



COMMUNITY CLIMATE
COLLABORATIVE

City of Charlottesville's FY 2021 Budget

CLIMATE POLICY ADVOCACY HIGHLIGHTS

Charlottesville, VA | June 2020

C3 formulated a set of climate policy recommendations for the City of Charlottesville's 2021 budget that identifies opportunities to further support local climate action. These recommendations were presented to the public in a [virtual fashion](#) on March 13th, 2020. [Click here](#) to download the presentation slides from C3's Budget Forum.

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Summary of C3's Climate Policy Recommendations

C3 has formulated a set of climate policy recommendations to be included in the City's budget for FY21. Note: this set of policy recommendations can be improved, as we will be continuously receiving feedback from our partners, community members, and City authorities via bilateral conversations, focus groups, public events and online outreach.

The Community Climate Collaborative urges the Charlottesville City Council to:

1. Strengthen the City's Environmental Sustainability Division

Provide the division with sufficient resources (such as additional staff and budget for contracting third-party assistance for research and studies).

2. Incentivize Cleaner, More Efficient, and More Equitable Energy Consumption Patterns

Match [County of Albemarle's Climate Action Pool](#) of \$750,000, which was created to support strategies to address climate change.

3. Incentivize Cleaner, More Efficient, and More Equitable Transportation System

Improve CAT's service quality; Increase funding to repair and create new sidewalks and bike lanes; Increase of public EV charging stations.

4. Ensure That Climate is a Priority Criteria for Key Decision Making in the City

Require key strategic boards and committees to include a community member with demonstrated experience in climate action and policy and/or create the "Charlottesville Climate Advisory Committee".

Require the City's "Budget Priorities" to include Climate Leadership.



Why is this important?

Local Effects of Climate Change

The top climate hazards projected to affect the Charlottesville area due to climate change are extreme precipitation, drought, warming, heatwaves, and storms. Our [recently published report](#) identified that these hazards will impact not just biodiversity, but also public health, safety, agricultural production, and energy bill costs.

If human-induced GHG emissions do not decrease, the Charlottesville area will experience:

- An increase of average daily maximum temperatures of up to 8°F by 2100;
- **A spike on the annual number of days with a heat index above 105°F, from current level of less than one day/year to 20 days/year by 2050 and 47 days/year by 2100;**
- **More costly air conditioning use, leading to an increase on electricity bills of up to 89%;**
- Drier conditions would increase the probability of droughts, increase need for irrigation, lower crop yields, and decrease livestock productivity due to heat stress;
- Less frequent yet more extreme rainfalls, increasing the chances of flooding, landslides, property deterioration, and road closures;
- More frequent health risks, such as heat exhaustion, stroke, and vector borne diseases.

Energy Equity (work in progress)

We are engaging in research and analysis of neighborhood-level housing stock and demographic data in the City of Charlottesville to gain a deeper understanding of our community's energy use and energy burden. Our results will be displayed in a map that will allow community members to identify our community's hotspots where energy inequity exists and pinpoint how different housing-stock features and household characteristics relate to energy burden levels.

Key Initial Highlights:

- Nearly **1,000 households in the City of Charlottesville suffer from an extremely high energy burden**, with at least 20% of their income allocated to paying energy bills:
 - All extremely high energy burdened households have family incomes of less than 30% of AMI;
 - Nearly 90% of those live in [Census Tracts](#) 2.01, 2.02, 4.01, 5.01 and 7.
- Approximately **4,000 households in the City of Charlottesville suffer from an energy burden of 10% or more of their household income.**
 - All of these families have a household income of less than 60% of AMI.



Where Are We?

Charlottesville's GHG Emissions Analysis (2011 – 2016)

In 2011, the baseline year for the City's recently established climate goals, Charlottesville's community-wide GHG emissions added up to nearly 460,000 MTCO_{2e}. The share of GHG emissions by fuel sources was:

- Electricity consumption: 46.4%
- Vehicle fuel consumption: 28.0%
- Natural gas consumption: 19.0%

In 2016, Charlottesville's community-wide GHG emissions added up to nearly 362,000 MTCO_{2e}. The share of GHG emissions by fuel sources was:

- Electricity consumption: 47.3%
- Vehicle fuel consumption: 28.2%
- Natural gas consumption: 17.5%

Between 2011 and 2016, Charlottesville experienced a 21.1% reduction in GHG emissions. The main drivers for this were:

A 19.7% decrease on the GHG emissions of the electricity sector:

- Overall electricity consumption in kWh has declined 0.34%;
- Per person electricity consumption fell by 7.7%;
- The electricity sector accounted for 43.1% of the total GHG emissions reductions of 21.1% experienced by the city between 2011 and 2016;

- Note: State and regional efforts for decreasing the carbon intensity of the electrical grid resulted on a 19.4% drop on the city's electricity GHG emissions, or 98.5% of the sector 19.7% total decline;

A 20.6% decrease on the GHG emissions of the transportation sector:

