

Due: March 25, 2019

The Honorable Markwayne Mullin (R-OK)

The Democrats Green New Deal plans on getting rid of fossil fuels in 10 years. With the United States producing only roughly 18% of electricity from renewable sources right now, how would we replace the 62% that comes from natural gas and coal?

- a. *Can you talk more about how carbon capture could help us reduce CO2 emissions while still using the fossil fuels our country relies on?*

No credible analysis shows the United States can completely transition from fossil fuels in a ten year period. The Green New Deal would require renewable energy to be adopted across all aspects of our economy faster than the most popular consumer products in recent history, including the adoption of cellphones and flat-screen TVs. The proposal is made even more daunting because fossil fuels are what (quite literally) moves and powers the American economy. Natural gas and coal make up 62% of the United States electricity mix. Economy-wide, including sectors like transportation and heavy industry, fossil fuels make up 80% of total U.S. energy use.¹ Putting costs and economics aside, complete replacement of these fuels in a decade is highly improbable.

Carbon capture can help reduce carbon dioxide emissions from fossil fuel consumption in a very significant way, in line with both economic and environmental goals. According to groups as diverse from the largest energy companies (Shell, Southern Company, etc.), leading universities (MIT, Stanford, etc.), and international energy & environmental authorities (International Energy Agency, Intergovernmental Panel on Climate Change) carbon capture can be a very significant lever for reducing global carbon emissions. For several decades, carbon capture has been applied to enhanced oil recovery where we can now capture over 25 million tons of industrial carbon dioxide each year.² The most U.S. recent facility, Petra Nova, captures carbon dioxide from a coal power plant. It can capture 90% of all emissions that run through the system, or roughly the equivalent of carbon dioxide produced by 350,000 cars.³

The Department of Energy is a global leader in carbon capture research and development. They've help drive dramatic cost reductions and have been responsible for several commercial projects in the United States, from Texas to Illinois. In tandem with the recently enacted changes to the Section 45Q carbon capture tax credit, the Department of Energy expects more commercial carbon capture projects.

¹ https://www.eia.gov/energyexplained/?page=us_energy_home

² <https://co2re.co/FacilityData>

³ <https://www.nrg.com/case-studies/petra-nova.html>

Unlocking carbon capture is important because it can address carbon emissions from fossil-fired power plants, contributing to the stability and affordability of the power grid. Additional research should also be conducted to improve the performance of carbon capture systems at more industrial sources, including steel and cement facilities. To realize this promising reality, Congress should encourage R&D across the development spectrum and address regulations that restrict the buildout of enabling infrastructure.