



COMMITTEE ON
SCIENCE, SPACE, & TECHNOLOGY
Lamar Smith, Chairman

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Statement of Chairman Lamar Smith (R-Texas)
Energy Innovation: Letting Technology Lead

Chairman Smith: Good morning. Today we will hear from a panel of private sector innovators who are inventing the way to bring next generation technology to the energy market.

New technology provides solutions to today's energy and environmental challenges. Instead of government mandates, more regulations, and higher energy taxes, the federal government should invest in the research that allows innovative technology like advanced nuclear power and energy storage to succeed. We should all agree on these technology-driven energy solutions.

Unfortunately, nuclear power, which is the only baseload, emissions free source of electricity, is still criticized by environmental activists today.

If those on the left are truly interested in solving some of America's environmental challenges, they would endorse and promote these critical new technologies.

This hearing will consider the value of federally funded basic and early stage research as well as the research infrastructure at universities and national labs. These investments provide valuable expertise that would otherwise be unavailable to industry.

The Science Committee has jurisdiction over the \$9 billion R&D portfolio at the Department of Energy, which funds basic science and energy research. Fundamental research conducted by the DOE Office of Science has led to groundbreaking discoveries about our universe, innovative new technologies, and private sector achievements across the energy and manufacturing industries.

Much of the technology we will hear about today is rooted in the basic science discoveries made at DOE national labs. Industry can build on these early stage research discoveries, and use research infrastructure to create market-ready, next generation energy technologies.

For example, our witness Dr. Jacob DeWitte, who started his career as an intern at Sandia National Lab, is the co-founder of Oklo, a privately funded start-up company working to commercialize a small advanced nuclear reactor design.

Dr. DeWitte's compact fast reactor design is ideal to replace the diesel generators used in rural areas, industrial operations, or even on military bases. This reactor was

developed using early stage nuclear energy research conducted by DOE national labs.

It will have zero emissions and could lower costs for consumers by up to 90%. If environmentalists are serious about reducing emissions, they should champion advanced nuclear reactors as a key part of a clean energy future.

At UCLA, Dr. Gaurav Sant and his team have used basic research in chemistry, materials science, engineering, and high performance computing to design a technology that converts carbon dioxide into a cement-like material.

This technology could take captured carbon dioxide from power plants and turn it into a usable, cost effective material. This innovative technology has the potential to revolutionize the market for CO₂, turning a waste product into profit.

Even large companies can benefit from basic research.

AES Energy Storage is revolutionizing renewable energy through the deployment of batteries for the electric grid. AES's most recent project in California is capable of storing up to 120 megawatt hours of energy produced by wind and solar power. This is the energy equivalent of serving 20,000 customers for four hours.

Basic and early stage research in electrochemistry can improve the efficiency and resiliency of the thousands of batteries used in these facilities.

This Committee authorized exactly this kind of basic and fundamental research in the DOE Research and Innovation Act, which passed the House earlier this year.

Enabling these private sector innovators to develop the most competitive ideas is essential to ground-breaking energy technology.

If we want to protect the environment, lower costs for consumers, and increase our energy potential, innovative technology is the solution.

And note that during the White House "Made in America" week, we have three American companies testifying on innovative technology.

By allowing the market – not the government – to determine the best approach, we can develop technology that will increase energy efficiency, reduce environmental impact, and save the American people money.

America's energy history is full of innovative technologies that have unlocked new possibilities. It is technology, not regulation, that improves efficiency, lowers costs, and reduces the environmental impact of all kinds of energy.

For too long the government has picked winners and losers through regulation, federal loans and loan guarantees, or market-distorting subsidies. It is time to let the scientists,

researchers, engineers, and inventors ensure that the United States remains the world technology leader and is better able to address environmental concerns.

As we shape the future of the Department, our priority must be basic energy research and development that only the federal government has the resources to pursue. This will allow private sector innovators, like the witnesses who join us today, to take ground-breaking energy technology to the marketplace, creating jobs and growing our economy.

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