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**Written Responses
To
Testimony Questions
From
The Honorable Markwayne Mullin (R-OK)**

**U.S. House Energy and Commerce Subcommittee on Environment and Climate Change Hearing
“Time for Action: Addressing the Environmental and Economic Effects of Climate Change”**

February 6, 2019

Thank you, Congressman Mullin, for these questions and the opportunity to add to the record on this important issue.

Natural gas is at the heart of the energy revolution in the United States. Shale gas and shale oil development have allowed us to go from an era of scarcity to an era of abundance.

1. Does natural gas help the United States reduce its reliance on foreign energy sources?

Yes, natural gas does help the United States reduce its reliance on foreign energy supplies. Fifteen years ago, we were anticipating importing nearly all of our natural gas through as many as 48 import terminals. Now, we produce enough natural gas for domestic use, and we export natural gas to more than two dozen countries--our friends and allies around the world.

a. Natural gas has created thousands of high paying jobs. If we were to replace natural gas with renewable energy would these jobs go away?

Currently, it would be impossible to replace natural gas with renewables. If it were possible to go to a 100% renewable energy economy, the cost of just storing electricity would be 19 times the annual total electricity bill in the United States. Should some miracle technology breakthrough occur that allows renewables to replace natural gas completely, then yes, the great paying natural gas jobs would go away.

b. What do our emissions look like compared to the rest of the world?

United States has achieved a 28% reduction in CO2 emissions in the electric power sector. No more than one or two other countries can claim this accomplishment. Most other countries are seeing increases in CO2 emissions. Some, such as China and India, are seeing dramatic increases.

c. What do you attribute to the decline in greenhouse gas emissions?

Our dramatic reduction in greenhouse emissions has occurred due to fuel switching from coal to natural gas, and significant gains in energy efficiency, including automobile efficiency, building efficiency, and gains in appliance efficiency. There has been GHG reduction from deploying renewables, but the primary drivers are fuel switching and efficiency.