U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON
SCIENCE, SPACE, & TECHNOLOGY
Opening Statement

Representative Sean Casten (D-IL)

Energy Subcommittee Markup of:
H.R. 4091, the ARPA-E Reauthorization Act of 2019
H.R. 4230, the Clean Industrial Technology Act of 2019
Wednesday, September 11, 2019

The climate crisis is an existential threat to all life on Earth. It is an urgent crisis. And its one that demands we take action, immediately.

However, that does not mean that the problem is not complex. Our standard of living, our economy, our social safety nets, and our government itself depend on energy access. We cannot allow ourselves to become deluded into thinking that because the problem is urgent, any action will solve the problem. Ignoring the urgency is suicidal. But ignoring the complexity is irresponsible. We must account for **both**.

This means that Congress and policymakers cannot simply issue edicts from on high. And we cannot shy away from expertise. The urgency of this crisis demands we act with seriousness, determination, and in a measured and deliberative manner.

In short, to solve the climate crisis, we must unleash the nerds. And that's hard for politicians. Because nerd-driven policies may not be exciting, flashy, or ready-made for primetime news headlines.

Some of these policies are already known; low-hanging fruit that we could enact tomorrow – like FERC reform, grid modernization, or climate-risk disclosure requirements for public corporations. Others are hard, intractable realities that will require massive mobilizations to solve – such as figuring out how to best pursue carbon removal or deal with communities inundated with the impacts of rising sea-levels.

But, a third bucket involves the need to deal with reducing emissions from sectors for which we have no easy solutions.

While the power sector has proven extremely efficient in reducing greenhouse gas emissions, other sectors, notably the industrial and heavy-duty transportation sectors have struggled to keep pace. In 2017, while the power sector constituted 27.5% of total greenhouse gas emissions domestically, the transportation sector and industrial sectors accounted for 28.9% and 22.2% of

emissions, respectively. Despite this, the vast majority of federal R&D investments on emissions reduction technologies and methods in the U.S. have focused on the power sector.

How do we make fertilizer without natural gas? How do we feed billions of people globally without fertilizer?

How do we make silica, cement, or steel without producing CO2? And if we don't have steel or silica – how do we build the infrastructure of the future needed to lower our emissions whether through building retrofits or solar panels?

How do I ship goods across the country or the globe without bunker fuel?

How do I make pharmaceuticals, cosmetics, and plastics without fossil fuel inputs?

If anyone says they already know the answers to all these questions, they are lying. These are hard questions. I believe we can solve them. But we must dedicate resources to solving them.

The Clean Industrial Technology Act (CITA) of 2019 does just this by directing the Secretary of Energy to establish a Department of Energy (DOE)-led cross-agency research program to reduce emissions from non-power industrial sectors. This includes everything from research on lowering emissions from iron and steel production, to finding alternative materials for buildings, to reducing emissions from shipping, aviation, and other modes of long-distance transportation.

To ensure that these technologies make their way into the private sector here in the United States, the bill includes a $650 million authorization for demonstration projects. This will cover 3-5 large scale demonstrations that help provide certainty to industry and help the private sector better implement new lower-emission technologies.

In a similar spirit, the bill also authorizes a technical assistance program to allow eligible entities to receive assistance from DOE in working towards the goal of reducing emissions of non-power industrial sectors.

In addition, CITA would establish a Federal Advisory Committee that would consist of industry, academic, federal, and labor representatives to help develop the missions and goals of the research program and ensure consistent progress towards achieving these goals, as well as to develop emissions reduction roadmaps in each of the relevant focus areas. This is not only important for solving the climate crisis for the future of American competitiveness across the manufacturing sectors.

Names like Haber and Bosch, Bessemer, Fischer and Tropsch, persist today because they invented processes that helped fuel an industrial revolution that enabled us to achieve economic prosperity on a scale previously unimaginable.

The nation or nations which develop and popularize the low-carbon industrial processes of the future, will control the manufacturing economy of tomorrow.

This effort is not ideological. It is about averting the climate crisis. It is about American competitiveness. It is about U.S. manufacturing and industry leading the world in a new industrial revolution.

The bill is widely endorsed including by the U.S. Chamber of Commerce, National Association of Manufacturers (NAM), United Steelworkers, the BlueGreen Alliance, NRDC, EDF, and the American Chemistry Council.

I was proud to lead this effort alongside Chairwoman Johnson and Congressman McKinley, as well as Senators Whitehouse and Capito. I'd like to thank them all for their leadership and dedication to taking on this issue in a bipartisan and bicameral manner. This helps underscore just how essential this effort is.

I urge support of the Clean Industrial Technology Act of 2019.

Thank you and I yield back.