- Overall Annual Vehicle Miles Traveled (VMT) have increased by 5.8%, while annual VMT per person dropped 2.0%.
- The transportation sector accounted for 27.3% of the total GHG emissions reductions of 21.1% experienced by the city between 2011 and 2016;
- Note: during the period, Charlottesville's vehicles carbon intensity dropped 25% on average as fuel economy increased;

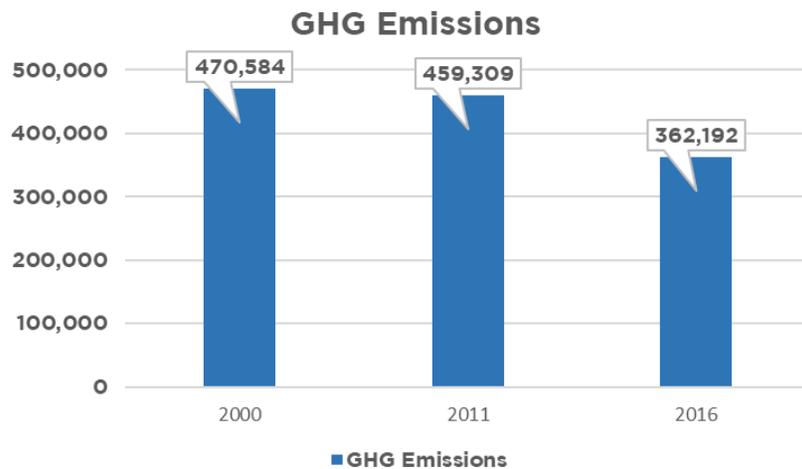
A 27.2% decrease on the GHG emissions of the natural gas sector:

- Overall natural gas consumption has declined by 27.2%;
- Per person natural gas consumption fell by a marked 32.5%;
- The natural gas sector accounted for 24.4% of the total GHG emissions reductions of 21.1% experienced by the city between 2011 and 2016;
- Note: [Dec/2015 through Feb/2016 was the warmest winter on record](#);

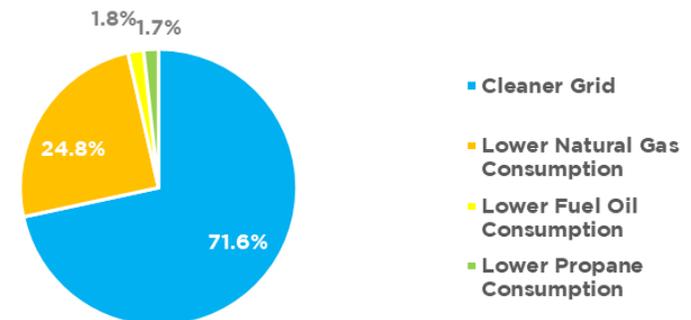


Charlottesville GHG Emissions – Changes Highlights

- Nearly **70.4% of the GHG emissions reduction experienced by City during the period of 2011 and 2016 had its main drivers in external factors**, such as a cleaner electrical grid or more fuel-efficient vehicles;
- The remaining 29.6% of GHG emission reduction happened mainly due to reduced consumption (of natural gas (24.4%), fuel oil (1.8%) and propane (1.7%).



Contribution to Charlottesville's 21.1% GHG emissions reductions between 2011 and 2016





How is Climate Action Being Incentivized?

Local Incentives for Climate Action

Public and private entities offer several monetary incentives for climate action through energy efficiency, renewable energy, and transportation measures. C3's [Climate Action Incentives Report](#) inform Charlottesville and Albemarle County residents and business managers of their options to save money and take action against climate change.

There are 49 incentives available to support local climate action, some key insights about them are:

Per type of climate action:

- 78% offer incentives to energy efficiency upgrades,
- 20% offer incentives to renewable energy investments;
- 8% offer incentives to low carbon transportation investments, but *none of those are available for households.*

63% of incentives provide rebates:

- 40% of the rebates are lower than \$100, 70% are lower than \$500.
- 68% of the rebates are directed to households and 32% to businesses;

86% of incentives have at least one qualifying criteria:

- 10% require good credit history;
- 12% require the beneficiary to be either income or age qualifying;
- *40% require property ownership.*



What is the City Planning to Do?

City Budget Highlights (work in progress)

A quick review, with a climate lens, of the information shared during Charlottesville's [FY 2021 Budget work sessions](#) and the [FY 2021 Proposed Budget](#) would highlight:

Charlottesville's General Fund expenditures averaged \$171 million/year between FY16 - FY20, and would average \$198 million/year in FY21 - FY25.

- The average annual increase of nearly \$ 27 million in General Fund expenditures is expected to be mostly funded by bond issues (debt).

Key changes in budget allocation for capital improvements projects with the potential to reduce Charlottesville's GHG emissions include:

- More investments: Urban Tree Planting (50% increase);
- Same level of investment (0% change): City Schools HVAC Replacement, City Facility HVAC Replacement, City and Schools Solar PV Program, Sidewalk Repair, Housing Rehabilitation, and Home Energy Conservation Grant Program;
- Lower investment: New Sidewalks (75% decrease);
- Eliminated (-100%): [Facilities] Energy Performance Contact (Audit), Bicycle Infrastructure.

