of Stanford University testified that “climate change makes the 1-in-100-year wildfire more likely to occur once a decade or perhaps more relevantly once in a 30-year mortgage.”

Since those three hearings in March of 2023, the news has reported insurers continually fleeing the increasingly risky Florida and California insurance markets. Insurance companies are exiting the Florida homeowners’ market due to unsustainable risk exposure from rising seas and intensifying storms.³ Florida homeowners unable to secure conventional insurance have had to turn to a state-backed insurer of last resort, Citizens Property Insurance, which has doubled its total number of policies over the last three years and dramatically increased its risk exposure (a

³ Yacob Reyes, “Tampa-based Slide to obtain scores of Farmers Insurance policies,” *Axios*, October 17, 2023, <https://www.axios.com/local/tampa-bay/2023/10/17/slide-farmers-insurance-policies>.

potential risk to the federal budget this Committee is investigating).⁴ Increased premiums and lessened availability are beginning to disrupt the Florida real estate market, as foretold at our hearings.⁵

In California, seven of the top twelve homeowners insurance providers have exited the state or restricted underwriting since March of last year, citing growing wildfire risks.⁶ There is turbulence reported in insurance markets up and down our coasts, as predicted at our hearings.⁷ Just this month, Federal Reserve Chair Jerome Powell told the Senate Banking Committee that it was “a significant issue” that “in the longer term, companies are withdrawing from writing insurance in some coastal areas.”⁸ Powell also noted that increasing insurance rates are contributing to inflation, as forecast at our hearings.⁹ Florida insurers are proposing homeowners premium increases of over 50 percent in 2024.¹⁰ Auto insurance premiums are also increasing to cover growing fire and storm losses, with New York seeing an average 17 percent increase in December of last year, New Jersey a 15 percent increase, and California a 30 percent increase.¹¹

We heard at our October 2023 hearing about climate risk to the global network of interdependent supply chains. Dr. Scott Kelly, a risk management consultant, testified about how extreme weather “can cascade through supply chains affecting the flow of commodities and goods to regions and sectors, leading to increased costs to business and to the broader economy.” At that hearing, we heard about how drought could limit traffic through the Panama Canal—climate-driven disruption driving climate-driven inflation. Since that hearing, news reports have linked worsening drought conditions in Panama to reduced canal traffic disrupting global trade. Shipments transiting the canal have been reduced by 40 percent, and shipping companies have

⁴ Brianna Sacks, “How ‘cherry-picking’ policies let one insurer win big in Florida’s insurance crisis,” *Washington Post*, December 30, 2023, <https://www.washingtonpost.com/climate-environment/2023/12/30/florida-insurance-citizens-slide/>.

⁵ Tarik Minor, “Property insurance crisis disrupting Florida real estate market as buyers struggle to get policies,” *News4Jax*, June 16, 2023, <https://www.news4jax.com/money/2023/06/16/property-insurance-crisis-disrupting-florida-real-estate-market-as-buyers-struggle-to-get-policies/>.

⁶ Danielle Venton, “Insurance In California Is Changing. Here's How It May Affect You,” *KQED*, November 13, 2023, <https://www.kqed.org/science/1985175/insurance-in-california-is-changing-heres-how-it-may-affect-you>.

⁷ Amy Green, “Insurance Rates Are Soaring for US Homeowners in Climate Danger Zones,” *WIRED*, March 16, 2024, <https://www.wired.com/story/insurance-rates-soaring-us-homeowners-climate-danger-zones-florida-louisiana-california-hurricane-flood/>.

⁸ Marco Quiroz-Gutierrez, “Jerome Powell just revealed a hidden reason why inflation is staying high: The economy is increasingly uninsurable,” *Fortune*, March 12, 2024, <https://fortune.com/2024/03/12/why-inflation-high-jerome-powell-says-insurance-climate-change/>.

