OPENING STATEMENT Ranking Member Marc Veasey (D-TX) of the Subcommittee on Energy

Committee on Science, Space, and Technology Subcommittee on Environment Subcommittee on Energy "Geoengineering: Innovation, Research, and Technology" November 8, 2017

Thank you, Mr. Chairman. We have an excellent panel of witnesses and I am really looking forward to hearing their insights.

Despite numerous claims, Geoengineering is not the answer to 150 years of polluting our planet at an unsustainable rate. To slow the impact of climate change and eventually reverse its effects, our first priorities must be mitigation and adaptation.

The most pressing global challenge we face is climate change. Solving this challenge requires every nation to find effective solutions to reduce our emissions and set us on a far more sustainable path. The scientific community has made clear that climate change will continue to be an issue for the rest of this century and beyond. The long-term nature of this challenge is the reason we need to investigate every possible solution in addition to implementing mitigation and adaptation strategies. Geoengineering, in particular, is in its very early stages and more research is required to expand our understanding of its risks and potential benefits.

During our discussion today, I hope the witnesses can provide us their recommendations on what types of research the federal government should invest in for the benefit of all Americans. These recommendations will help shape our national investments in climate modeling, Earth systems research, laboratory experiments, and potential small-scale field tests in the coming decades.

On that note, I would like to stress to my colleagues the importance of supporting the full spectrum of research at the Department of Energy. In particular, activities within the Office of Science's Biological and Environmental Research program (BER) are crucial to expanding our knowledge of Earth systems and climate modeling. Funding this important research can have numerous benefits, including advancing the field we are discussing today. It is unfortunate that the Trump Administration's budget proposal included a 43% cut to BER, with major cuts and outright eliminations of key activities within the Earth and Environmental Systems subprogram. These cuts would hurt the emerging field of geoengineering, but more importantly, they would cripple our ability to understand that the range of factors driving global temperatures upward.

If you are a climate skeptic, then you must support more research to expand our collective understanding. If you cannot support that, then you are choosing to ignore the facts. Frankly, we have no time to ignore the mounting scientific evidence. We need productive dialogue if we want to better understand this challenge and embrace the necessary solutions.

In addition to supporting the key research activities that underpin geoengineering, there may also be additional federal investments that Congress should consider in order to have an impact in the near future. Carbon dioxide removal strategies are a generally less-risky form of climate intervention that may prove useful in our efforts to fight the impacts of climate change. These strategies come in the form of bioenergy with carbon capture and sequestration, direct air capture technologies, enhanced geological weathering, and land use management, to name a few. The National Academies examined carbon dioxide removal in 2015 and concluded that this area is ripe for further federal research investments.

For this reason, I included this critical research in a draft bill that I will be introducing in the coming weeks – the Fossil Energy Research and Development Act. In addition to authorizing key R&D activities for carbon capture, utilization, and sequestration activities, the bill would also instruct DOE to create a research program on carbon dioxide removal. I hope that many of my colleagues on both sides of the aisle will join me as a cosponsor of this legislation. The bill would push the Department of Energy to prioritize the important work of environmental mitigation within the Office of Fossil Energy. The public health <u>and</u> economic benefits are considerable and numerous. I hope this bill can be a bipartisan path forward to an area of research at DOE that needs it.

I look forward to working with my colleagues on these issues. Thank you again, Mr. Chairman and I yield back the balance of my time.