Note: given the City's process of hugely augmenting its expenditures, projects receiving an unchanged monetary allocation will have a lower share of the total investments. This shows a lower prioritization of climate-related projects



Full Climate Policy Recommendations

The Community Climate Collaborative urges the Charlottesville City Council to:

1. Strengthen the City's Environmental Sustainability Division

Provide the division with sufficient resources (such as additional staff and budget for contracting third-party assistance for research and studies) to:

- Conduct a greenhouse gas (GHG) inventory every two years and create an annual publication of data for community-wide and City government electricity consumption, natural gas consumption, and estimated vehicle-fuel consumption. As building energy consumption and transportation account for nearly 94% of our community's GHG emissions, these publications would:
 - Provide City authorities with measurements for strategic decision-making,
 - Empower community members with the necessary data to hold the City accountable to their climate leadership goals.
- Assess, develop and effectively implement climate policies to advance more climate action in our community in a timely manner;
- Assess the direct and indirect net climate impacts of major projects and policies considered by the City Council.

2. Incentivize Cleaner, More Efficient, and More Equitable Energy Consumption Patterns

Match [County of Albemarle's Climate Action Pool](#) of \$500,000, which was created to support strategies to address climate change and currently considers an additional appropriation of \$250,000 to the Climate Action Reserve for projects to increase energy efficiency of lower-income households. Establishing a Climate Action Fund gives a clear signal to residents, businesses and investors regarding the city's ongoing commitment to support projects that reduce emissions and increase resilience. C3 recommends that:

- The Fund shall allocate significant resources to enabling energy efficiencies and renewable energy investments of either [Small, Women-owned, and Minority-owned Business \(SWaM\)](#) or lower-income or energy burdened households;
- The Fund would not be an operational expense and could be initially funded through a one-time lump sum transfer from the Council Strategic Initiatives Fund;
- The Fund would allow the City to engage with new projects before July 2021 (FY 2022), especially those that



are not authorized, but might become viable after the end of [VA General Assembly 2020 session](#).

- For instance, the Fund would allow the City to secure resources for studying the feasibility and advancing negotiations for Solar Power Purchase Agreements (PPA) on rooftops of city-owned buildings, especially schools.

3. Incentivize Cleaner, More Efficient, and More Equitable Transportation System

Strengthen CAT:

- Provide resources for better route and bus-fleet management;
- Increase the share of permanent employees/drivers;
- Commit to increase CAT's ridership by 100% by 2025.

Improve Bicycle and Walking Access:

- Increase funding to repair and create new sidewalks and bike lanes.

Provide More Clean Transportation Infrastructure:

- Require a [minimum of 3% parking ratio](#) of EV charging spaces to parking spots in municipal parks and facilities.

¹ Such as: Board of Architectural Review, Building Code Board of Appeals, CAT Advisory Board, Charlottesville-Albemarle Regional Transportation Committee, Charlottesville Economic Development Authority, Charlottesville Redevelopment and Housing Authority, Entrance Corridor Review Board, Housing Advisory Committee,

4. Ensure That Climate is a Priority Criteria for Key Decision Making in the City

Require key strategic boards and committees¹ to include a community member with demonstrated experience in climate action and policy and/or create the "Charlottesville Climate Advisory Committee" with the goal of:

- Providing the City Council with recommendations regarding Climate Policy, and
- Providing the City Council with recommendations regarding Climate Funding Priorities.

Require the City's "Budget Priorities" to include Climate Leadership:

- Ensure that the [City's Comprehensive Plan](#) is developed with an important focus on promoting climate change mitigation (GHG emissions reductions) and adaptation/resilience in an effective and equitable manner.

JAUNT, Minority Business Commission, Parking Advisory Panel, Parks and Recreation Advisory Board, Planning Commission, Rivanna Solid Waste Advisory Committee, Rivanna Solid Waste Authority, Rivanna Water and Sewer Authority, Towing Advisory Board, Tree Commission.



C3's Mission and Goals

The Community Climate Collaborative (C3) mission is to catalyze climate action at the community level through evidence-based planning, collaboration, programs, and advocacy which directly reduce climate pollution and elevate the climate leadership of communities.

Through our work we:

- Demonstrate that our community's ambitious climate goals are economically-feasible and can be implemented in an equitable manner;
- Highlight the importance of promoting energy and transportation equity in our community as a necessary and desirable component of a prudent climate action plan;
- Engage with community members to directly reduce greenhouse gas (GHG) emissions, supporting them with data-driven technical expertise and custom solutions;
- Provide community members with knowledge about a variety of climate action options and assist them on the creation of their successful climate action plans;
- Elevate climate leaders and mobilize residents, businesses, and social justice leaders to support and enable local climate policy solutions.