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House Energy and Commerce Subcommittee on Environment & Climate Change
"Time for Action: Addressing the Environmental & Economic Effects of Climate Change"

Good morning Chairmen Tonko and Pallone, Republican Leaders Shimkus and Walden, and other members of the committee. Thank you for the opportunity to appear before you today and for holding this hearing.

My name is Rich Powell. I am the Executive Director of ClearPath, a non-profit that develops and advances conservative policies that accelerate clean energy innovation. My organization supports flexible low-carbon energy technologies - next-generation nuclear, hydropower, carbon capture on both coal and natural gas, and grid-scale energy storage.

Climate change is an urgent challenge that merits action at every level of government and the private sector. It is too important to be a partisan punching bag. Climate change deserves a pragmatic and technology-inclusive agenda to make the global clean energy transition cheaper and faster. It's conservative to hedge for this risk.

Heavy industry is aggressively moving onto solutions to deal with climate issues. Southern Company is reducing their emissions in half by 2030 and will be low to no carbon by 2050 - all while rapidly innovating clean tech. Shell also aims to cut its carbon emissions in half by 2050. Notably, senior executives from Southern, Shell, and just last week BP are among the growing list of big energy companies who are beginning to link future bonuses and other pay to their emission targets. These examples help illustrate a very clear principle: the federal government, where appropriate, should enable private-sector solutions through market-oriented policies.

Crucially, we must remember that climate change is a global problem. A molecule of CO2 emitted on the other side of the world has the same impact as one released here. Since 2000, coal power generation in China nearly quadrupled.[1] Bloomberg reports that over 250 gigawatts of new Chinese coal capacity remain planned, roughly the size of the entire U.S. coal fleet.[2] Abroad, China is financing another 100 gigawatts of coal in at least 27 countries.[3] The expected emissions growth from developing Asian countries alone would offset a complete decarbonization of the U.S. economy by mid-century.[4]

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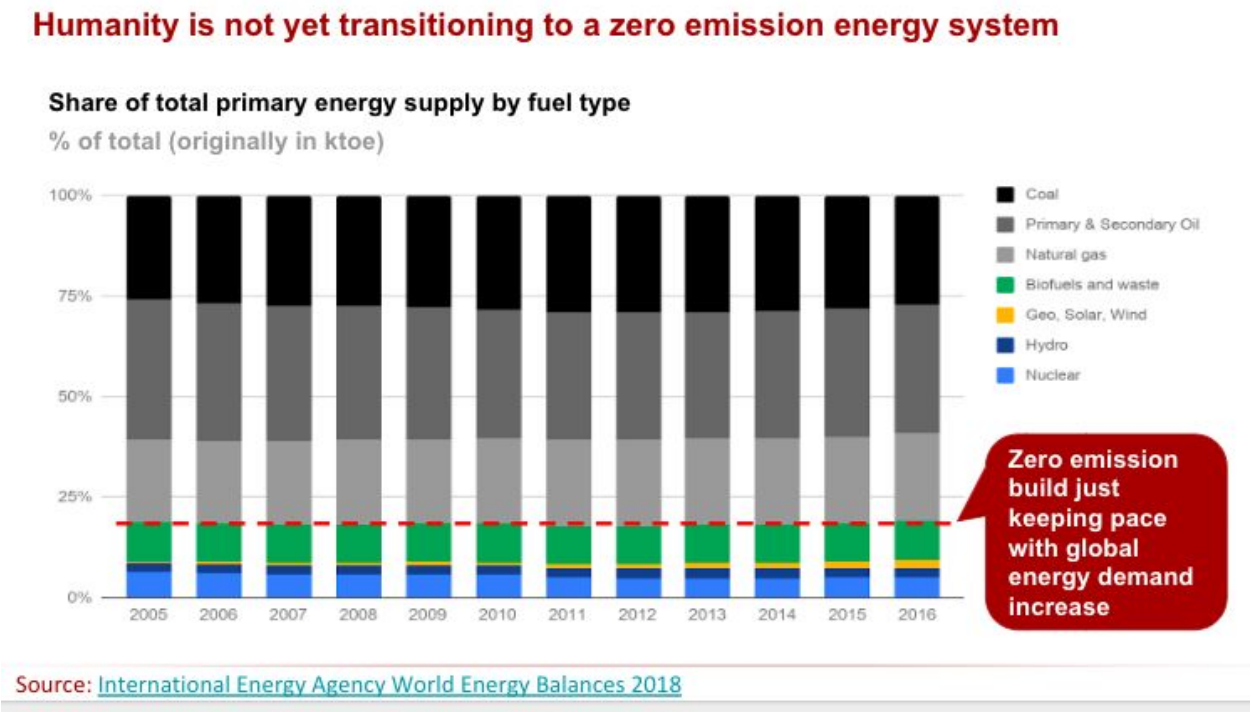
[1] https://www.shell.com/energy-and-innovation/the-energy-future/scenarios/shell-scenario-sky.html
[2] https://www.bloomberg.com/news/articles/2018-11-30/almost-half-of-coal-power-plants-seen-unprofitable-to-operate
[3] http://ieefa.org/wp-content/uploads/2019/01/China-at-a-Crossroads_January-2019.pdf
[4] https://www.eia.gov/outlooks/aeo/data/browser/#/?id=10-IEO2017&region=0-0&cases=Reference&start=2010&end=2050&f=A&linechart=Reference-d082317.3-10-IEO2017~~~~~~~Reference-d082317.17-10-IEO2017&map=&ctype=linechart&sourcekey=0

