

KING COUNTY GROWTH MANAGEMENT PLANNING COUNCIL AGENDA ITEM

AGENDA TITLE: Climate Change

PRESENTED BY: Interjurisdictional Staff Team (IJT)

Background

Countywide Planning Policies (CPPs) EN-17 and EN-18 direct the GMPC to establish a countywide greenhouse gas (GHG) emissions reduction target and a measurement framework to measure progress towards that target.

EN-17 Establish a countywide greenhouse gas reduction target that meets or exceeds the statewide reduction requirement that is stated as the 2050 goal of a 50 percent reduction below 1990 levels.

EN-18 Establish a greenhouse gas emissions inventory and measurement framework for use by all King County jurisdictions to efficiently and effectively measure progress toward countywide targets established pursuant to policy EN-17.

Staff from the nine cities of the King County-Cities Climate Collaboration (K4C), with support from interested non-member cities, have been collaborating with the Interjurisdictional Team (IJT) to provide relevant information and recommendations to support implementation of EN-17 and EN-18. The K4C is a voluntary partnership between King County and the cities of Issaquah, Kirkland, Mercer Island, Redmond, Renton, Seattle, Shoreline, Snoqualmie, and Tukwila.

In February 2014, King County Executive Constantine and Mercer Island Mayor Bruce Bassett convened the K4C Elected Official Working Summit, which was attended by K4C cities plus the cities of Woodinville, Bellevue, Sammamish and Kenmore. This group – representing roughly three quarters of the population of King County - agreed to several next steps including collaborating to develop a package of shared principles and commitments to help achieve deep regional GHG emissions reductions.

At the Summit, the Executive clarified that the GMPC would be setting greenhouse gas emissions targets for the county as a whole through amendments to the CPPs. The

K4C and additional participating cities, in a parallel but supporting effort, are focusing on establishing shared principles and commitments. These commitments will support implementation of the targets established in the CPPs.

Analysis:

A. Existing GHG Targets

Washington State's stair stepped GHG reduction requirements are to:

- Limit emissions to 1990 levels by 2020
- Limit emissions to 25% below 1990 levels by 2035
- Limit emissions to 50% below 1990 levels by 2050

King County has adopted a communitywide goal to partner with its residents, businesses, local governments and other partners to reduce countywide greenhouse gas emissions by at least 80 percent below 2007 levels by 2050.

When comparing Washington State and King County, the King County policy of achieving a reduction of 80% below 2007 levels is significantly more ambitious than Washington State's adopted requirement.

Additionally, many cities in King County have adopted their own targets, including:

- 17 of 39 King County cities adopted the U.S. Mayor's Climate Protection Agreement, which included a target to reduce GHG emissions 7% below 1990 levels by 2012
- Kirkland: 10% below 2005 by 2010, 20% by 2020, and 80% by 2050
- Issaquah: 80% below 2007 by 2050
- Mercer Island: 80% below 2007 by 2050
- Seattle: carbon neutrality by 2050
- Shoreline: 25% below 2007 by 2050, 50% by 2030, and 80% by 2050

B. Scientific Imperative

Increasing air temperatures, ocean acidification, rising sea levels, decreasing snow pack, and changing river flows are examples of climate change impacts that are already occurring. These impacts have the potential to become more severe over time. According to best available science, to avoid the most devastating impacts of climate change, global temperature increases should be limited to no more than 2 degrees C compared to 1900. Globally, this translates to an approximately 80% GHG emissions reduction by 2050 (compared to 2007), which is more aggressive than the current Washington State emissions reduction requirement contained in RCW 70.235.020.

C. New Energy Cities

New Energy Cities is a program of Climate Solutions, a non-profit organization that works with northwest communities to tackle GHG emissions. In support of the K4C,

New Energy Cities recently completed an analysis in King County which shows how getting on a pathway to reduce GHG emissions by at least 80% reduction by 2050 is ambitious but achievable.

