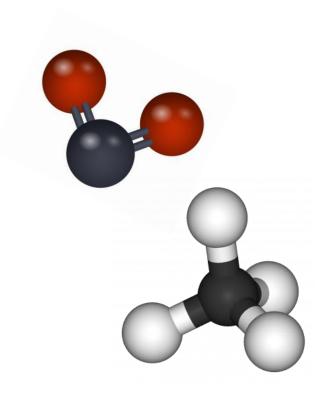
Montgomery County Draft Climate Action Plan

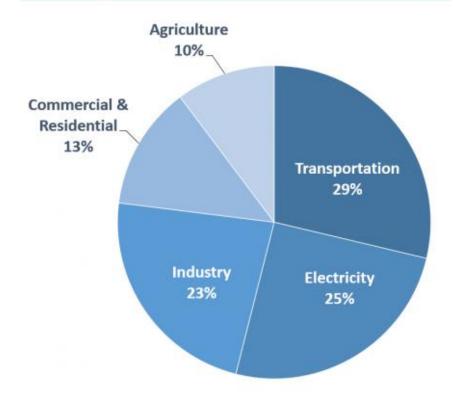
EDITH ALLISON

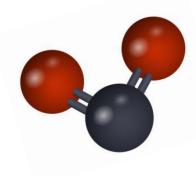
MAY 2021

Sources of Anthropomorphic Greenhouse Gases



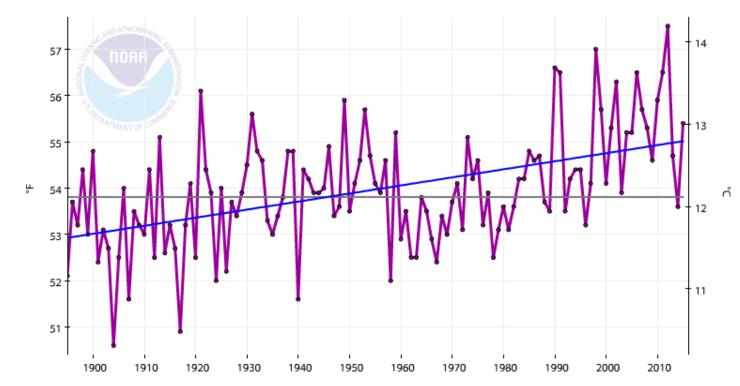
Total U.S. Greenhouse Gas Emissions by Economic Sector in 2019





Where We Are Today

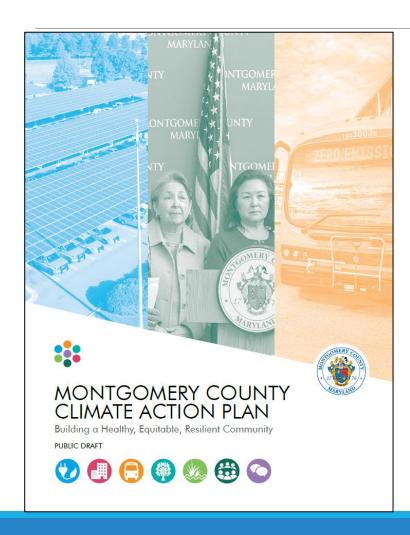




Other Warming-Related Changes:

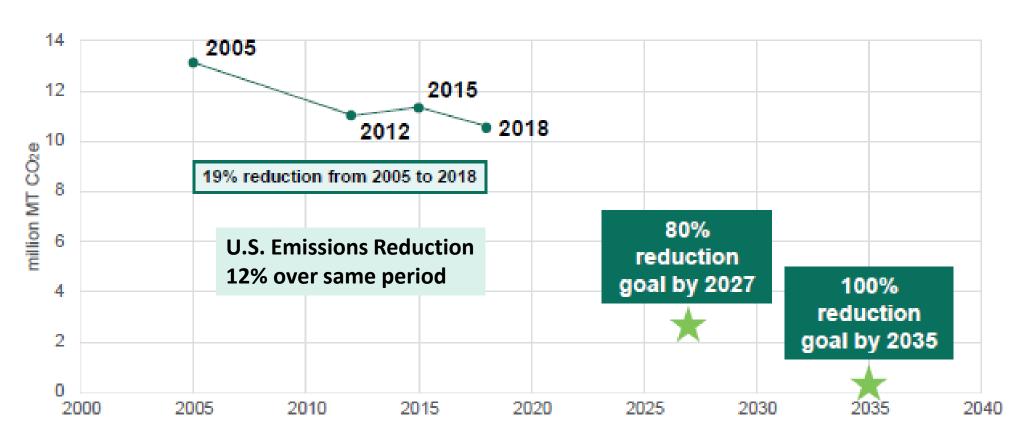
- ~30% increase in intense precipitation events
- ~ 1' sea-level rise around Baltimore

Draft County Climate Action Plan



https://www.montgomerycountymd.gov/green/climate/index.html:

County Emissions Progress and Goals



Source: Metropolitan Washington Council of Governments (MWCOG) Montgomery County GHG Inventory