More broadly, the share of global energy supplied by clean sources has not increased since 2005. Despite significant global renewables deployment, emissions continue to rise. In other words, clean development is only just keeping up with economic development; clean is not gaining ground. Clean technology available today is simply not up to the task of global decarbonization. It must represent a better, cheaper alternative so developing nations consistently choose it over higher-emitting options. We have a choice - bet that the Chinese and their partners shut down their coal-fired power plants at the expense of economic growth; or develop, demonstrate, and export U.S.-based emissions control technologies.



This technology challenge is evident in the most ambitious plan yet from a major U.S. utility. Xcel Energy recently announced plans to reduce its carbon emissions 80% by 2030 and 100% by 2050. Xcel noted they will require innovative new technology to reach their 100% goal while remaining reliable and affordable for their customers. Their already-impressive portfolio of existing renewable and other clean power isn't enough.

A serious debate on climate solutions must include a dose of political and technical realism. Let's not rush toward any impractically hasty, exclusively renewable strategy in the U.S. that will be both costly and unlikely to reduce global emissions. If supporters of a Green New Deal truly believe climate change is an existential threat, they should focus on policies that reduce global emissions as quickly and cheaply as possible.

So how do we change our trajectory? We've done it before. There's no reason that clean technology needs to be more expensive or worse performing than higher-emitting technology.

Take America's shale gas revolution, rooted in decades of public-private research partnerships.[5] This R&D, coupled with a $10 billion alternative production tax credit, yielded breakthroughs in combined cycle turbines, diamond drill bits, horizontal drilling, and 3D imaging.[6] This market-driven phenomenon has increased natural gas from 19 to 32% of the grid[7] between 2005 and 2017, resulting in a 28% emissions decline.[8]

The same ingenuity that produced the shale boom can make that gas fully clean. A company called NET Power has created a groundbreaking zero-emission natural gas power plant. NET Power is successfully demonstrating near Houston and preparing to scale up. More broadly, it's an immensely promising time for U.S. clean innovation. Public-private efforts like Form Energy are developing cheap long-duration energy storage that may enable many more renewables. Intrepid entrepreneurs are innovating small modular nuclear reactors, such as NuScale, and micro-reactors such as Oklo and X-Energy, in partnership with our national labs. These efforts are representative of the aggressive public-private collaborations needed to dent this global problem.

The last Congress hasn't received the credit it is due for boosting low-carbon technologies. Your broadly bipartisan agenda enhanced critical incentives for carbon capture, renewables, and advanced nuclear; invested in Department of Energy R&D at record levels; and reformed regulations to accelerate the licensing of both advanced nuclear reactors and hydropower. The 45Q tax incentive for carbon capture and storage technology is a perfect example - it was supported by a vast bipartisan coalition from environmental organizations to organized labor to utilities to coal companies. Notably, seven national unions just collectively re-emphasized the importance of including carbon capture and nuclear in any national clean energy policy.

Going forward, given the scale of the climate challenge, we need to greatly increase the pace and ambition of our efforts. Let's not shy away from smart investments in "moonshot" goal programs that deliver low-cost, high-performing clean technology - from basic research all the way through demonstrations. Let's create stronger financing and incentives to commercialize cutting-edge companies and deploy those technologies globally. And let's enact deep regulatory reforms that remove barriers to rapidly scaling clean technology.

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[5] https://static.clearpath.org/2019/02/shale-gas-fracking-doc.pdf
[6] http://americanenergyinnovation.org/wp-content/uploads/2013/03/Case-Unconventional-Gas.pdf
[7] https://www.eia.gov/survey/#eia-923
[8] https://www.eia.gov/environment/emissions/carbon/

Bipartisan cooperation on climate change is essential under divided government - and attainable. In fact, it is the only chance our nation will have if it is going to play a significant role in the global solution. Thank you again for this opportunity, and I look forward to the discussion.