

Statement of
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Nominee for the Position of
Under Secretary for Science and Energy
of the United States Department of Energy
Before the
Committee on Energy and Natural Resources
United States Senate
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Chairman Manchin, Ranking Member Barrasso, and distinguished members of the Committee, thank you for the opportunity to appear before you.

I am honored to appear before you today to discuss my nomination to serve as the Under Secretary for Science and Energy at the Department of Energy (DOE). As a research scientist, I have had a long association with DOE, starting with a summer research internship at Lawrence Berkeley National Laboratory when I was 21. Later, I received DOE funding for my own research, and I served in leadership roles on many of the Department's basic and applied-science advisory boards. From my visits over the years to DOE laboratories, I know firsthand that they are indeed the crown jewels of the nation's research and innovation domain. These labs, along with thousands of initiatives funded by competitive DOE grants, are achieving the groundbreaking discoveries and breakthroughs that long have made United States the envy of the world in science and engineering.

Growing up on a farm in Kansas, I could never have envisioned the career opportunities I've experienced over the years. In fact, as a little girl, I could dream no bigger than just going to college, which was my parents' aspiration for me because the Depression had deprived them of that dream. My gift for math opened up possibilities in science and beginning with my undergraduate chemistry studies at Kansas State University, my world — and my worldview — have been expanding ever since.

My research work has been laser-focused, quite literally. At the University of Oregon lab, my team and I use lasers to study issues relevant to energy production, environmental remediation, and atmospheric chemistry. My work has resulted in many publications with many great students, and I have been honored to receive awards for our achievements. But science has also given me countless opportunities to serve on national advisory boards, as presidents of scientific societies, as a U.S. State Department Science Envoy, and as the founding director of a grass-roots organization that has helped thousands of women scientists and engineers around the globe. These experiences have provided me with a deep understanding of the scientific and engineering enterprise in this country, but even more, its power to solve our problems and improve our lives.

I come before you as the scientific challenges for our nation and our world have never been greater. I believe the magnitude of the solutions outweighs even the Manhattan Project as climate change poses an existential threat to the entire planet. I have been to all 50 states and to countries on every continent. I have seen the human cost of climate change: the growing shortage of clean water sources, job displacement, and inequities in access to energy. But I also have experienced the boundless energy and creativity of our human resources. I deeply understand our capabilities, and I know solutions are within reach.

If I am confirmed to lead DOE's science and innovation ecosystem, I plan to set several priorities that will muster our resources and place the United States at the forefront of these solutions:

I want to ensure that we continue our pre-eminent role in every step of the process of innovation, from making fundamental discoveries, to developing new energy technologies, to ramping up the scale to mass production and deployment. This is not a relay race, where the baton is passed off from one stage to the next. As challenges arise along this journey, we need the discovery science to be ready to intercede in the technological development and deployment. DOE's National Laboratories, user facilities, Frontier Energy Research Centers, ARPA-E and others are uniquely situated around the country for such long-haul mediating efforts.

I want to strengthen partnerships with other federal agencies, as well as private technology and energy enterprises in this country and around the world. With the urgency of the tasks before of us, we must resist the impulse to compete against one another and develop collaborations that will move us faster and farther together. I have been honored to serve as chair of the DOE's Basic Energy Sciences Advisory Committee, as an appointee by both President Obama and President Trump to the National Science Board and have worked with leaders in the laboratories of the departments of Defense and Commerce. I look forward to using these leadership experiences to strengthen the connections among our vast national community of innovators.

If confirmed, I also will foster a dynamic science and technology workforce that reflects the diversity of our population. It is well proven that innovation is fueled by diverse perspectives, and creativity flourishes in an inclusive workplace. Much of my career has been dedicated to this issue, particularly in support of women and minority scientists. I have a deep understanding — and a passion — for what is needed to identify, train, and support the best and the brightest among us. I look forward to ensuring that DOE laboratories and the programs the Department funds become a model for diversity.

In the lab, "synergy" is a scientific term, but in this role, I plan to employ it in very human terms. We are stronger, smarter, and simply better when we all seize the possibilities together. And there is no better place on this planet for scientific discovery and innovation than a country built on the premise of joining forces.

Thank you for allowing me the opportunity to appear here today. I look forward to your questions.