



Executive Department
Jon P. Jennings, City Manager

To: Councilor Thibodeau and members of the Sustainability and Transportation Committee
From: Troy Moon, Sustainability Coordinator
Date: March 16, 2018
Subject: Adopting a goal to reduce greenhouse gas emissions citywide 80% by 2050

In June, 2017, the Portland City Council adopted a resolve to join the [Mayors National Climate Agenda \(Climate Mayors\)](#), pledging to take actions to reduce greenhouse gas emissions in a manner consistent with the goals outlined in the Paris Agreement. Specifically, signatory cities pledged to:

1. Develop a community greenhouse gas (GHG) emissions inventory
2. Set near- and long-term targets to reduce emissions
3. Develop a Climate Action Plan aligned with the City's targets

The Sustainability Office has been developing a strategy to meet this commitment. During this process, I met with my counterpart in South Portland – also a member of the Climate Mayors – to discuss our plans. We realized that by collaborating we could address climate issues on a regional level and reduce costs by sharing consulting expenses. Together, we developed a joint project centered on an ambitious long-term vision for deep emissions reductions. The key facets of our recommended strategy are:

1. Adopt a greenhouse gas reduction target compatible with the goals established by the Paris Climate Agreement. Leading cities have chosen an 80% reduction in emissions by 2050. (80x50)
2. Select a qualified consultant to assist with the development of a rigorous planning process that will identify actions necessary to achieve the targeted GHG reductions.
3. Establish a stakeholder group of experts in key areas to guide the planning process. (Key areas include energy, land use and transportation, waste reduction, and resilience.)
4. Conduct community meetings to engage citizens in the planning process

At the conclusion of this process each city will have a detailed plan describing concrete actions and measureable goals that will result in a less carbon intense and more resilient community.

During the formation of our strategy we were approached by a team consisting of the principals from Gridsolar and the leadership of the Maine Chapter of the Sierra Club. They proposed a project that would create parcel level maps of energy consumption in both cities and a map showing the location and capacity of key assets in the local electric grid. Together, this information would allow our cities to identify effective ways to deploy distributed energy resources such as solar panels, choose areas where micro-grids might make sense, and where it makes the most sense to build out electric vehicle charging infrastructure. These technologies will be vital parts of any effort to reduce GHG emissions and ensure our communities are resilient in the face of the unavoidable impacts of climate change. GridSolar and the Sierra Club view this

project as a model for cities across the country and are offering to pilot it in our cities at no charge, although they ask that we help identify potential funders if possible.

With these pieces in place, Sustainability staff met with both City Managers to review our project and discuss funding. Conversation with colleagues in other cities and discussions with several consultants suggests a budget for our planning process should be approximately \$220,000. We proposed that South Portland and Portland both commit \$110,000 to the project. Either city pursuing a planning process on its own would likely pay more than that. Additionally, partnering with GridSolar will provide access to research, mapping, and public outreach valued at \$400,000. Moving forward with this project will model collaborative regional climate action planning, minimize consulting costs, and leverage an innovative approach to energy modeling.

As a next step in this process we are asking the City Council to officially adopt the goal of reducing greenhouse gas emissions by 80% before 2050. The cities involved in the Climate Neutral Cities Alliance, which includes New York, Boston, Minneapolis, Seattle, San Francisco, as well as many international cities state:

Cities striving for carbon neutrality recognize that averting the worst impacts of climate change will require cutting GHG emissions by at least 80% by 2050. Because urban areas account for nearly three-quarters of humanity's emissions, reaching this goal will depend in large part on our ability to reimagine and reinvent cities in ways that promote economic prosperity, social equity, enhanced quality of life, and climate resilience.

The Paris Agreement was signed by 195 nations around the world who rallied around a shared objective of keeping global temperature rise to no more than 2 degrees Celsius, preferably no more than 1.5 degrees Celsius. As a member of the Climate Mayors, Portland has pledged to work toward this goal.

Adopting this goal aligns with the City Council's stated commitment to take meaningful action to address global climate change and to reduce its local impacts. It represents the first step toward developing a comprehensive climate action and adaptation plan for the City of Portland.