

South Portland City Council
Position Paper of the City Manager

Subject:

RESOLVE #24-17/18 – Adopting a goal to reduce greenhouse gas emissions citywide 80% by 2050 and transitioning to 100% clean energy for municipal operations by 2040. Passage requires majority vote.

Position:

This item was discussed at the Council Workshop on March 27, 2018. Council is being asked by Sustainability Director Julie Rosenbach to adopt a resolve to reduce greenhouse gas emissions in South Portland by 80% by 2050 and to transition to 100% clean energy for municipal operations by 2040. As detailed in the attached memo by Ms. Rosenbach, these aggressive goals are in line with the resolve adopted by Council last July, when it voted to join the mayors National Climate Agenda, thus pledging to take actions to reduce greenhouse gas emissions consistent with the goals outlined in the Paris Agreement.

As a means of helping to achieve this significant emissions reduction, Ms. Rosenbach has proposed that the City join forces with the City of Portland to hire a consultant and form a joint steering committee to prepare a report that would outline steps each community should undertake to reach the 2040 and 2050 goals. Through money already encumbered and another amount that the Manager will be proposing in the FY19 capital budget, the City would contribute up to \$110,000 as part of this collaborative effort.

Ms. Rosenbach will be at Tuesday's meeting to answer any questions.

Requested Action:

Council passage of RESOLVE #24-17/18.


City Manager



**SUSTAINABILITY
OFFICE**

JULIE A. ROSENBACH
Sustainability Director

To: Scott Morelli, City Manager; Linda Cohen, Mayor; and City Council
From: Julie Rosenbach, Sustainability Director
Date: March 27, 2018
Subject: Adopting a goal to reduce greenhouse gas emissions citywide 80% by 2050 and transition to 100% clean energy for municipal operations by 2040.

On July 10 2017, the South 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 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 steering committee of experts in key areas to guide the planning process (key areas include energy, land use & 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 and greenhouse gas emissions in both cities and a map showing the location and capacity of key assets in the local electric grid. 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



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JULIE A. ROSENBACH
Sustainability Director

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. Conversations 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% by 2050. This goal is in line with the Paris Agreement, which was signed by 195 nations around the world who rallied around the 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, South Portland has pledged to work toward this goal.

The cities involved in the Climate Neutral Cities Alliance including New York, Boston, Minneapolis, Seattle, San Francisco, as well as many international cities have adopted this goal and 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 Sustainability Office also believes the City can lead the way by further resolving to transition to 100% clean energy in municipal operations by 2040. Over 190 mayors have signed on to this goal as part of Sierra Club's "Ready for 100%" campaign. In the United States, these include large cities such as San Francisco, Salt Lake City, and Chicago as well as a number of smaller cities including Burlington, VT, Aspen, CO, Rochester, NY, Grand Rapids, MI, and Portland, ME.

Transitioning to renewable energy will be an important part of any climate action program, and explicitly stating this goal underscores South Portland's commitment to renewable energy and climate action. It will also place the City amongst the vanguards who have begun to reimagine the operations of their cities without the use of fossil fuels.

Attachments

- Resolve
- Portland/South Portland Climate Action Plan project description
- Sierra Club 100% clean energy commitment



CITY OF SOUTH PORTLAND

LINDA C. COHEN
Mayor

SCOTT T. MORELLI
City Manager

EMILY F. SCULLY
City Clerk

SALLY J. DAGGETT
Jensen Baird Gardner & Henry

District One
CLAUDE V. Z. MORGAN

District Two
KATHERINE W. LEWIS

District Three
EBEN C. ROSE

District Four
LINDA C. COHEN

District Five
ADRIAN T. DOWLING

At Large
MAXINE R. BEECHER

At Large
SUSAN J. HENDERSON

**IN CITY COUNCIL
RESOLVE #24-17/18**

**IN SUPPORT OF ADOPTING A GOAL TO REDUCE GREENHOUSE GAS
EMISSIONS CITYWIDE 80% BY 2050 AND TRANSITIONING TO 100%
CLEAN ENERGY FOR MUNICIPAL OPERATIONS BY 2040**

WHEREAS, as a coastal, urban community, South Portland is highly vulnerable to the impacts of climate change; and

WHEREAS, local sea level during the past two decades has been rising 130 percent faster than the historical rate and the Maine Geological Survey currently estimates Casco Bay could experience a 3- to 10-foot rise in sea level by the end of the century; and

WHEREAS, waters in Casco Bay and the Gulf of Maine are warming at a rate of 99% faster than the world's ocean, which is projected to shift marine species and disrupt traditional fisheries; and

WHEREAS, members of our community and others are already feeling the effects of climate change through increased temperatures, more extreme weather events, more frequent flooding, and other disruptions that affect our residents, economy, and way of life; and

WHEREAS, from 1895 to 2014, average annual temperatures in Portland warmed by 4°F and climate models for the Casco Bay watershed predict further increases from 2 to 6°F by mid-century and 3 to 10°F by 2100; and

WHEREAS, current trends and projections show that Cumberland County can expect more frequent extreme precipitation events- categorized as coastal floods, flash floods, heavy rain and tropical storms- and increased months of drought alike; and

WHEREAS, these climate changes have cascading effects on the City's economy, infrastructure, public health and safety, and other critical systems; and

WHEREAS, the transition to a low-carbon community reliant on the efficient use of clean energy resources and electrified transportation will improve air quality, enhance public health, increase national and energy security, create local green jobs, and reduce reliance on finite resources; and

WHEREAS, taking steps to increase energy efficiency and resilience can attract jobs and economic development opportunities to our community and increase our long-term economic competitiveness;

WHEREAS, the City of South Portland has already demonstrated leadership in climate action and has implemented initiatives to reduce greenhouse gas emissions, including the adoption of the Clear Skies Ordinance in 2014, energy upgrades in municipal buildings, deployment of electric vehicles and charging infrastructure, an Energy Benchmarking Ordinance in 2016, the completion of a Municipal Climate Action Plan and the placement of the state's largest municipal solar array on the City's capped landfill in 2017; and

WHEREAS, national leaders met in Paris in December 2015 to negotiate a global agreement that endeavors to decrease greenhouse gas (GHG) emissions to a level where it is possible to cap average global temperatures at two degrees above normal or lower; and

WHEREAS, conservative estimates by the world's climate scientists state that to achieve climate stabilization and avoid cataclysmic climate change, emission of GHG cases must be brought to 80% below 1990 levels by 2050; and

WHEREAS, South Portland would be joining a growing coalition of cities around the world who are committed to an 80% reduction in GHG emissions by 2050 including Atlanta, Boston, Boulder, Chicago, Minneapolis, New York, Portland OR, Providence, San Francisco, Seattle, and Washington DC;

NOW, THEREFORE, BE IT RESOLVED, that the City of South Portland hereby establishes the goal of reducing citywide greenhouse emissions 80% by 2050; and

BE IT FURTHER RESOLVED, that the South Portland City Council lead the way by establishing an additional goal to transitioning to 100% clean energy in municipal operations by 2040.

Fiscal Note: Less than \$1,000

Dated: April 17, 2018