



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

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## Opening Statement

**Chairwoman Eddie Bernice Johnson (D-TX)**

Joint Research & Technology and Environment Subcommittee Hearing:  
*Assessing Federal Programs for Measuring Greenhouse Gas Sources and Sinks*

June 23, 2022

Good morning. Thank you everyone for joining us for this joint subcommittee hearing. I especially want to thank Chairs Stevens and Sherrill for holding today's hearing. This is an important and timely topic.

Last November, I attended the 26th U.N. Conference of Parties, or COP 26, in Glasgow with Speaker Pelosi and many of my colleagues. Throughout the conference, we consistently heard about the need to keep within 1.5 degrees of warming. This Committee has worked tirelessly to pass legislation that ensures we develop the tools and technologies to address climate change and its worst impacts.

Ultimately, however, we will need to enact policy to regulate greenhouse gas emissions. And for any such policy to be successful, we must have high-quality and accurate measurements of these emissions. Measurement, reporting, and verification will be the backbone of meeting obligations and holding parties accountable at the local, national, and international level, including under the Paris Climate Agreement.

But ensuring the accuracy of these measurements is a difficult challenge. Earlier this month, this Committee had a hearing about methane, during which witnesses testified that oil and gas companies are failing to measure and mitigate methane leaks. A 2021 study showed that many U.S. cities were dramatically undercounting their greenhouse gas emissions. Failing to accurately measure our emissions will undermine our ability to achieve effective climate solutions.

Fortunately, many of our Federal science agencies are working together to address this challenge. Some of our agencies, like the EPA, focus on a bottom-up approach, analyzing ground-level sources of greenhouse gases. Others, in particular NASA and NOAA, collect data top-down through the atmosphere. NIST has developed a greenhouse gas measurement framework for urban emissions, using both top-down and bottom-up measurements to calibrate one another.

In order to reach our goal of trusted measurement frameworks, new technologies will be needed to improve the accuracy of greenhouse gas measurements while bringing down their associated costs. Creating novel measurement capabilities will in turn require a workforce with the skills to operate them. And finally, we must continue to support and improve domestic and international partnerships toward our common goal of addressing climate change.

Today's discussion will rightfully focus on the science and technology needs to advance this field. However, we mustn't forget the public health impacts of greenhouse gas emissions. Communities of color are disproportionately vulnerable to the impacts of climate change caused by increased greenhouse gas emissions. Improving our ability to accurately measure greenhouse gases will in turn improve public health outcomes in these communities. The most vulnerable communities must be prioritized when improving our greenhouse measurement programs

I am excited to hear testimony from expert witnesses representing each of these agencies about their unique roles and activities related to greenhouse gas measurement. I am particularly interested to hear if the agencies need any new authorities or funding to support their important work.

Thank you, Chairs Stevens and Sherrill. I yield back the balance of my time.