United States House of Representatives Select Committee on the Climate Crisis

Hearing on April 30, 2019 "Solving the Climate Crisis: Drawing Down Carbon and Building Up the American Economy"

Questions for the Record

Christopher Guith Acting President Global Energy Institute U.S. Chamber of Commerce

The Honorable Garrett Graves

1. Has the Chamber's position on climate change changed?

The Chamber has long supported sensible action to address anthropogenic climate change, with special emphasis on the fundamental role technology, supported by sound, durable policies, will play in mitigating it and adapting to it. That has not changed. We welcome the renewed emphasis on bipartisan solutions that can preserve American jobs and economic growth, maintain the international competitiveness of our businesses and industries, increase energy access to the nearly one billion people living in energy poverty, and improve the environment.

America's business community is ready, willing, and able to provide the solutions that will continue to reduce emissions while growing the economy. Our companies and entrepreneurs will continue to lead by bringing innovation, technology, and ingenuity to this challenge, just as they have done with other environmental challenges. With a sensible policy environment that plays to America's strengths and business leadership, we can continue to make our economy cleaner and stronger by leveraging the America's edge in energy, technology, and innovation going forward. The Chamber looks forward to working with members on both sides of the aisle to fashion climate solutions that are sensible, effective, and durable.

2. It was mentioned that the NERA report the American Council on Capital Formation and the Global Energy Institute sponsored examining the costs of meeting the Obama Administration's pledge under the Paris Agreement has been "debunked." Could you respond to this statement.

The NERA report was a solid and in many respects groundbreaking piece of analytical work. First, the business community supports the Paris framework, and continues to do so. It should be noted that had the Obama Administration laid out a plan to meets its Paris pledge and conducted an economic analysis of it, hiring NERA to do such an analysis would not have been necessary. Concerning the report itself, reproduced below is a response to critics of the report that GEI posted in June 2017 and that should put to rest any claims that it has been debunked:

June 3, 2017 Setting the Record Straight on the NERA Report By Dan Byers & Stephen Eule

Summary

Over the last few days, there has been a lot of attention given to a report that the Energy Institute co-sponsored that examined the costs of meeting the Obama Administration's Paris pledge. The report by NERA Economic Consulting, Impacts of Greenhouse Gas Regulations on the Industrial Sector, examines the costs of filling the gap between what President Obama committed to—a 26% to 28% reduction in net greenhouse gas emissions by 2025 compared to 2005—and the plans he proposed to accomplish it.

President Trump cited some of the results of the study. Some media outlets and others have mischaracterized the report and its findings. Here we set the record straight on two key critiques. (For more in-depth analysis read beyond this summary.)

<u>The first erroneous claim</u> is that the policies modeled by NERA were based on "worstcase assumptions" that would "inflate the cost of meeting U.S. targets under the Paris accord."

This is not true.

The NERA study generated **five unique scenarios** using realistic and reasonable cost estimates based on Department of Energy baseline forecasts – not the one scenario with "worst-case assumptions" as has been claimed. The data from the study cited by President Trump were from the scenario that most closely followed the Obama Administration's regulatory approach. In addition, other analyses—by Hillary Clinton's campaign and the Energy Information Administration, for example—show impacts of meeting the goal similar to the range of outcomes in the NERA study.

The second erroneous claim is that study does not count the economic benefits from constructing and operating new renewable generating facilities. <u>*This claim, too, is false.*</u>

The NERA model used in the study does NOT ignore positive economic contributions from renewable energy projects. It simulates <u>ALL</u> economic interactions in the U.S. economy, **including the economic benefits from renewable energy projects**. The model calculated benefits from the building and operating of renewable energy projects. However, in the model, these economic benefits were outweighed by increased costs.

The model design is discussed extensively in the report. It makes it clear that it captures all types of responses and benefits from the various regulatory decisions that would be made to meet the pledge.

The reason the study was conducted in the first place was to undertake the analysis the Obama Administration failed to do before and after it made its Paris pledge. It makes sense to at least understand what the impacts of that pledge would be and how it might be achieved. The report is transparent in its assumptions and its data, explains its methodologies, and provides multiple scenarios which take into account both the benefits and costs of the meeting the pledge.

There will be considerable debate about the President's decision, but criticism of the NERA report is unwarranted.

We have addressed other critiques of the NERA report here <https://www.globalenergyinstitute.org/nrdc-swings-and-misses> and here <https://www.globalenergyinstitute.org/wri-also-swings-and-also-misses>, and readers interested in a more detailed response to the critiques describe above should see below.

Detailed Analysis

Claim One: The policies modeled by NERA were based on "worst-case assumptions" that would "inflate the cost of meeting U.S. targets under the Paris accord." This is <u>false</u>.

This argument isn't new—some environmental groups made it when the report was first released. While we've addressed it here and here, let's take another stab at it.

