

SUMMARY REVIEW OF THE CONGRESSIONAL BRIEFING ON CARBON CAPTURE, HOSTED BY THE AMERICAN ENERGY SOCIETY

On Friday, March 3, The American Energy Society hosted a Congressional Briefing, "*Carbon Capture: Tomorrow Just Happened.*" It was a balanced, thoughtful, non-partisan discussion that emphasized the technical aspects of sequestration, utilization, and commercialization. Based on the size of the audience (overflow), media interest, and the penetrating questions, it was by any measure an enormous success. Suffice it to say, Congress is now informed. The American Energy Society would like to thank the panelists on the Briefing:

- Sally Benson, Professor, Director of the Precourt Institute for Energy, Stanford University;
- Howard J. Herzog, Senior Research Engineer, MIT Energy Initiative;
- Gary Rochelle, Professor of Chemical Engineering, University of Texas-Austin;
- Nicholas Flanders Co-Founder and CEO at Opus 12, (and Forbes' 30 Under 30);

SUMMARY:

1. There are small-scale opportunities in which carbon capture can be effective. For instance, there are CCU technologies that can be used as an independent method for manufacturing basic products (shampoos and soaps, cement, foam, and of course fuel). Using CCU manufacturing technologies can mitigate CO₂ emissions, though the amount is very, very small. There is some need for government/industry support (SBIRs, cooperative programs with National Labs and/or industry, etc.), but the total amount of necessary funding is minimal because this approach is working seemingly well, and rollout is fairly straightforward (Opus 12 for instance).

2. As for large, utility scale "carbon capture," there is an opportunity to use compressed/solid CO₂ that is captured from power plants as a way to level (synchronize) energy production with power grid consumption, but these methods are only useful for newly constructed coal plants (which isn't happening), and capital costs are roughly \$1 billion for each power plant facility and would need government support.

3. Policy measures are essential for continued development of small- and large-scale carbon capture technologies. These policies may include but are not limited to: carbon taxes, investment tax credits/rebates, subsidies, federal loans, SBIRs, etc - similar to the support given other sources of energy (renewables, nuclear, coal, O&G, etc.). Additionally, there is need for governmental risk-sharing and support in the ongoing development of both research and pilot-scale carbon capture systems.

4. Carbon capture can mitigate some CO₂ greenhouse gas emissions, but it is not a comprehensive solution. At its most efficient level, carbon capture solutions can remove in the short-term about .5 billion tons of CO₂ out of the 32 billion tons that are produced. In order to substantially reduce greenhouse gas emissions, other CO₂-efficient technologies (i.e. cleantech, energy efficiencies, etc.) are still necessary.