

Chairman Conor Lamb (D-PA)

Subcommittee on Energy Hearing: Advancing the Next Generation of Solar and Wind Energy Technologies May 15, 2019

Good morning and thank you to our great panel of witnesses for being here today. I am excited to hear your valuable perspectives on the importance of federal support for solar and wind energy research, development, and demonstration activities and the next steps we need to be taking.

Solar and wind energy reduce air pollution, support thousands of American jobs, and can reduce energy costs to our constituents across the country. The solar and wind energy industries have grown tremendously over the past 10 years, and the prices for their power have fallen dramatically. In the last decade the price for wind energy fell 69%, and the price for solar fell 88%. These cost reductions have made wind and solar mainstream, resulting in cleaner air, a burgeoning green-collar sector, and lower utility bills. I am particularly excited to note that the solar and wind energy industries now employ over 350,000 Americans.

These industries, like many, have greatly benefited from federally funded R&D. It was the Department of Energy that established the Solar Energy Research Institute back in 1977, which later expanded and became the National Renewable Energy Laboratory, commonly known as NREL [pronounced EN-REHL]. NREL is responsible for setting many of the early records in solar photovoltaic panels' efficiencies and demonstrating some of the first concentrating solar power projects. NREL also houses the National Wind Technology Center, and in recent years, led cutting edge offshore wind energy demonstration projects in the U.S.

Despite the advances to solar and wind energy technologies, continued innovation in these technologies is needed to advance their growth at a significant scale. In 2018, solar and wind energy together combined to produce just 8.2% of our electricity in the U.S. (according to most recent data from EIA) and challenges remain to their widespread deployment. Moreover, studies suggest U.S. emissions increased from 2017 to 2018. This is an alarming reversal after three years of declining emissions and is concerning as we continue our efforts to reduce emissions and mitigate climate change.

I believe that net-zero emissions technologies such as solar and wind, and a broad array of other technologies, will play crucial roles in reducing greenhouse gas emissions from the electricity

sector. Whether it's looking at new, more efficient materials for solar photovoltaic panels, or developing the next generation of floating, offshore wind turbines, next generation solar and wind energy technologies can and should play a key role in the transition to a clean energy economy.

That is why I look forward to using this hearing to further inform and refine the draft pieces of legislation that will guide DOE's solar and wind energy R&D activities. Each draft aims to provide stronger direction to the Department, reflecting significant changes to these technologies, their industries, and their future research needs. We need to ensure that we are doing everything we can to advance solar and wind energy technologies. With their potential for increased carbon-free electricity, American jobs, and lower electricity bills, we should work to reassert American leadership in this sector.

Thank you again for appearing before our committee and I'm looking forward to today's hearing.