Thank you, Chairwoman Johnson. As we start the second session of this 116th Congress, I want to thank you for your leadership. Like many of the hearings we held last year, today’s hearing is an opportunity for a constructive dialogue on the issue of climate change.

Almost one year ago we held the Science Committee’s first hearing of the Congress titled, “The State of Climate Science and Why It Matters.” We heard testimony from a similar panel of IPCC authors and scientists.

We know the climate is changing and that global industrial activity has played a role in this phenomenon.

But now one year later I ask: what progress have we made since then? I believe my friends on the other side of the aisle agree with me that the most effective thing we can do on this Committee to address climate change is to support more basic research that will lead to the next generation of technologies that are needed to reduce global emissions, like carbon capture, nuclear power, and fusion energy.

I’m disappointed that we haven’t taken that action, and instead of supporting the technologies of the future, we have focused our attention in the past year on applied research in industries like wind and solar that are already thriving.

I’m also disappointed in headlines that put a ticking clock on our destruction at the hands of climate change. This is counterproductive to promoting both science and solutions.

These doomsday scenarios and apocalyptic predictions are misleading – because the U.S. is already taking action through investments in the science and innovation needed for cleaner energy production.

We won’t successfully address greenhouse gas emissions with pie-in-the-sky policies that demand 100% renewable energy at the expense of reliable power from nuclear and fossil fuels. This would only raise energy prices for businesses and consumers and cripple the American economy.

Today, the market exists for implementing groundbreaking innovations. Government investment in basic research has led to the development of carbon capture, carbon use,
advanced nuclear, and renewable energy technologies that will incentivize growth in these industries – and reduce global emissions in the process. Innovation is good for the global environment and the American economy.

We have to take the long-term approach and make investments in research that will lead to new technologies. Federal mandates to deploy today’s technologies won’t revolutionize the energy market, and they won’t lead to the next big discovery.

For instance, current U.S. battery capacity is just 1 gigawatt. If we were to meet the radical and, frankly, unrealistic goal of 100% renewable energy by 2050, we would need 3,300 gigawatts of battery capacity to accommodate the necessary solar and wind power.

So if we want to see more renewable energy, we need to invest in the kind of fundamental chemistry and materials research that will lead to affordable, scalable batteries.

The Department of Energy is developing a range of technologies at our national labs, like carbon capture and advanced nuclear reactors, that have the potential to reduce greenhouse gas emissions around the world and ensure American energy dominance.

It is unrealistic to limit our future energy mix to only renewable energy. As we’ll hear from one of our witnesses, Mr. Michael Shellenberger, nuclear power is an incredible resource that is and will continue to be a crucial piece of the puzzle in addressing climate change.

Nuclear power is clean, safe, reliable, and growing more affordable by the day. Private companies are developing advanced reactors that provide clean, carbon-free power. With support from DOE, these advanced technologies could provide cheap, reliable, emissions-free power around the world.

But in order for that to happen, we can’t let scare tactics allow us to abandon this promising technology.

America led the world in coal, oil, and gas. Now we must lead again, and partner with industry to develop breakthrough energy technologies and make our existing energy sources cleaner and more affordable.

Prioritizing investments in basic science and energy research will revolutionize the global energy market and dramatically reduce greenhouse gas emissions.

We have the tools and expertise to take on the next generation of technology challenges – including a changing climate. We have a common goal, and I’m more encouraged than ever that we are on the right track. But I ask my colleagues: let’s move on from the finger pointing and focus on tangible innovation and realistic solutions.

I thank our witnesses for being here today and I look forward to a productive discussion.