



Joint Commission on Technology and Science

September 13, 2021, at 10:00 a.m.

Pocahontas Building, House Committee Room

<http://dls.virginia.gov/commission/jcots.htm>

The Joint Commission on Technology and Science (the Commission) met in Richmond with Delegate C.E. Cliff Hayes, Jr., chair, presiding.¹ The meeting began with introductions and opening remarks followed by presentations and discussion. Materials presented at the meeting are accessible through the [Commission's meetings webpage](#).

Presentation: Wing

Nick Devereux, Policy and Government Affairs, Wing (an Alphabet Company)

Mr. Devereux presented on Wing, a company that offers lightweight on-demand package delivery via drone directly to customers' homes. He explained that the company operates in Christiansburg, which is its only location in the United States, Finland, and Australia and stated that the goal of the company is to improve access to medicine and food while lowering emissions. Commission members asked about issues with regard to multiple public and private drone operators flying drones below 400 feet. Mr. Devereux emphasized that a collaborative approach and app-based traffic management tools ensure that drones can operate safely in the same air space. He highlighted Wing's commitment to partner with community colleges in an effort to strengthen Virginia's workforce to support Wing's latest ventures. Mr. Devereux concluded his presentation by reiterating Wing's commitment to continue and expand its pilot drone delivery program in Virginia.

Presentation: Carbon Capture Technology Final Report

Tara Illgner, Commonwealth of Virginia Engineering and Science (COVES) Fellow, University of Virginia

Ms. Illgner presented on carbon capture and sequestration options and zero-emission power plants and electricity generation. During the 2021 Special Session I, the General Assembly passed SB 1374 (Lewis), which created the Carbon Sequestration Task Force for the purpose of studying carbon sequestration, including possible methods of increasing carbon sequestration within the natural environment. Ms. Illgner stated that also exploring carbon capture through technological processes, such as the Allam-Fetvedt Cycle, could result in low-cost, emission-free growth in electricity generation in Virginia. Commission members asked for clarification of the Allam-Fetvedt Cycle. Ms. Illgner described the process as one of capturing, compressing, and liquefying carbon dioxide and using it as a renewable resource to power hydroelectric turbines. She concluded by emphasizing that new technologies offer an option for reaching Virginia's 2045 carbon emissions goals.

¹ **Members Present:** Delegate C.E. Cliff Hayes, Jr. (chair), Senator John A. Cosgrove, Jr., Senator Barbara A. Favola, Senator Ghazala F. Hashmi, Senator David W. Marsden (virtual), Delegate Terry L. Austin (virtual), Delegate Hala S. Ayala (virtual), Delegate Kathy J. Byron (virtual), Delegate Kenneth R. Plum (virtual), Delegate Danica A. Roem (virtual)

Members Absent: Senator Adam P. Ebbin (vice-chair), Delegate Glenn R. Davis

The full issue brief can be found [here](#).

Next Meeting

The Commission's next meeting will be held in Richmond on October 13, 2021, at 10 a.m.

For more information, see the [Commission's website](#) or contact the Division of Legislative Services staff:

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