Subcommittee on Environment and Climate Change
Hearing on
"We'll Always Have Paris:
Filling the Leadership Void Caused by Federal Inaction on Climate Change"
February 28, 2019

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The Honorable John Shimkus (R-IL)

1. A number of legal scholars have argued that U.S. participation in the Paris Agreement may authorize EPA to pursue a broad range of greenhouse gas regulations under section 115 of the Clean Air Act (CAA). According to a forthcoming Columbia University report entitled *Legal Pathways to Deep Decarbonization in the United States*, these regulations could address industrial carbon emissions, agriculture, and even an economy-wide cap and trade system.

    a. Do you believe the President's formal "acceptance" of the Paris Agreement provides legal justification for regulation under CAA Section 115?

    RESPONSE: This question relates to a legal interpretation of the purview and appropriate application of CAA Section 115, and is outside of my area of expertise. Other experts have investigated this question.

    b. If formal "acceptance" of the Paris Agreement does not provide legal justification for CAA section 115, do you believe Senate "ratification" of the Paris Agreement would constitute legal justification for regulation under this section of the Clean Air Act?

    RESPONSE: This question also relates to a legal interpretation of the purview and appropriate application of CAA Section 115, and is outside of my area of expertise. Other experts have investigated this question.

The Honorable Billy Long (R-MO)

1. Figure 1 in your testimony maps the coalition of subnational actors who have committed to climate actions in their own jurisdictions. What strikes me is that these actors are

concentrated in New York, California, and up and down both coasts. The Midwest, including my home state and district of Southwest Missouri, are pretty bare. To me it seems like the policies that have been implemented in New York and California work because they have specific geographic and demographic characteristics that are unlike most of the rest of the country.

a. How would implementing policies like those in California and New York, be viable for my district in rural Missouri?

RESPONSE: Policies and strategies to support economic growth through clean energy and other new technologies can make sense everywhere, and the way they are implemented can absolutely be tailored to the unique needs and opportunities of different places. In fact, in the few months since the release of our report, the groundswell of interest in these policies has continued to grow across America, including in our heartland. The map that you reference has changed too – and now includes Colorado, Nevada, New Mexico, Minnesota, Wisconsin, and Michigan, as well as my own home state of Illinois. And notably, such action is expanding to include members across party lines, including three Republican governors. I very much appreciated the constructive, bipartisan discussion in the hearing I participated in. It remains an opportunity for us to better understand how these policies can be tailored to help deliver economic opportunity even as they get us on track toward a future that is healthier for our people and safer for the climate.

For example, implementing climate policies can support the growth of new energy industries, and increase the country's energy security. These benefits are already manifesting themselves in Missouri and could be strengthened by federal action and action in the Midwest. A recent report by the Clean Energy Trust estimated that Missouri is home to about 55,000 clean energy jobs and is adding new ones at a rate of about 1,500 jobs per year. A majority of these jobs (70.5%) are provided by small businesses with fewer than 20 employees. Your district of Missouri is home to over 6,000 of these clean energy jobs with the majority in the energy efficiency sector. Compared to the roughly 8,000 fossil fuel energy jobs in Missouri state-wide, this sector is a booming opportunity for Missourians and the 7th District.[1] As one specific example, the City of Nixa, Missouri installed a solar farm in 2017 that is projected to save the City $2.5 million over the life of the contract, which means Nixa Utilities can continue to keep rates low for its customers.[2] In addition to providing jobs and helping our transition to a cleaner energy future, this facility and others like it around the state increase the country's domestic energy supply.

Farmers also benefit from climate action policies, like those enacted across the

[1] Clean Energy Trust and Environmental Entrepreneurs (2019). "2019 Clean Jobs Midwest: Missouri". Retrieved from: https://cjm2019test.wpengine.com/wp-content/uploads/2019/04/Missouri_CJM-Exec-Summary-FINAL.pdf
[2] City of Nixa (2017). "Nixa Solar Farm". Retrieved from: https://www.nixa.com/departments/public-works/electric/nixa-solar-farm

country, especially in a state like Missouri with access to excellent wind resources and major original equipment manufacturers. The Missouri Department of Economic Development estimated that the average Missouri farm could bring in $18,000 to $24,000 annually by hosting three to four wind turbines on their land.[3] The Farmers City Wind Farm in Atchison County is another great example of subnational action working for rural communities. The wind farm produces power to cover electricity needs of 33,000 average Missourian homes, is estimated to produce $600,000 to $1 million in annual county tax revenue, contributes approximately $365,000 a year in lease payments to landowners as a stable source of income, and given the small footprint of individual turbines farmers continue to grow soybeans and corn.[4]

These are just a few examples that illuminate some of the real opportunities for finding solutions that work for specific state or district needs. And as we discussed in our hearing, we very much need the creative thinking across America to create a true transition that accelerates our economic opportunity in ways that fit with each location's potential strengths and growth areas.

b. How does electrification of transportation work for farming and for long distance trucking industries, which provide significant employment for my constituents?

