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

Ranking Member Jamaal Bowman (D-NY)
of the Subcommittee on Energy

Unearthing Innovation: The Future of Subsurface Science and Technology in the United States

July 26, 2023

Thank you, Chairman Williams, for convening this hearing today. And thank you to our panel of expert witnesses for appearing before the Committee to talk about a topic that is relevant to several technologies that we must use to enable our clean energy future. Understanding the natural processes of the earth and how we can sustainably harness its resources is essential to human well-being. And a lot of our unanswered questions lay in the rock and soil beneath our feet, in the subsurface of the earth.

There, too, can be found one of our most promising technologies for building a climate-safe future. Geothermal technology allows us to utilize the warmth naturally captured in the subsurface of the earth to produce clean energy. We can even use that heat directly to enable industrial processes that need high temperatures, or to heat our homes. Many communities in my district are pursuing the creation of thermal energy networks to efficiently bring geothermal power to clusters of public buildings and affordable housing. I am pleased to see President Biden's administration embrace geothermal energy and am proud to have joined with my colleagues here on the Science Committee to support efforts to advance the technology. I also understand that there has been a recent breakthrough in geothermal technology development that one of our witnesses here today can talk extensively about, and I greatly look forward to that discussion.

Historically, a lot of the subsurface technology R&D supported by the Department of Energy has focused on extracting fossil fuels from the ground. We have learned a great deal on how to harness resources in the subsurface which can thankfully now be applied to clean energy, as with geothermal. This body of knowledge can also help us assess if and how carbon can be safely stored underground. But as we work to transition to a new, clean energy system, we must build in principles of equity and justice at every step of the process. And I'm happy to see the President focusing on exactly that through his Justice 40 initiative, which ensures that 40 percent of the benefits from our federal investments, including science R&D, flow to the communities that have historically been hit hardest by fossil fuel pollution.

The Department of Energy has also stewarded decades of subsurface research related to understanding natural terrestrial processes, such as the carbon and water cycles, and on applying this science to help understand how Manhattan Project experiments impacted the environment. This emphasis on biogeochemistry and materials science not only helps us to understand our

responsibility to manage legacy contaminants, but also helps us further the earth sciences in general and their application to climate action. This research that the Department supports is part of a global effort to understand and reduce the damage humans are causing to the earth. It is critical that we continue to fund these federal investments in climate science.

With that, I want to say thank you again to Mr. Williams and to our panel of distinguished witnesses for putting on this hearing today, and I yield back.