

## Acting Chair Lizzie Fletcher (D-TX)

Subcommittee on Energy Field Hearing: The Future of Advanced Carbon Capture Research and Development

Friday, November 22, 2019

Thank you, Mr. Weber. I am grateful for your work to bring us together for this hearing today on the future of advanced research and development on carbon capture, and it is fitting that we meet here in Houston.

Houston is a place of big ideas – it always has been. Perhaps more important, it is a place where those big ideas become realities. And the subject of today's hearing is a very big idea that is becoming a reality.

Here in Houston, we know energy. When it comes to energy innovation, this is its home. Right now, we are experiencing an energy renaissance, one that has reduced costs and increased investment here and around the world.

Texas is, as we all know, the largest producer of oil and natural gas in the country. Texas also is the leader in developing wind energy in the country. We have installed three times as much wind power as the next leading state. Texas is also the sixth leading state in solar energy capacity.

Here in Houston, we also know that climate change represents a real and growing threat. We are already experiencing its effects. And we know that reducing emissions is key to addressing climate change.

The advances in technology that have transformed our energy economy have substantially reduced U.S. carbon emissions. Replacing coal-fired plants with natural gas plants has contributed more to the reduction of domestic carbon emissions than any other effort. Developing and utilizing more renewable energy sources is another critical part of our overall effort.

But we need to do more.

That is why I am so glad that we are here today to talk about carbon capture research and development.

The Intergovernmental Panel on Climate Change *Special Report on Global Warming of 1.5 degrees Celsius* makes clear that the use of carbon capture technologies will be essential under just about any plausible scenario to sufficiently limit our global temperature increase.

Carbon capture, utilization, and storage provides an important pathway to meeting our energy needs and reducing our carbon emissions. While these technologies are promising, we need more research and development to reduce the costs of these technologies and to deploy them at the scale needed to meet our climate mitigation goals.

That is why I worked closely with my colleagues, including our Committee Chairwoman Johnson and Subcommittee Chairman Lamb and Mr. Veasey, to bring forward the Fossil Energy Research and Development Act to expand Department of Energy (DOE) research, development, and demonstration programs including carbon capture technologies for power plants, including technologies for coal and natural gas; carbon storage, including to develop and maintain mapping tools and resources that assess the capacity of geologic storage formations in the United States; carbon utilization, including to assess and monitor potential changes in the life cycle of carbon dioxide and other greenhouse gas emissions; advanced energy systems to reduce emissions from and improve the efficiency of fossil fuel power generation; developing and assessing methods to separate and recover rare earth elements from coal and byproduct streams; identifying the environmental, health, and safety impacts of methane hydrate development; carbon dioxide removal from the atmosphere; methane leak detection and mitigation; and identifying and evaluating novel uses for light hydrocarbons produced during oil and shale gas production.

As we see consistently on the Science, Space, and Technology Committee, there is an important and valuable partnership between government, research institutions, and industry that is critical to advancing this effort.

I look forward to hearing from our expert witnesses today about how this important technology works and what we in the federal government can do to make smarter investments and assist in developments that ensure that we remain the global energy leader and as the global clean energy leader, while addressing the challenges before us to reduce carbon emissions.

I want to thank all of you here today for joining us for this hearing and I look forward to an excellent discussion.