D. What kinds of actions would it take to reduce greenhouse gas emissions 80 percent by 2050?

Technical analysis presented at the February 13, 2014 Elected Official Working Summit showed us that getting on track to an 80% reduction by 2050 is ambitious but achievable. Subsequent analysis conducted after the Summit has demonstrated that a 50 percent reduction by 2030 is possible with concerted action. There is a menu of strategies – from building standards, to transit-oriented development, to clean fuels – that can be packaged and carried out in phases to get us on track. Federal and state laws such as federal vehicle efficiency standards and Washington State’s Energy Code and Renewable Portfolio Standard will help to make significant progress in reducing emissions; additional local actions are needed to close the gap.

In King County, actions to reduce emissions are focused on the following: transportation and land use, energy and green building, forests and farms, and consumption and materials management. The particular strategies that a jurisdiction would implement are dependent on factors such as location and development history. While each jurisdiction’s pathway would be different, example strategies that been proven effective and would likely be included in many cities efforts include:

- Sustain and expand transit and implement clean mobility options;
- Adopt and implement green building standards;
- Partner with utilities to help them transition to increasingly renewable resources, meet demand through efficiency improvements, and phase out fossil fuels;
- Implement outreach programs to increase residential and commercial recycling and reuse ; and
- Improve efficiency of and reduce emissions from government buildings and fleets.

E. What would the costs of achieving an 80 percent reduction target be?

Ascribing costs to the county/city to achieving an 80 percent reduction target is difficult, since costs and benefits are born by several different players. Some actions would require minimal costs to local governments (such as changes to transportation or building policies), some could be done at low costs (for example by partnering with other cities or with utilities) and others may build on existing city programs.

Many climate actions reduce energy or resource costs. At an economy-wide scale there is a growing consensus that the costs of action are far less than resulting reduced resource costs and the avoided costs of climate change impacts that are likely if collective action is not taken.

Staff Recommendation:

The IJT is recommending that King County use 2007 as a base year and 2050 as the target with interim levels for which to measure our progress. Establishing near term milestones (e.g. 2020 and 2030) helps to track progress toward the long-term target, are useful for current planning horizons, and critical to pushing progress. Proposed GHG milestones for 2020 (25% reduction) and 2030 (50% reduction) follow a near straight line trajectory from the 2007 baseline year to the 2050 target year (overall, slightly less than a ~2% decrease each year from 2007 to 2050 would be needed.) Actual progress may not follow this straight-line and will follow actions to reduce emissions from major sectors like transportation and buildings. As several years have passed since many jurisdictions adopted initial targets, the 2020 milestone is ambitious but can help to drive early actions.

EN-17 ~~((Establish a countywide))~~ Reduce community level sources of greenhouse gas ((reduction target that meets or exceeds the statewide reduction requirement that is stated as the 2050 goal of a 50 percent reduction below 1990 levels)) emissions, compared to a 2007 baseline, by at least 25% by 2020, 50% by 2030, and 80% by 2050. For geographic-based emissions, assuming 1% annual population growth, these targets translate to per capita emissions of approximately 8.5 metric tons of carbon dioxide equivalent (MTCO2e) by 2020, 5 MTCO2e by 2030, and 1.5 MTCO2e by 2050.

EN 18A King County shall assess and report countywide greenhouse gas emissions associated with resident, business, and other local government buildings, on road vehicles and solid waste at least every two years. King County shall also update its comprehensive greenhouse gas emissions inventory that quantifies all direct local sources of greenhouse gas emissions as well as emissions associated with local consumption at least every five years.

Next Steps:

1. Today, May 21st, provide direction to staff on the amendments to EN-17 and the addition of the new policy, EN-18A, regarding GHG emissions goals and measurement methodology, respectively.
2. Continue discussions on actions and strategies through the K4C and the Elected Official Working Summit, scheduled for June 12, 2014.
3. At the GMPC meeting on July 23rd, consider action on a motion to amend the CPPs as directed.