

Faith Alliance for Climate Solutions

Responses to Seven Google Form Questions

In Relation to the March 31, 2020 CECAP Meeting Materials

Question One

This presentation provides information about Fairfax's GHG inventory, business-as-usual projections, illustrative reduction scenarios, and goal setting. What questions do you have about the presentation materials?

The Faith Alliance for Climate Solutions (FACS) has several concerns about the draft CECAP planning documents. We offer some recommendations for improving the preliminary models that we hope will improve the County's likelihood of reaching an 80% reduction by 2050, much less reaching 100% reduction by 2050 or earlier.

Are the GHG estimates accurate and consistent between Fairfax's GHG emissions inventory and two MWCOG estimates? Fairfax County's 2013 [GHG inventory](#), the MWCOG's [Fairfax County GHG Inventory Fact Sheet](#) and MWCOG's [CECAP draft emissions scenario planning document](#) vary. Fairfax's GHG inventory and MWCOG GHG estimates for the same year differ as much as 23%. The two MWCOG documents differ by 7.5% to 8.5%. Fairfax's trash incinerator GHGs reported to the EPA are more than 4 times greater than the CECAP planning documents. Other emissions estimates in the draft MWCOG documents may omit important sources of GHGs.

Are the [draft emission scenarios \(v.2\)](#) unnecessarily limiting potential sources of emissions from the models? It is difficult from the [Methodology Report](#) to determine the statistical modeling used for projections. Although the lack of statistical methodology makes it difficult to replicate each model's projections, our greatest concerns is that major sources of GHG emissions do not seem to be included in even the most aggressive model E. Residential and commercial building fossil fuel-based heating and all vehicles other than passenger light duty vehicles appear to be arbitrarily omitted from the models. Excluding these sources from models makes it very unlikely the county can reach aggressive GHG reduction goals.

Can the planning models include legislative, regulatory and budgetary changes in Richmond that appear essential to achieving significant GHG reductions? We attempted to independently simulate the five draft models with [the Energy Policy Simulator \(EPS\)](#), an online, open source, research-based tool developed by Energy Innovation Policy and Technology with support from MIT and Stanford, Argonne National Laboratory, the National Renewable Energy Laboratory, Lawrence Berkeley National Laboratory and others. Our simulations attempting to replicate the five draft models suggest that state action will be necessary to make dramatic GHG reductions. Action by the county on all sources of GHGs will need to be included, as well. In an attachment, the Faith Alliance for Climate Solutions presents our simulations of the five models and suggestions of actions at the County, State and Federal level that could give Fairfax a better chance of achieving net GHG neutrality by 2050.

Question Two

In the next stage of work, we need to begin limiting the number of scenarios that would get a deeper analysis. Please rank the top two scenarios that you would like to get further analysis. See slides 32 through 52 and the materials on the CECAP Task Force Meeting: March 31, 2020 webpage for more information on the reduction scenarios.

Model E is the only one that even approaches 80%. We recommend more in-depth analysis of Model E and modeling the additional actions that necessary to achieve net neutrality by 2050 or sooner. Model E should be the floor. More aggressive GHG reductions than those in Model E should be tested.

Question Three

A target year(s) establishes a timeframe that the GHG reduction goal should be achieved by. What should be our target year? See slide 63 for more information about target year selection.

The Intergovernmental Panel on Climate Change (IPCC) in November 2019 issued the [Emissions Gap Report](#). The UN panel warns that unless GHG emissions fall by [7.6% each year](#) between 2020 and 2030, the world will miss the opportunity to get on track towards the 1.5°C temperature goal of the Paris Agreement. Worldwide emissions will have to fall by at least 2.7% to stay below 2°C, a level that would yield devastating climate impacts. Were Fairfax to follow the IPCC recommendations for staying below 1.5°C, we would need to cut GHGs by 75% by 2030. A rough midpoint between the 1.5°C and 2°C would call for a 5% annual reduction through 2030, a 50% reduction from 2018 levels by 2030. Extrapolating a 5% reduction beyond 2030 would reach the goal of net neutrality by 2040, and net positive 50% by 2050.

We recommend CECAP establish goals of 50% reduction from 2018 GHG levels by 2030, 100% reduction by 2040 and 50% net positive (i.e., drawing down GHGs by 50% of the amount currently emitted) by 2050.

Question Four

Should there be interim year goals? See slide 63 for more information about interim year goal selection.

We strongly recommend 5-year interval goals for overall county GHG emissions. Consistent with neighboring jurisdictions, we recommend County and FCPS emissions should reach net neutrality by 2030.

Question Five

Is it more important for Fairfax's target year goal to be attainable or aspirational? See slide 65 for definitions of each.

We recommend short term attainable goals through 2030, making use of existing technologies and implementing legislative, regulatory and budgetary policies that have scientifically demonstrated impacts on GHG emissions. In five year increments after 2030, we recommend aspirational goals through 2040 and 2050.

Question Six

Should the plan include sector-specific goals? See slide 67 for more information about sector-specific goals.

It is imperative that five-year sector specific goals be modeled and tracked. Goals should be set for transportation, residential buildings, commercial and government buildings, electricity, waste and water, fugitive gases (HFCs) and agriculture. Each should have aspirational net zero goals and be tracked separately.

Question Seven

What other questions or comments do you have?

Please see our attached document which summarizes GHG reduction projections for each of the five models, proposes a more comprehensive and ambitious model, and identifies legislative, regulatory and budgetary initiatives at the county, state and national levels. We believe it vital that Fairfax develop proposals for the 2021 general assembly well before the CECAP process has concluded.