



COMMITTEE ON SCIENCE SPACE & TECHNOLOGY

REPUBLICANS

Opening Statement of Research & Technology Subcommittee Ranking Member Randy Feenstra

Joint Research & Technology and Environment Subcommittees Hearing – Assessing
Federal Programs for Measuring Greenhouse Gas Sources and Sinks

June 23, 2022

Thank you, Chairwoman Stevens and Chairwoman Sherrill for holding today's hearing.

And thank you to our witnesses for your participation here today.

We're here to discuss measurement and monitoring of greenhouse gases, which can improve the tools we have available to reduce and capture emissions.

Importantly, we're not just going to discuss emissions, but also sinks, or the processes that remove greenhouse gases from the atmosphere.

Once such example is the land use and forestry sector, which offset total U.S. greenhouse gas emissions by 13% in 2020.

This is an important contribution to emissions reductions, and federal R&D can help us make it even better.

For example, we know there's potential to improve carbon sequestration in cropland through conservation tillage and other practices.

Without accurate data, however, it's difficult to make significant progress in any greenhouse gas reduction efforts.

So federal science agencies are working with academia and industry to improve the monitoring, measuring, and verifying of sources and sinks of greenhouse gas emissions.

Better monitoring and measurement technologies give us the ability to implement more efficient and cost-effective practices to reduce greenhouse gas concentrations.

I'm encouraged by the work being done today and I see great potential.

For instance, the National Institute of Standards and Technology (NIST) is using an innovative approach through its Greenhouse Gas Measurement Program.

While most cities estimate greenhouse gas emissions indirectly through economic data, such as the number of miles that vehicles travel within a city, NIST has developed atmospheric observational tools to measure emissions directly.

By combining the indirect and direct observations, scientists can make better estimates for emissions and provide more useful information to stakeholders.

NIST also operates an Urban Greenhouse Gas Measurements Testbed System, which develops and evaluates the performance of emissions measurement capabilities in Indianapolis, the Los Angeles Air Basin, and the Northeast Corridor.

In order to help measure, monitor, and report greenhouse gas emissions in an accurate, standardized, and transparent manner, NIST has also initiated a documentary standards effort.

This work will help develop best practices that improve industry's ability to use measurement tools and quantification methods to reduce greenhouse gases in the environment.

Eventually, the hope is that they will lead to the development of technical standards to improve the data quality of greenhouse gas emissions reports.

NIST also works with other Federal agencies through the Greenhouse Gas Monitoring and Measurement Interagency Working Group to coordinate existing efforts.

That coordination is critical. We can't afford to have agencies duplicating work or worse – providing conflicting information.

So I'd like to emphasize to our witnesses today how important it is that you continue to coordinate research activities moving forward to maximize our resources.

In addition to learning more about the work being done to better understand lifecycle greenhouse gas emissions, I hope to learn more today about where measurement and data challenges exist, and where research gaps remain.

I look forward to hearing your perspectives on that.

I want to thank our witnesses again.

And Madam Chair, I yield back.