Fairfax County Community-wide Energy and Climate Action Plan (CECAP)

Transportation & Development Sub-Group Meeting

Strategies Discussions #3

Thursday, March 25, 2021 6:00 pm – 8:00 pm Held Electronically via WebEx

Welcome & Meeting Overview

Candace Blair Cronin, Ph.D. – ICF Facilitator



Meeting Objectives

Key Takeaways from Mural Brainstorming Matrix

Review of Impacts Discussion Starter &

Agenda

Prioritization Matrix

Prioritization of Strategies

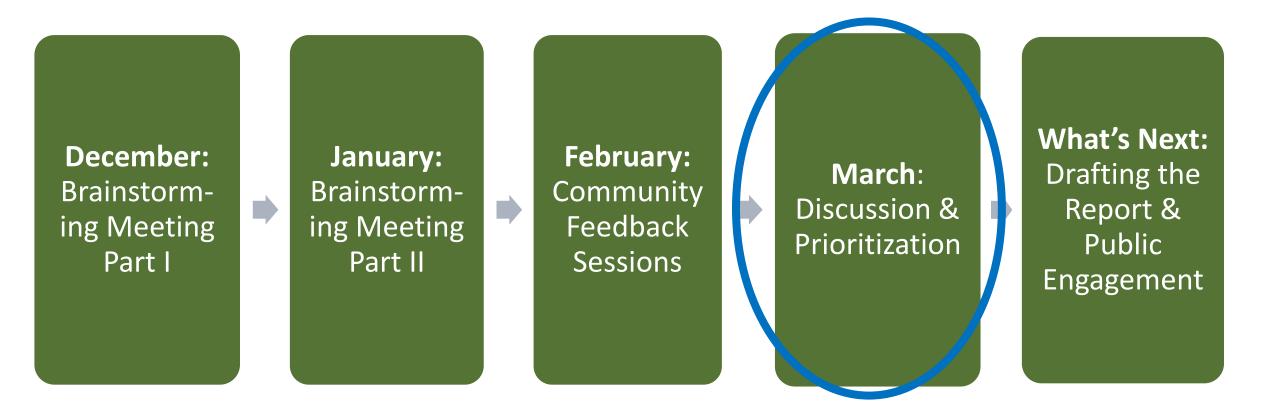
Sector-Based & Interim Goals

Wrap Up, Vote on March Meeting Part II, and Meeting Feedback

Meeting Objectives

- Review key takeaways from the Mural Brainstorming Matrix.
- Review of Impacts Discussion Starter & Prioritization Matrix.
- **Prioritize** and **discuss** strategies and actions to inform their level of emphasis and their narrative in the CECAP report.
- Discuss sector-based and interim goals.
- **Decide** on whether a March meeting Part II is needed on March 31.

Task 3 Timeline



February Public Feedback Sessions

Link to February Energy Public Meeting page

- Gathered feedback on:
 - Major Energy-Saving Improvements
 - Smaller, DIY Energy-Saving Improvements
 - Renewable and Alternative Energy
 - Green Buildings

Link to February Transportation & Development Public Meeting page

- Gathered feedback on:
 - Public Transportation & Other Transit
 - Connected & Sustainable Communities
 - Electric Vehicles & Mobility
 - Waste Reduction, Recycling & Composting
 - Green Spaces & Natural Resources

Public surveys closed on March 14 and analysis of comments is in process.

Key Takeaways from Brainstorming Comments Matrix

Adam Agalloco, ICF



Key Takeaways

The top 3 commented strategies/technologies within each sector include:

- Building & Energy Efficiency stricter building code adoption & enforcement, green infrastructure, combined heat and power/district energy
- Energy Supply solar (photovoltaic & community solar), geothermal, wind
- Transportation Expanding routes & trails/connectivity, improving safety, density/walkability
- Waste Waste reduction (reduce, reuse, repair), recycling, composting
- Forestry Tree planting, conservation, urban greenspace
- *These takeaways are not meant to reflect the Working Group's priorities. Priorities will be discussed at today's meeting.

Reminder on Definitions

- **Sector:** An area of emissions focus or an economic sector which generates carbon emissions from its energy use or economic activity.
- **Strategy:** A broader set of actions or set of sub-sector work that can be modeled to understand emissions reductions.
- **Action:** A project or specific technology that impacts greenhouse gas emissions within a strategy or sector.
- Implementation: Programs or policies that support realization of actions.
- Impacts: Results of the action or implementation

Key Takeaways, cont.

Implementation

- Incentive programs were the most popular implementation method across all sectors, followed by county programs and education/outreach.
- The CECAP is intended for voluntary, community action as 95% of emissions come from the community. There are other plans focused on reducing emissions from Fairfax County government and school operations. This is the first time the County is addressing community emissions and that is the emphasis of the CECAP.