County Energy and Emissions Saving Efforts to Date



Wilson Wemms Elem. School LEED Gold Certification

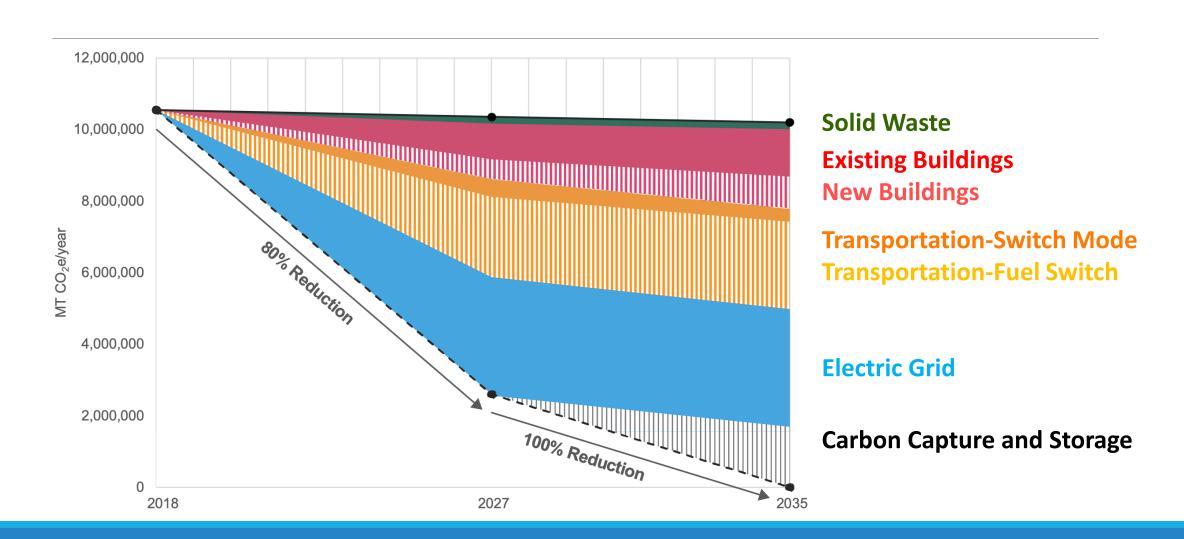


Gaithersburg Public Library LEED Gold Certification

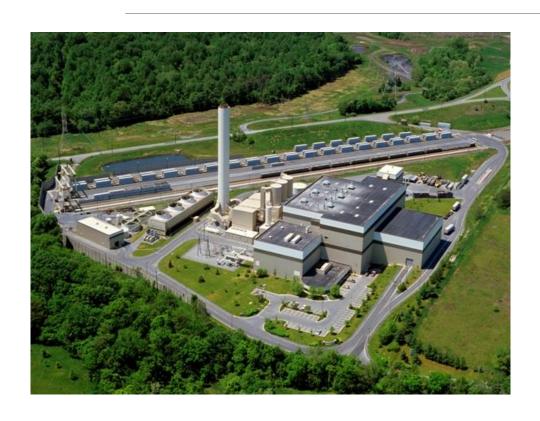


FLASH Bus Rapid Transit Hwy 29

County Paths for Emissions Reductions



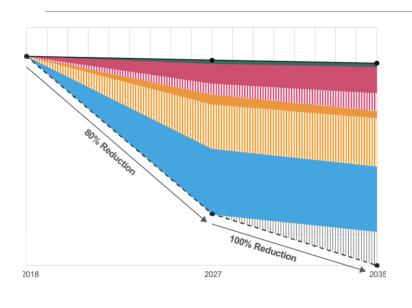
Major GHG Mitigation Actions: 2027 Target Group 1: Mostly Local Control, Decisions and Costs



- No paper sent to landfills, no plastic incinerated by 2027.
- 85% of existing residential and 75% of commercial buildings all-electric by 2027.
- 100% new buildings all-electric by 2027.

Resource Recovery Facility, Dickinson, MD

Major GHG Reduction Actions: 2027 Target Group 2: Require Regional and National Decisions



- Transportation Mode: reduce private vehicle trips 15%.
- Transportation Fuel: 85% of passenger vehicles electric.
 - 100% of buses and taxis electric.
- Power Generation: 100% zero-emission by 2035.
- Other: carbon capture, use, storage

Limitations on Renewable Energy Growth

- High initial cost.
- Lifestyle changes required.
- Infrastructure opposition Wind farms, transmission lines.
- **▶** U.S. manufacturers plan 30% electric vehicles in 2035.
- Limited battery production.

Mitigating Racial and Economic Inequities

- More zero-emission public transportation.
- Reduce heat and flooding in lower-income areas.
 - Increased tree cover and green streetscapes.
- > Repair water infrastructure.
- Restore forests and wetlands.

Eliminating Fossil Fuels by 2050?

- 2050 Global Zero Emissions: Decrease energy use as global economy doubles.
- Coal is cheap in developing world.
- Plastics, airline fuel and renewable energy backup may use fossil fuels for many years.
- Carbon capture, use and storage, CCUS, expands.

Maryland Actions to Watch

- American Rescue Plan of 2021 provides money to states, cities and counties.
- Maryland legislature designated Montgomery County a pilot for county control of electricity generation and storage systems.
- State plan to widen I-270 and the American Legion Bridge opposition.