⁹ *Id.*

¹⁰ “Florida Insurance Companies Propose Over 50 Percent Rate Rises,” *Newsweek*, February 13, 2024, <https://www.newsweek.com/florida-insurance-companies-plan-over-50-percent-rate-rises-1869433>

¹¹ Jean Eaglesham, “Buying Home and Auto Insurance Is Becoming Impossible,” *Wall Street Journal*, January 8, 2024, <https://www.wsj.com/business/insurance-home-auto-rate-increases-climate-change-03b806f3>.

had to choose between paying to jump the queue or avoiding the Panama Canal altogether, adding days to shipment times—both significant financial costs.¹²

Climate-related droughts and other severe weather events also directly result in increased prices for agriculture commodities. At our hearing in June of last year on climate-related costs to the agricultural sector, there was bipartisan agreement that climate change is damaging crop yields and driving up prices. Since that time, prices for olive oil,¹³ sugar,¹⁴ and chocolate¹⁵ have skyrocketed due in part to climate-related phenomena. And just this month, reports emerged about climate-related threats to banana production.¹⁶

Our sixth hearing, in April of last year on the healthcare costs associated with climate change, warned how the climate crisis would impose costs on our healthcare system, many borne by the federal budget. Dr. Katelyn Moretti, an emergency room physician, shared that “the patients most at risk from climate hazards are also the same patients most likely to be on Medicaid or Medicare and least able to afford” medical costs. In February of this year, a new study from leading universities and hospitals confirmed that healthcare costs associated with climate-related disasters are not only real but severely underestimated.¹⁷

We also heard testimony on the risks of a carbon bubble. Our fifth hearing, in April of 2023, focused on climate-related transition risks; namely, on how failing to keep pace with the energy transition could strand U.S. fossil fuel investments and the communities and investors that depend on them for revenues. As Dr. Gregor Semieniuk explained, “capitalist economies are unrivalled in their ability to supply an expanding market. The same cannot be said of a declining one.” Here too, time has proven our experts’ warnings prescient. This February, Saudi Arabia, one of the lowest-cost fossil fuel producers in the world, signaled a “U-turn” on expanding its oil production. The reason? The energy transition, and uncertainty about whether there would be a

¹² Jonathan Yerushalmy, “Changing climate casts a shadow over the future of the Panama Canal – and global trade,” *The Guardian*, December 22, 2023, <https://www.theguardian.com/environment/2023/dec/22/changing-climate-casts-a-shadow-over-the-future-of-the-panama-canal-and-global-trade>.

¹³ Mary Whitfill Roeloffs, “Olive Oil Prices Jump 50%—And Climate Change Might Be Why,” *Forbes*, September 20, 2023, <https://www.forbes.com/sites/maryroeloffs/2023/09/20/olive-oil-prices-jump-50-and-climate-change-might-be-why>.

¹⁴ Oliver Milman, “Cookies and Candy are the Latest Victim of Climate Crisis as Sugar Prices Surge,” *The Guardian*, January 5, 2024, <https://www.theguardian.com/environment/2024/jan/05/climate-crisis-drought-sugar-cost-impact>.

¹⁵ Mumbi Gitau, “Cocoa’s Record Price Surge Comes With a Climate Warning,” *Bloomberg*, February 13, 2024, <https://www.bloomberg.com/news/newsletters/2024-02-13/valentine-s-day-chocolate-comes-with-a-climate-warning-as-cocoa-surges>.

¹⁶ Matt McGrath, “Banana prices to go up as temperatures rise, says expert,” *BBC*, March 11, 2024, <https://www.bbc.com/news/science-environment-68534309>.