Impacts

• Health and environmental justice was the top-commented impact category, followed by social and racial equity, cost, economic opportunity, and GHG reductions.

*These takeaways are not meant to reflect the Working Group's priorities. Priorities will be discussed at today's meetings and depend on who is selecting and taking action.

Review of Prioritization Discussion Starter & Prioritization Matrix

Adam Agalloco, ICF



Strategy Framework

- Edited and expanded upon based on discussion and comments received to-date (e.g., through Mural, emails, meetings)
- Provides a framework for the Energy, Transportation, Waste and Land strategies that contribute to the CECAP
- Provides detailed descriptions of each strategy, including potential actions, emerging technologies, and implementation methods

Impacts Discussion Starter

- Provides background information and an initial framework for considering the impacts of various strategies, actions and implementation methods.
- Each of the impact categories is included in the **Prioritization Matrix** with associated values or indicators.

Impact categories:

- Greenhouse Gases (GHG)
- Public Health
- Environmental Resource
- Economic Opportunity
- Equity (i.e., One Fairfax)
- Payback
- Cost to Community Member
- Timeframe
- Other Considerations

Prioritization Matrix

- Organized comments from Mural brainstorming sessions
- Categorized by strategy type, action, and scored across impact categories (MTCO₂e Reduced, Public Health, Environmental Resource, Economic Opportunity, One Fairfax, Payback, Cost to Community Members, Timeframe, Other Considerations)

Social Impacts and Strategy Synergies	Cost Impacts
	N/A
-	/
=	\$
+	\$\$
++	\$\$\$

Strategy Framework (updated)

Buildings and Energy Efficiency

- Strategy #1: Increase energy efficiency and conservation in existing buildings
- Strategy #2: Pursue beneficial electrification in existing buildings
- Strategy #3: Implement green building standards for new buildings

Energy Supply

- Strategy #4: Increase renewable energy in grid mix
- Strategy #5: Increase production of onsite renewable energy
- Strategy #6: Increase energy supply from renewable natural gas (RNG), hydrogen, and power-to-gas

Transportation

- Strategy #7: Increase electric vehicle (EV) adoption
- Strategy #8: Support efficient land use, active transportation, public transportation, and transportation demand management (TDM) to reduce vehicle miles traveled
- Strategy #9: Increase fuel economy and use of low carbon fuels for transportation

Waste

- Strategy #10: Reduce the amount of waste generated and divert waste from landfills and waste-to-energy facility
- Strategy #11: Responsibly manage all waste generated including collected residential and commercial waste, wastewater and other items.

Forestry and Land Use

 Strategy #12: Support preservation, restoration, and expansion of Fairfax County's natural systems and public spaces

Terms for Goal Setting

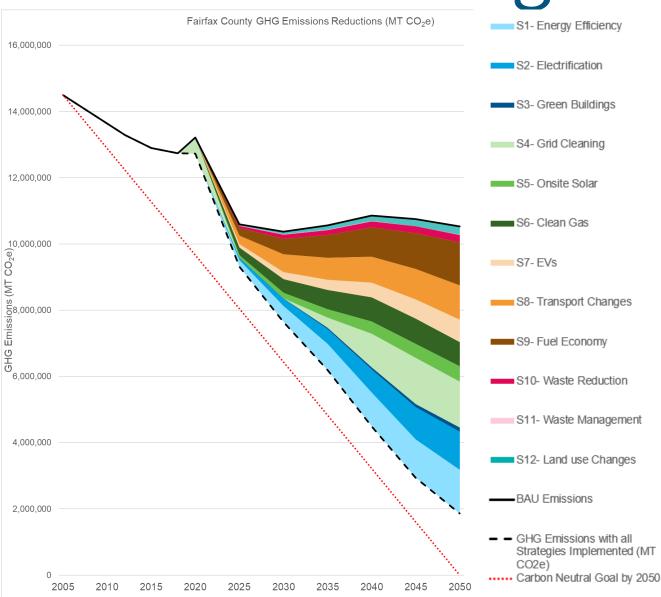
- Reduction goal/target goal/long term goal: The emission reduction levels that a government or organization sets out to achieve by a specified time, or target year.*
- Interim goal: A goal that provides a progress point for the long term goal and works to create accountability within the plan.
- Sector-specific goal: A goal set for sector-specific metrics that would contribute to the overall goal of reducing emissions and/or energy use.

