



Albemarle County

Legislation Text

File #: 21-415, **Version:** 1

AGENDA DATE: 9/1/2021

TITLE:

Climate Program Update

SUBJECT/PROPOSAL/REQUEST: Presentation on the County's Climate Protection Program, including organizational development, a new greenhouse gas emission inventory, and recent actions in service of the Climate Action Plan

ITEM TYPE: Regular Information Item

STAFF CONTACT(S): Richardson, Henry, Stewart, Harper, Dayley

PRESENTER (S): Gabe Dayley

LEGAL REVIEW: Not Required

REVIEWED BY: Jeffrey B. Richardson

BACKGROUND: On October 16, 2019, the Board of Supervisors adopted targets to reduce community-wide greenhouse gas emissions by 45% from 2008 levels by 2030 and to achieve zero net emissions by 2050. These targets reflect those recommended in 2018 by the International Panel on Climate Change (IPCC) for limiting global warming to 1.5 degrees Celsius above pre-industrial levels, a threshold that will likely mean the difference between difficult but manageable climate change and much more catastrophic changes. On October 7, 2020, the Board adopted the County's first Climate Action Plan, that defines objectives and action areas to meet the aforementioned targets to reduce greenhouse gas emissions.

STRATEGIC PLAN: Mission - To enhance the well-being and quality of life for all community members through the provision of the of the highest level of public service consistent with the prudent use of public funds.

DISCUSSION: This presentation will provide an update for the Board of Supervisors on the work of staff to develop a robust Climate Protection Program that will support implementation of the Climate Action Plan (CAP) adopted by the Board in October 2020. No action is requested from the Board at this time, except to provide feedback and questions. Since the CAP's adoption, staff have undertaken work in three primary areas: (1) program development, (2) pilot implementation projects, and (3) monitoring and evaluation.

Program Development

Staff took the opportunity to assess lessons learned from the CAP development process and to prepare for successful implementation of the CAP. This included creating a clear, robust program structure to support effective climate action across the organization and community, with clearly defined roles and responsibilities. Climate Program staff have also been engaged in work to prioritize action areas, map stakeholders, operationalize an equity lens in climate action, and develop a climate action lens for decision-makers. Together, these tasks will support strategic implementation of the CAP and aid long-term success.

Pilot Implementation Projects

Staff have begun to implement select actions in the Climate Action Plan. Examples include, but are not limited to:

- (a) funding programs for lower-income home weatherization in the community - which reduces greenhouse gas emissions and supports social equity by reducing high home energy burdens for lower-income residents;
- (b) installing seven electric vehicle charging stations at local government office buildings to increase local charging infrastructure and facilitate local electric vehicle adoption; and
- (c) initiating a review and update of local government operational policies and procedures to ensure alignment with CAP goals and other environmental sustainability priorities.

Monitoring and Evaluation

Staff conducted a greenhouse gas emission inventory for the calendar year 2018 (included as Attachment A). This is the first such inventory since 2008, which serves as the baseline year for emission reduction targets. The CAP commits the County to conducting inventories every two years, so staff have begun to collect data for 2020. To support biennial inventories and monitoring progress toward our targets, staff invested up-front time to create templates for performing calculations that follow standard emission inventory methods. The results of the 2018 inventory are presented with transparent, step-by-step calculations that disclose all sources and assumptions and are therefore replicable by others.

Inventory Results and Trends: In 2018, the Albemarle County community produced 1.4 million metric tons of greenhouse gas emissions in carbon dioxide equivalent units. This is a reduction of approximately 10% from 2008 levels. Emissions from transportation and stationary energy (buildings) continue to contribute to the vast majority of total community emissions (52% and 39%, respectively), with solid waste (4%) and agricultural livestock (5%) contributing smaller portions of the total. Community emissions decreased from 2008 to 2018, despite an increase in emission-producing activities - driven by an approximately 12% increase in population over the same period. This decrease in emissions can likely be explained by increases in energy efficiency, such as increased vehicle mileage and more efficient homes, as well as shifts in electricity generation to cleaner sources, for instance, from coal to natural gas. Nevertheless, Albemarle County needs to increase the pace of emission reductions to meet its 2030 target. Implementing the Climate Action Plan adopted in 2020 will aid this effort.

BUDGET IMPACT: There are no budget impacts associated with this presentation, although portions of Climate Action Plan implementation require budgeted departmental funds.

RECOMMENDATION:

Staff recommends that the Board of Supervisors receive this update and provide feedback and questions.

ATTACHMENTS:

A - 2018 GHG Emission Inventory Report