

TO: CIAC  
FROM: Dave Kershner  
RE: Forecasting future GHG emissions, evaluating possible targets  
DATE: April 30, 2020

This memo discusses forecasting scenarios for GHG emissions.

As you know, our mandate as an advisory committee is to “periodically recommend to the County Council new or revised targets that meet or exceed state or federal GHG reduction and renewable energy goals.” Given that Cascadia Consulting Group plans to forecast the County’s business-as-usual community-wide GHG emissions through 2050, I propose that the committee request a forecast of 2030 and 2050 emissions based on the reductions necessary to achieve the new statewide targets. In addition, Cascadia presumably could forecast a community-wide GHG emissions trend line, assuming 100 percent renewable energy for electricity, heating and transportation in 2035, a goal that the City of Bellingham is now considering.

The statewide targets approved by the Legislature in March 2020 are a 45 percent reduction below 1990 GHG emissions levels by 2030, a 95 percent reduction below 1990 levels by 2050, and net zero emissions by 2050.<sup>1</sup> Although we do not have 1990 GHG emissions data, ICLEI’s ClearPath software will allow us to “backcast” to 1990 from our 2017 inventory data to get a rough estimate of what emissions might have been at that time. Cascadia could then forecast the emissions reductions necessary to achieve the statewide targets for 2030 and 2050, recognizing the uncertainty about the 1990 data.

Given that the County Council established a goal of 100 percent renewable energy use and directed the Climate Impact Advisory Committee “to work diligently toward that goal,<sup>2</sup> it would seem prudent to also forecast emissions in 2035 assuming 100 percent renewable energy use for electricity, heating, and transportation (and bearing in mind that there will likely still be lifecycle emissions associated with these renewable energy sources in 2035.)

For government operations, Cascadia could potentially do two scenarios: an 80 percent reduction below 2007 levels (consistent with the goal in King County’s Carbon Neutral Implementation Plan) and a second forecast assuming 100 percent renewable energy use for electricity, heating, and transportation.

King County appears to have the most ambitious government operations target in the state and a viable plan to achieve it.<sup>3</sup> King County’s Carbon Neutral Implementation Plan, released in 2019, calls for reducing the county’s government operations target to 80 percent below its 2007 emissions level by 2030. Although the King County target for 2030 is more ambitious than Thurston County’s, that county and its three largest cities may strengthen their targets in response to the new statewide targets.<sup>4</sup>

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<sup>1</sup> <https://app.leg.wa.gov/billsummary/?billNumber=2311&year=2020>

<sup>2</sup> <http://documents.whatcomcounty.us/weblink8/0/doc/4223112/Page1.aspx?>

<sup>3</sup> <https://www.kingcounty.gov/services/environment/climate/actions-strategies/climate-strategies/strategic-climate-action-plan/carbon-neutral-plan.aspx>

<sup>4</sup> [https://www.trpc.org/DocumentCenter/View/7068/FactSheet\\_072619](https://www.trpc.org/DocumentCenter/View/7068/FactSheet_072619)