## Opening Statement of Chairman Sheldon Whitehouse Senate Committee on the Budget "Left Holding the Bag: The Cost of Oil Dependence in a Low-Carbon World" March 29, 2023

Ranking Member Grassley, colleagues, welcome to the fifth Committee hearing in our series on the economic and budgetary havoc that climate change threatens to wreak. The last four hearings on this topic presented expert testimony on the outcomes when climate change's physical effects disrupt insurance, mortgage, and property markets; and how those risks are both systemic and multiple, with likely cascades of economic disruption throughout the economy.

Today, we will hear about risks that don't result from ecological upheaval, but stem from failing to keep up with the global energy transition. Market transitions can be held back by outside influence, and then occur suddenly as economic shocks. These are potential costs of the fossil fuel-funded campaign of denial, delay, and obstruction holding back the transition, and then having it occur in a sudden collapse.

In other hearings, the operative term was systemic risk, when losses in one sector cascade out through the economic system. Here the issue is that the world is moving away from oil and gas, but truculent and politically-connected market actors persist in fossil fuel investments, which crash in value when their unsustainable economics overwhelm the artificial politics that supported them.

The operative term of today's hearing: stranded assets. The prospect of investments in fossil fuels becoming worthless when there is no one to buy the dirty product may sound like a far-off possibility, but for the United States, the world's largest producer of oil and gas, it could be just around the corner. Why is that?

That's because Saudi Arabia and everyone else in OPEC can produce oil far more cheaply and thus can sell it at a lower price point than the United States. If there is ever a rush for the exits, they can sell at cost and price us out of the market. For now, prices are propped up by the cartel, but just like a run on a bank, when a major supplier loses confidence in the cartel and drops prices to cost, things go bad in a hurry.

The present artificial market cannot last forever. There are too many externalities looming. Even fossil fuel companies talk about the inevitability of reaching 'peak oil', or the point at which maximum oil demand is reached, followed by an irreversible decline. How does that decline come? Is it slowly up and then slowly down the other side of the peak?

Likely not. The International Energy Agency notes that as soon it becomes clear that oil demand is going to decline, it will be in the economic interest of these lowest-cost producers to flood the market at prices just above their marginal cost of production. The shift could be fast. When it happens, all the assets producing more expensive, less competitive fossil fuels stateside can't compete with the lower price and they become worthless—stranded. The market for American oil dries up, fast. Our witness estimates that stranded U.S. fossil fuel assets could total \$397 billion. Globally, the losses could total 1.4 trillion dollars. This is what is known as the carbon bubble. Similar to the systemic risks rising seas, flooding, and wildfires pose to the housing and mortgage markets, a mass stranding of fossil fuel assets could also lead to large economic shocks that reverberate across the broader economy, with real consequences for the federal budget.

And, as we will hear today, peak oil is on the horizon. As Putin's brutal invasion of Ukraine reminded the world, foreign energy from petrocrats often comes with strings attached. It's in the national self-interest of every single fossil fuel importer—from the E.U. to China—to exit the volatile and expensive oil and gas market as soon as they can, especially when more solid energy security can be found in the form of renewables, EVs, and other low-carbon technologies.

In the same way that a carbon bubble bursting hits the United States particularly hard, within the United States certain states will be hit particularly hard— states heavily dependent on fossil revenue sources, as one of our witnesses will elaborate. Preparing for that day is elementary prudence.

If we want to avoid the worst economic disruptions of a carbon bubble, we need an orderly transition to zero-carbon energy. An orderly transition requires policies to smooth the change, precisely the policies the fossil fuel industry has spent over three decades fighting. Every day that industry uses political power to hold back progress, more water backs up behind the dam, making the downstream catastrophe more damaging when the grim day arrives. Orderly versus disorderly has grave ramifications.

Our choice is clear. We can plan for the future and try and minimize the economic damages associated with stranded assets. Or we can plow ahead and hope all the evidence is wrong. Just as the scientists haven't been wrong about climate change, something tells me the economists are unlikely to be wrong about the economic fallout.