^{*}C2ES US State GHG Emissions Targets

Goal Slide

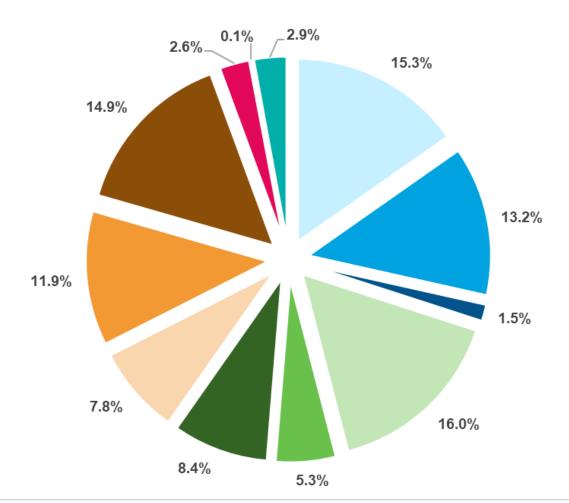
Long-term goal: Carbon neutrality by 2050, with at least 87% coming from emissions reductions from a 2005 base year.

Initial GHG Modeling Results



Initial GHG Modeling Results, cont.





- S1- Energy Efficiency
- S2- Electrification
- S3- Green Buildings
- S4- Grid Cleaning
- S5- Onsite Solar
- S6- Clean Gas
- S7- EVs
- S8- Transport Changes
- S9- Fuel Economy
- S10- Waste Reduction
- S11- Waste Management
- S12- Land Use Changes

Instructions for Mural Prioritization Exercise

1. Emphasize Priorities

- a. The 6 strategies are on the board, each accompanied by their associated actions
- b. You are given 6 votes to allocate (by clicking on strategies). You can put all 6 in one or spread them around to indicate what you believe should be prioritized.

2. De-Emphasize Priorities

- a. This time, which strategies would you de-emphasize?
- b. Again, you are given 6 votes to allocate (by clicking on strategies). You can put all 6 in one or spread them around to indicate what you believe should be deprioritized.

3. Return to WebEx

a. To review results and have a discussion.

What Happens Next?

Results and feedback received from today's exercises will be used to:

- Develop the narrative of the CECAP Plan
- Reflect minor changes to the modeling

At the conclusion of this discussion:

- These Strategies and Actions are considered the final product of that subgroup.
- Each subgroup will have the opportunity to review and respond to the other subgroup's strategies and actions, and specific and targeted feedback can still be provided.
- There will be an opportunity to review the draft report and ensure the report accurately reflects the discussions of this subgroup.

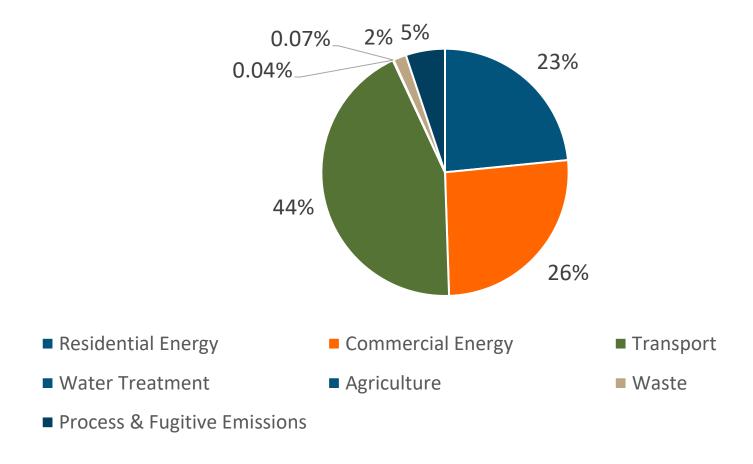
Sector-Based Goals

Candace Blair Cronin, Ph.D. – ICF Facilitator Adam Agalloco - ICF

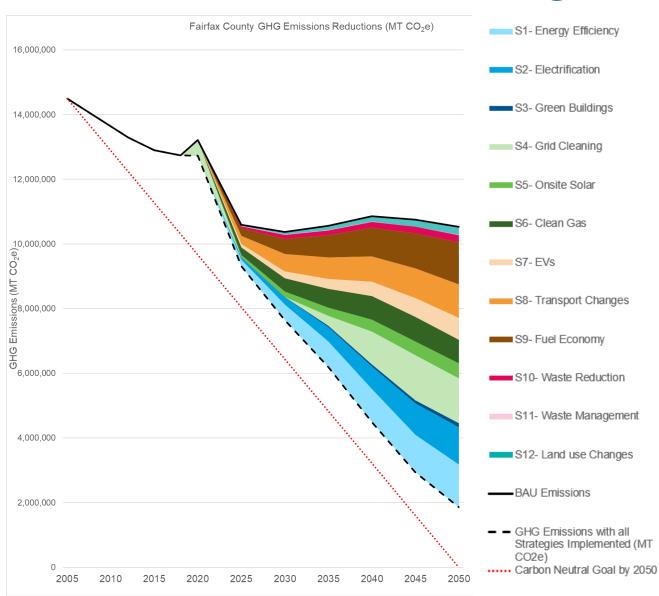


Context: GHG Inventory

• Total: 12.6 million metric tons of CO₂ equivalent



Context: Initial GHG Modeling Results



Sector Goal Progress To-Date

At the July 29 Task Force meeting, a discussion indicated:

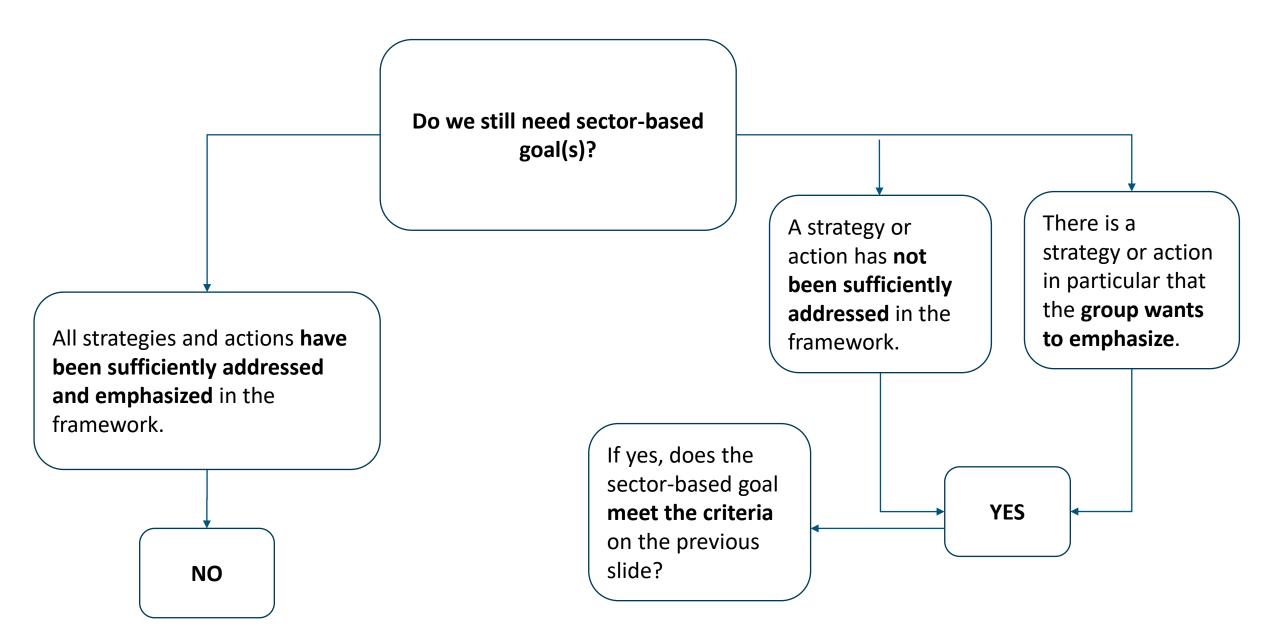
- A preference toward sector goals.
- A preference for a potential goal or goals focused in Transportation, Renewable Electricity and Buildings/Energy Efficiency.

Framing Today's Goals Discussion

- Today's discussion of goals will be conducted within your subgroup.
- Once the subgroups meet together in May, further discussion and a formal verbal vote will be conducted.

Framing Today's Discussion Sector goals should:

- 1. Be easily and **broadly understood** by the public
- 2. Be **measurable** based on available data
- 3. Support the **target** year goal
- 4. Be specific to Fairfax's priorities and ability to impact, but not limiting
- 5. Focus on **larger sectors** (not strategies)
- 6. Be **attainable** if in the short term
- 7. Be set for **specific metrics** that would contribute to the overall goal; generally, not specified with a GHG emission reduction target



Wrap-up and Next Steps

Candace Blair Cronin, Ph.D. – ICF Facilitator



March Meeting Part II

Agenda would include:

- Sector-based goals
 - Should there be sector-based goals?
 - If so, what sectors and how many?
- Interim 2040 goal
 - Should there be an interim 2040 goal?
 - If so, what percentage reduction.
- Opportunity to comment on strategies & actions in other Subgroup (i.e., make the case for why something should be added).

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Stay Informed

CECAP Homepage

Office of Environmental & Energy
Coordination (OEEC) Climate Action
News Blog

Twitter: @ffxgreen / #ffxCECAP

Follow for updates on the CECAP process, as well as information on climate and energy science, policy, and best practices.

Learn about the topics and trends driving the climate conversation in Fairfax County.

Thank You!

For further questions, please contact:

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OEEC Climate Planning Webpage