First and foremost, the NERA report didn't just look at one "worst case" scenario—it actually examined five, including one that set a price on carbon as a way to achieve the emissions reduction the U.S. has committed to. All of those scenarios produced different results, which were included in the report.

The numbers cited by President Trump were specific to one particular scenario, which reflected the regulatory approach being taken by the Obama Administration and that most likely would have been taken by a Clinton Administration has Hillary Clinton won the election.

There is solid evidence to back this up. The Obama Administration's fiscal year 2015 budget request for the Environmental Protection Agency included funding to develop this scenario—new greenhouse gas regulations on industrial sectors. And in official meetings with stakeholders, the Obama Administration did not hide its intention to regulate industrial emissions. *InsideEPA* reported on White House meeting where, "administration officials were candid in their plans to regulate manufacturing GHGs to address an emissions 'gap' between current and proposed climate rules and President Obama's INDC pledge to cut GHGs 26 to 28 percent from 2005 levels by 2025." While we're on the subject of assumptions, critics have also asserted that the NERA results are out of line with result from other analysts. That's not the case.

During the election, it turns out that the Clinton campaign undertook modeling to estimate the costs of closing the Paris gap. It set a greenhouse gas fee at \$42 (2012\$) per ton of carbon dioxide from energy use in 2017 and increased it by roughly 2% a year thereafter. This study found significant economic impacts: "In our analysis, for example, a \$42/ton GHG fee increases gasoline prices by roughly 40 cents per gallon on average between 2020 and 2030 and residential electricity prices by 2.6 cents per kWh, 12% and 21% above levels projected in the EIA's 2014 Annual Energy Outlook (AEO) respectively. Average household energy costs would increase by roughly \$480 per year, or 10% relative to the levels projected in EIA's 2014 Outlook."

The NERA results also are consistent with those from modelling runs performed by EIA under President Obama. Among the many side case modelling runs in the AEO 2016 was the "Industrial Efficiency High Incentives" side case, which EIA describes this way: "Uses a price on carbon dioxide emissions as a proxy for higher energy costs as a way to increase energy efficiency in all industries except refining. The carbon dioxide price is phased in gradually, starting in 2018, reaching \$35.00 in 2023 (2015 dollars per metric ton), and increasing by 5% per year thereafter."

Why is this model run interesting? Because it produces cuts in economy-wide energyrelated carbon dioxide emissions in 2025 of about 30% below the 2005 level, entirely consistent with President Obama's Paris economy-wide greenhouse gas pledge.

When compared to EIA reference case model run (without the Clean Power Plan), this scenario produces the following results (all dollar figures in 2015\$):

- Change in GDP in 2025: -\$269 billion Cumulative Change in GDP from 2018-2025: -1.92 trillion
- Change in Employment: Trough of -1.4 million in 2023 and -955,000 in 2025
- Change in Average Electricity Price in 2025: +19%
- Change in Cumulative Electricity Expenditures from 2018-2025: +\$350 billion
- Change in Average Gasoline Price in 2025: +11%

As these other studies make plain, the NERA study we co-sponsored is not an outlier by any extent of the imagination.

Claim Two: The study guilty of not counting the economic benefits from constructing and operating new renewable generating facilities. This claim is false.

The NERA model used in the study simulates ALL economic interactions in the U.S. economy, including the economic benefits from renewable energy projects. The model calculated benefits from the building and operating of renewable energy projects, but in

the model these were far outweighed by higher costs on producers, consumers, and the overall economy due to broader greenhouse gas regulations on other sectors.

The model design and description is detailed extensively in the report. One section notes the following: "Throughout the time horizon of the module run, in order to meet any increase in electricity demand, increase in reserve margin requirements, and/or replacement of retired generation, the electric sector must build new generating capacity. Future environmental regulations, system constraints (e.g., reserve margin requirements), capital costs, and forecasted energy prices influence which technologies to build and where. For example, if a national RPS policy is to take effect, some share of new generating capacity will need to come from renewable power. On the other hand, if there is a policy to address emissions, it might elicit a response to retrofit existing fossil-fired units with pollution control technology or enhance existing coal-fired units to burn different types of coals, biomass, or natural gas. All of these policies may also affect retirement decisions. <u>The NewERA electric sector module endogenously captures all of</u> these different types of decisions." [Emphasis added]

So that criticism doesn't hold water, either.

3. Concerning H.R. 9, are the Nationally Determined Contributions other nations have offered up part of the Paris Agreement.

No. Parties to the Paris Agreement have a binding obligation to submit periodically Nationally Determined Contributions (NDC). The goals in the NDCs themselves, however, are not binding in any way, and they are not part of the Paris Agreement itself (unlike pledges under the Kyoto Protocol, for example, which were negotiated and appended to the treaty).