

**United States House of Representatives
Select Committee on the Climate Crisis**

**Hearing on September 10, 2019
“Solving the Climate Crisis:
Manufacturing Jobs for America’s Workers”**

Questions for the Record

**Edward Stones
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Dow**

The Honorable Kathy Castor

- 1. In your testimony, you reference the fact that the Dow Chemical Company is one of the largest users of renewable energy in the chemicals industry. What Federal policies could facilitate greater use of renewable energy by companies like Dow?**

Technologies such as energy storage and demand-response need support to reach the point of economies of scale. Both of these technologies should form part of a broad, cost-competitive environment for large companies such as Dow. Both are essential to grid stability in the long term, and will be needed for further gains in renewables penetration.

Over the past years the renewable energy markets in the United States grew thanks in part to the federal support received through the Renewable Electricity Production Tax Credit (PTC) and the Business Energy Investment Tax Credit (ITC). Onshore wind and solar energy reached technologies of scale, making them cost-competitive in comparison to traditional means of creating power, thus expanding their accessibility to large users such as Dow. Today, both onshore wind and solar technology are competitive beyond the federal support received through the PTC and the ITC, so that continued federal credits are unnecessary.

Information from the Renewable Energy Buyers Alliance, based on publicly announced contracted capacity of corporate Power Purchase Agreements, Green Power Purchases, Green Tariffs, and Outright Project, shows that in 2014 there were eight transactions with a volume equal to 1.2 GW of capacity; by year-end 2018 there were seventy-five transactions with a total volume of 6.36 GW of capacity. Since 2014 companies have contracted almost 20 GW of renewable energy capacity.

Until there is wide spread adoption of energy storage options, which we foresee post 2030 at the earliest, gas fired energy generation will be required to offset renewable

energy intermittency. Additionally, companies like Dow require process heat in significant amounts, with high temperatures and pressures. Few options other than nuclear exist for low carbon alternatives or renewables. Carbon Capture and Storage (CCS) and Carbon Capture, Utilization, and Storage (CCUS) are critical technologies and policy solutions. State and federal governments have a role to play in defining and enabling the infrastructure required for collecting and moving captured CO₂. Next generation nuclear facilities are also potentially a source of zero carbon steam and power, as well as grid reliability.