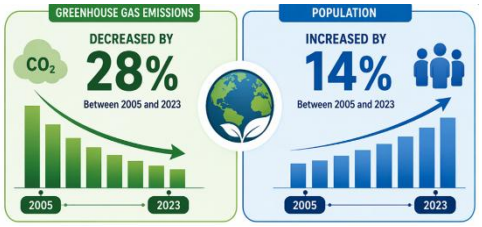
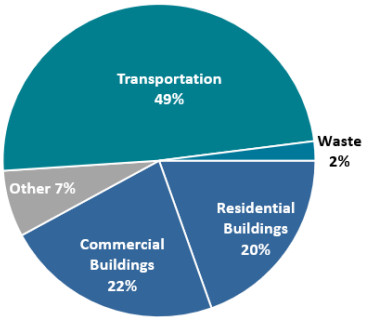
December 1, 2026
Community-wide Energy and Climate Action Plan (CECAP)
Progress and Outlook: Supplemental Information

1. **Fairfax County has seen success with emissions reduction efforts**:



- **Greenhouse gas (GHG) emissions have fallen by 28%** from 2005 to 2023, despite a 14% growth in population.
- The success is from the cleaning of the electricity grid, and local actions by residents, businesses and organizations supported by federal and state policies and incentives, with local county efforts assisting these major drivers.

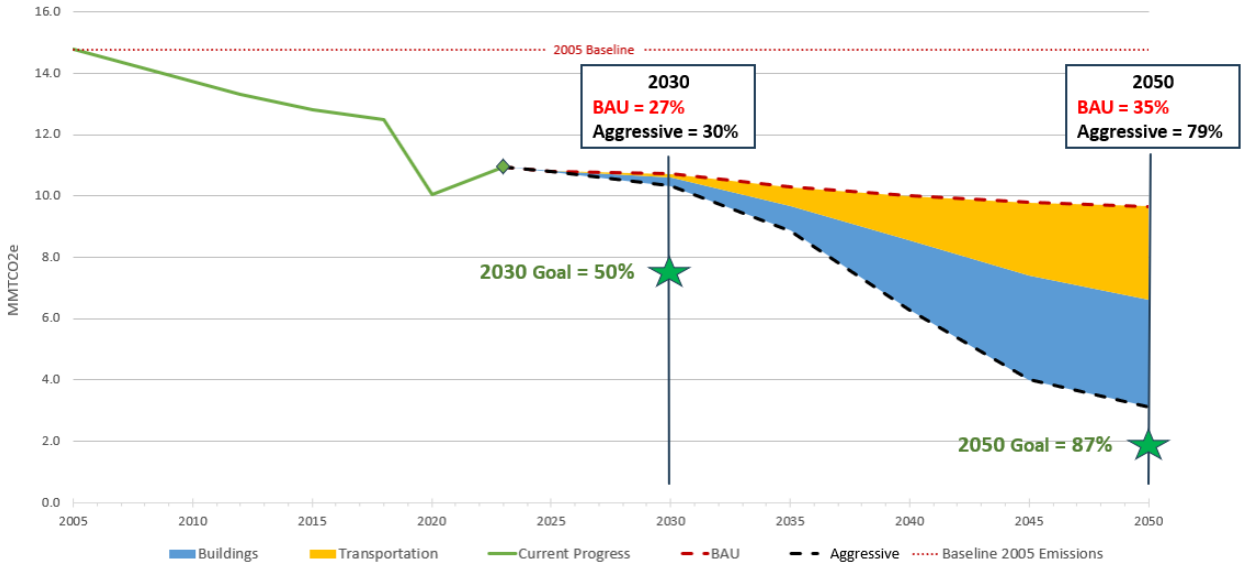
2. **Current CECAP sector emissions and trends**:



- Transportation is now a proportionally bigger source of emissions in 2023 than 2005 (rising from 42 to 49%), and the share associated with building energy is decreasing (falling from 52 to 42%). These two sectors make up 91% of the total emissions.
- Electricity use fell 10% between 2015 and 2023; this includes an 11% decrease in residential and 9% in commercial.
- Recent data provided by Dominion shows a 10% increase in electricity use for their Fairfax County customers between 2024 and 2026 with over 80% of that growth from non-residential customers.
- Data center development has increased energy use and related emissions since CECAP was completed in 2021. This trend is likely to continue unless electricity for data centers is sourced from renewable energy.

3. **Outlook for achieving the GHG reduction goal of 50% by 2030:**
   - Under a "business-as-usual (BAU)" scenario and an "Aggressive" Scenario, the county is only projected to achieve **emissions reductions of 27% and 30%, respectively, by 2030.**
   - The goals in CECAP were very aggressive and aspirational.

4. **Outlook for achieving the 2050 carbon neutrality goal**
   - Under the **BAU scenario**, the county is projected to achieve a **35% emissions reduction,** well **short of the aspirational goal of 87% reduction** needed to meet carbon neutrality.
   - Under an **"aggressive" scenario** to reflect favorable changes in clean energy markets, regulations, and funding, modeling results showed **emissions reduction 79% by 2050, still short of carbon neutrality.**



5. Difference in drivers between BAU and Aggressive scenarios

Business-as-Usual (BAU)	Aggressive
• Reflects recent changes in federal policies and loss of incentives • Progress on a clean electricity grid is slow and lags behind Virginia Clean Economy Act (VCEA) goals • Data center growth at current pace near-term • Incremental investments in building energy efficiency, electrification and onsite solar • Slow transition to electric and other zero-emission vehicles (ZEVs); continue to rely on fossil fuels. Rollback of fuel efficiency standards and EV incentives	• Strong federal and state policies, funding and incentives into a clean economy • Full implementation of VCEA • Data center growth slows and their electricity use is offset by investments that support VCEA • Increased local investments in building energy efficiency, electrification, and onsite solar • EV and other ZEV adoptions advance with policies, incentives and technology

6. <u>Staff Recommendations and discussion items</u>: Unless otherwise directed, staff recommends the following and will take steps to implement:

- Maintain aspirational GHG emissions reductions goals given the evolving clean energy policy landscape.
- Assess existing CECAP policies and programs and update the Implementation Plan (published December 2022).
- Focus efforts on strategies, programs, and actions that the county can control and are most likely to deliver accelerated progress.
- Continue to assess and prepare to leverage future opportunities, especially as state and federal policies evolve.