SCALE Act of 2021 (Storing CO₂ and Lowering Emissions Act)

Carbon capture, removal, and storage is essential for achieving climate and net-zero emissions goals, according to the Intergovernmental Panel on Climate Change (IPCC). Carbon capture can reduce emissions from industrial facilities, and reduce the stock of emissions already in the air through carbon removal. CO_2 transport and storage infrastructure is a vital backbone to enable large-scale carbon capture deployment. Recognizing this need, governments in the European Union, United Kingdom, Norway, Australia, and Canada have recently invested in the development of connected infrastructure to collect CO_2 from multiple capture sources and deliver it to shared CO_2 storage sites. Such interconnected systems:

- 1. Enable more CO₂ capture by connecting storage sites and emitters.
- 2. Realize economies of scale reducing the overall cost of the carbon capture system.
- 3. Create a carbon management market, reduce risks, and facilitate innovation by connecting multiple capture and storage projects.

Planning and investing in this infrastructure today will facilitate efficient deployment and reduce cost and land-use impacts by realizing economies of scale. Despite its importance, deployment of CO_2 infrastructure faces critical barriers that require federal support to be overcome:

- <u>Cost</u>. The Section 45Q tax credit enables economic CO₂ capture from many sources, but the credit value is not sufficient to also fund major new CO₂ infrastructure.
- <u>A chicken-and-egg challenge</u>. CO₂ transport and storage infrastructure must exist, or at least be certain to be built, before CO₂ capture projects can be committed. But the CO₂ capture projects must also exist or be certain before the infrastructure can be committed.
- <u>Building for future demand</u>. CO₂ transport and storage infrastructure should be built with excess capacity to realize economies of scale and enable future growth, but initial CO₂ capture projects must bear the cost of the infrastructure and cannot pay for over-sized infrastructure unless additional support is provided.

If enacted, the SCALE Act would establish key policy pillars designed to overcome the barriers and drive CO₂ infrastructure deployment in the U.S:

- A Secure Geologic Storage Infrastructure Development Program building upon the CarbonSAFE program to provide DOE cost share for commercial CO₂ storage hubs.
- Provide EPA with increased funding for permitting Class VI CO₂ storage wells, and grants for states to establish their own Class VI permitting programs, to ensure rigorous and efficient permitting of CO₂ storage infrastructure.
- Establish the CO₂ Infrastructure Finance and Innovation Act (CIFIA) program to finance shared CO₂ transport infrastructure. Modeled on the TIFIA and WIFIA programs for highway and water infrastructure, CIFIA will provide flexible, low-interest loans for CO₂ transport infrastructure projects and grants for initial excess capacity on new infrastructure to facilitate future growth. Also includes grants for Front-End Engineering Design (FEED) studies for CO₂ transport infrastructure.
- Provide grants for state and local governments to procure CO_2 utilization products for infrastructure projects, and support state and local programs that create demand for materials, fuels and other products made from captured carbon. The bill also adds the objective of developing standards and certifications for products that use CO_2 to DOE's carbon utilization program.