



U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON
SCIENCE, SPACE, & TECHNOLOGY

Opening Statement

Chairwoman Eddie Bernice Johnson (D-TX)

Energy Subcommittee Hearing:
Climate and Energy Science Research at the Department of Energy
May 4, 2021

Chairman Bowman, thank you for holding this important hearing today, and thank you to our esteemed panel of witnesses for being here.

Today we meet to discuss the pioneering research supported by the Department of Energy's Office of Science, and how the national laboratories, major facilities, and cutting-edge programs that it stewards are leading our nation to a cleaner energy future.

The Office's Basic Energy Sciences program, or BES, is one of the nation's largest sponsors of research in the physical sciences, supporting research at nearly 170 universities, laboratories, and other research institutions throughout the U.S. The program also currently oversees 12 national user facilities, two Energy Innovation Hubs, and 41 Energy Frontier Research Centers tasked with finding solutions for our nation's greatest energy challenges.

Many significant innovations can be traced to decades of BES research, such as LED lighting; efficient solar cells; better batteries; improved production processes for high-value chemicals; and stronger, lighter materials for transportation, nuclear power, and national defense applications. The program is also instrumental in fostering the next generation of scientists, which echoes the importance of our nation's continuous support of STEM education from K-12 through the doctorate degree level.

Not to be overshadowed, the Biological and Environmental Research program, or BER, seeks to equip our leading researchers and policymakers with the knowledge and tools necessary to better understand and predict the behavior of biological, climate, and other environmental systems. BER supports atmospheric and ecosystem research at all levels—from microscopic to field-scale. This work is carried out by scientists at universities and other research institutions across the nation, and is further enabled by two state-of-the-art user facilities, the Atmospheric Radiation Measurement facility and the Environmental Molecular Sciences Laboratory.

The research supported by BER will ultimately provide us with a more holistic and predictive understanding of our climate and environment that accounts for regional and temporal variations and considers the complex impacts they have on human behavior. That, in turn, will enable us to better anticipate shifts in our climate and to design and develop more efficient and resilient energy generation systems and infrastructure.

Today's witnesses should know that it is a priority of this Committee to strengthen and support the scientific capabilities of our national labs and universities. So, I look forward to our distinguished panelists sharing their perspectives on not only future research pathways to solve grand challenges, but also on how we can expand access to the unique capabilities of these critical facilities and programs. Thank you. I yield back.