RESPONSE: Electrifying commercial vehicles has been a rapidly expanding market and is expected to continue growing for most commercial vehicle applications. McKinsey Energy Insights estimates that the fully-electric truck market share could reach 15 percent of sales by 2030.[5] For agricultural applications there are already options on the market for electric machinery. Similar to passenger electric vehicles, larger applications of electrification offer many of the same benefits such as significantly less maintenance (with far fewer moving parts), less noise, greater control, more efficiency, and potentially increased safety. This area of transportation electrification is a growing area of manufacturing and presents an excellent opportunity for states with traditional manufacturing basis to take the lead in energy innovation.

c. What analysis has been done to show the economic impact of high fuel costs, particularly on rural communities? What are the ripple effects this can cause for the business community in a rural area?

RESPONSE: A recent report by the American Council for an Energy-Efficient Economy (ACEEE) and Energy Efficiency for All looked at "The High Cost of Energy in Rural America" and found that Americans living in rural areas spend a

[3] Department of Economic Development (n.d.). "Wind Energy". Retrieved from: https://energy.mo.gov/clean-energy/wind
[4] 3Degrees (n.d.) "Farmers City Wind Project". Retrieved from: https://3degreesinc.com/latest/wind-power-farmers-city/
[5] McKinsey (2017). "New reality: electric trucks and their implications on energy demand". Retrieved from: https://www.mckinseyenergyinsights.com/insights/new-reality-electric-trucks-and-their-implications-on-energy-demand/

disproportionally high share of their income on energy bills.[6] A recent analysis by the Union of Concerned Scientists found that rural drivers often have farther to travel to work, shop, and visit a doctor. As a result, they have to repair their vehicles more often and spend more money on gasoline. Using data from the 2017 National Highway Traffic Survey they found that the average rural driver could save $870 per year by choosing an electric vehicle over a conventional sedan because of reduced maintenance costs and lower fuel costs.[7] Additional studies have been done on specific states and areas over the years and the USDA completed a study back in 2011 analyzing the impacts of high energy prices on agriculture and rural economies.[8]

2. I understand you were in the Obama Administration when it was developing its climate action plan and the emissions commitments for the Paris Agreement.

    a. During the development of these emissions' reduction plans, did the Administration publish an economic analysis of the costs and economic impacts of the plans?

    RESPONSE:

    I should first note that it was not my job in the Obama Administration to direct rulemaking, or to conduct or oversee economic analysis of proposed regulatory actions. In addition, I was not part of the Administration during the development of the Climate Action Plan and its associated three-part strategy for reducing emissions at home, building resilience, and leading internationally. As such, I cannot speak directly to those aspects of your question.

    However, there are some basic observations that I can offer in my current capacity. The regulatory actions taken under the previous Administration underwent the standard, long-established procedures for the rulemaking process, which included, where applicable, assessing economic impacts and gathering comments before any final rules were issued. As such, costs and benefits were explicitly assessed and transparently communicated via the appropriate rulemaking procedures. Such benefits may include important elements such as fuel savings for consumers, improved health from cleaner air (e.g. fewer deaths due to heart attacks, fewer asthma attacks for children, fewer lost work days, etc.), reduced impacts from climate change, and other economic benefits. Most if not all

[6] Ross, L. et. al. (2018). "The High Cost of Energy in Rural America: Household Energy Burdens and Opportunities for Energy Efficiency". Retrieved from: https://aceee.org/sites/default/files/publications/researchreports/u1806.pdf
[7] Union of Concerned Scientists (2018). "Rural Drivers Can Save the Most From Clean Vehicles". Retrieved from: https://blog.ucsusa.org/daniel-gatti/clean-vehicles-save-rural-drivers-money
[8] Sands, Ronald and Paul Westcott (coordinators), J. Michael Price, Jayson Beckman, Ephraim Leibtag, Gary Lucier, William McBride, David McGranahan, Mitch Morehart, Edward Roeger, Glenn Schaible, and Timothy R. Wojan. Impacts of Higher Energy Prices on Agriculture and Rural Economies, ERR-123, U.S. Dept. of Agriculture, Econ. Res. Serv. August 2011.

rulemakings, and all major regulatory actions, were expected to create significant net benefits, as demonstrated by these analyses. Any future regulatory actions would similarly have been subject to detailed and rigorous economic assessment, as well as an opportunity for public comment, before any final rules could be issued.

b. If so, could you supply those for the record? And if such analyses were not published, could you please explain why not?

RESPONSE: Economic analysis for the rulemaking process, when applicable, was published in the Federal Register.