¹⁷ Alejandra Borunda, “The human cost of climate-related disasters is acutely undercounted, new study says,” *NPR*, February 29, 2024, <https://www.npr.org/2024/02/29/1234671424/the-human-cost-of-climate-related-disasters-is-acutely-undercounted-new-study-sa>.

willing buyer for their fossil fuels.¹⁸ Just last week, *The Economist* put out a special report entitled “The long goodbye,” examining how eventually declining demand for oil and gas will upend economies as the bubble collapses.¹⁹

This summary of our hearings, the expert testimony we heard, and the ways in which the warnings are already coming true could certainly be far longer given the myriad ways we’ve seen climate-related disasters affect our nation and world over the last year, the hottest in human history. But since the *Citizens United* decision of 2010 powered up fossil fuel’s political influence, bipartisanship on emissions-reducing climate legislation has proven elusive. You may not like these warnings from experts, but choosing to ignore them is simply not a credible response, particularly as it bears on America’s fiscal situation.

Democratic members of the Senate Budget Committee have proposed multiple bills to address carbon pollution. Over the past two congresses these bills have included:

- Abandoned Well Remediation Research and Development Act
- Advanced Energy Technologies and Grid Efficiency Act
- Assessing International Requirements to Fuel Aviation’s Impact Reduction (AIR FAIR) Act
- Airport Energy Resiliency and Renewable Energy Act
- Carbon Capture and Utilization (CCU) Parity Act
- Clean Commute for Kids Act
- Clean Competition Act
- Clean Energy for America Act
- Clean Energy Victory Bond Act
- Clean Shipping Act
- Climate Emergency Act
- Climate Smart Ports Act
- Community Energy Savings Program Act
- Community Facilities Program for Rural Clean School Bus Infrastructure Act
- Converting Our Waste Sustainably (COWS) Act
- Electric Credit Access Ready at Sale (CARS) Act
- End Polluter Welfare Act
- Energy Security and Independence Act
- Establishment of Community Solar Programs Act
- Healthy Climate and Family Security Act
- Healthy Soils Healthy Climate Act
- International Maritime Pollution Accountability Act

¹⁸ Ruxandra Iordache, “Saudi energy minister pins Aramco’s oil capacity halt on green transition,” *CNBC*, February 12, 2024, <https://www.cnbc.com/2024/02/12/saudi-energy-minister-pins-aramcos-oil-capacity-halt-on-green-transition.html>.

¹⁹ Vijay Vaitheeswaran, “The long goodbye,” *The Economist*, March 16, 2024, <https://www.economist.com/special-report/2024-03-16>.

- Job Creation through Energy Efficient Manufacturing Act
- Keep It in the Ground Act
- Landowner Fairness Act
- Medium- and Heavy-Duty Electric Vehicle Infrastructure Act
- Methane Emissions Reduction Act
- Methane Emissions Research Act
- Protecting America's Economy from the Carbon Bubble Act
- Revive Economic Growth and Reclaim Orphaned Wells Act (REGROW) Act
- Save Our Future Act
- Streamlining Interstate Transmission of Electricity (SITE) Act
- Stop Arctic Ocean Drilling Act
- Sustainable Aviation Fuel Act
- Voluntary Agricultural Land Repurposing Act
- Zero-Emission Vehicles Act

With the notable exceptions of Sen. Braun (Storing CO2 And Lowering Emissions [SCALE] Act), Sen. Crapo (Energy Sector Innovation Credit Act), and Sen. Graham (Foreign Pollution Fee Act), none of you have cosponsored meaningful proposals to reduce carbon pollution during the last two congresses. Indeed with a few exceptions (notably, the wildfire and agriculture hearings) you met these hearings by retreating to the stable of witnesses propped up by the fossil fuel polluters at the core of the problem. One witness even dismissed the flooding of cities like Boston and New York by rising seas as something from which people could just move away. It is hard to convey how insulting that is to your colleagues representing coastal constituents in harm's way.

I remain interested in finding a common path forward on reducing carbon pollution. It is why I continue to work with some of your Republican colleagues on other committees on carbon capture, carbon tariff, and nuclear legislation. But denying the problem, or wishing it away, or ignoring its systemic economic dangers, just won't work.

Sincerely,



Senator Sheldon Whitehouse
Chairman