COMMITTEE ON
SCIENCE, SPACE, AND TECHNOLOGY
REPUBLICANS Frank Lucas, Ranking Member

Opening Statement of Ranking Member Frank Lucas

Energy Subcommittee Hearing: "Climate and Energy Science Research at the Department of Energy"

May 4, 2021

Thank you, Chairman Bowman for hosting this hearing, and thank you to all our witnesses for being with us this afternoon.

The Department of Energy is the largest federal sponsor of basic research in the physical sciences and is a world leader in science and technology innovation. Through its Office of Science and National Laboratory system, the Department supports research across scientific disciplines and plays a lead role in the U.S. research and development ecosystem.

Today, we have an opportunity to examine the activities of two Office of Science programs, in Basic Energy Sciences (BES) and in Biological and Environmental Research (BER). These two programs cover a wide range of high priority R&D initiatives: from advanced materials science and biochemistry, to geoscience and climate systems modeling. The scientific impact of B-E-S and B-E-R cannot be overstated.

BES funds basic research at more than 150 U.S. academic, private sector, and nonprofit institutions, and its user facilities support approximately 16,000 scientists and engineers each year. Over the past 40 years, BES research has led to major discoveries in solar cells, battery technologies, advanced transportation materials, manufacturing processes, nuclear power, and LED lighting.

The other program we're considering today, BER, has helped to redefine modern biotechnology through the Human Genome Project, and since the 1950s has driven innovation in cutting-edge U.S. environmental systems science. Today, B-E-R is accelerating the capabilities of complex earth systems models using large scale data and high-performance computing.

This is the kind of fundamental research that will not only enable the development of next-generation technologies, but will also support U.S. competitiveness in science and establish our global leadership in industries of the future. This is why my bill, the

Securing American Leadership in Science and Technology Act (SALSTA), which creates a long-term strategy for investment in U.S. research and infrastructure, includes a comprehensive reauthorization of the DOE Office of Science, roughly doubling funding for programs like BES and BER over ten years.

SALSTA also provides specific funding for key DOE national laboratory user facilities, like the light sources and neutron sources that enable B-E-S work. And it establishes a program for the development and construction of B-E-R user facilities.

I'm also proud to join my colleagues on two bills to strengthen the work done by BER and BES.

Last week, Randy Weber, the Ranking Member of this Subcommittee, introduced the Computing Advancements for Materials Science Act, which creates a program at DOE to apply advanced computing practices to materials science research challenges. And my colleague Representative Baird of Indiana introduced a bill today to reauthorize bioenergy research centers and to create user facilities to help us address complex challenges in environmental science. These bills are important steps forward in improving our nation's clean energy research.

This hearing comes at a critical time in our conversation on the state of our Federal R&D enterprise. Lately, we've heard a lot of talk about big investments in American innovation. But at this moment, as we face very real threats to our global scientific leadership, only serious proposals can be considered. Maintaining U.S. leadership in science and technology will require a shared commitment to prioritize DOE and its Office of Science. Let me be clear – any American R&D investment plan that lacks this commitment is fundamentally flawed.

The Science Committee may not agree on everything, but we have always been united in our support for the Office of Science. This Congress, I look forward to continuing to work with Chairwoman Johnson and my friends across the aisle on bipartisan Office of Science legislation that will make a strong commitment to the success of programs like BER and BES, and ensure the long-term stability of our international leadership in science.

I once again want to thank our witnesses for being here today. I look forward to a productive discussion. Thank you Chairman Bowman and I yield back the balance of my time.