

Memo

Date: November 12, 2019

To: Planning and Sustainability Commission

From: Andria Jacob, Senior Manager, Energy Programs and Policy

Re: Update on 100 Percent Renewable Energy (Resolution No. 37289)

Resolution No. 37289 requires the Bureau of Planning and Sustainability (BPS) to report to Portland City Council every two years on progress toward the 100 percent renewable energy goals. BPS will present the first biennial report to Council on December 12, 2019 at 3:00 time certain.

Resolution goals and target years

- By 2035:
 - o 100 percent renewable electricity.
 - o 2 percent community-based ownership of renewable energy generation.
- By 2050:
 - o 100 percent renewable transportation and heating.
 - o 10 percent community-based ownership of renewable energy generation.

What 100 Percent Renewable Energy Means

Implementing the resolution means taking all the carbon out of the economy in a manner that is just and equitable. The terms "decarbonization" and "net zero carbon" are also used to describe these efforts under a single banner.

It's now widely accepted among city peer networks, backed up by scientific and engineering communities, that getting to a net zero economy is comprised of four fundamental pillars. These pillars provide the technical framework for how we arrive at a 100 percent clean energy economy. The four pillars are:

Efficiency. In the near-term, we must accelerate every effort to use less of everything fossil-fuel based. This includes electricity, natural gas, propane, diesel, gasoline, and heating oil. In buildings, this is called energy efficiency. In transportation, it means creating an environment where jobs, housing and services are located in close proximity to reduce the need for vehicle travel. It also



City of Portland, Oregon | Bureau of Planning and Sustainability | www.portlandoregon.gov/bps 1900 SW 4th Avenue, Suite 7100, Portland, OR 97201 | phone: 503-823-7700 | fax: 503-823-7800 | tty: 503-823-6868 means shifting travel modes, so more people are walking, biking, taking public transit and carpooling and less people are driving single occupancy vehicles. It also includes improving fuel economy of the vehicle fleet.

- **Clean electricity**. We must make the electric grid as close to 100 percent renewable as we can.
- Renewable transportation fuels. We must transition cars and trucks to non-fossil fuels like renewable biogas (also known as renewable natural gas, or RNG), ethanol, renewable diesel and electricity. It's important that renewable fuel have low lifecycle greenhouse gas emissions, including impacts from land use changes.
- Building electrification. We must eliminate fossil fuels used to heat buildings and hot water by switching to non-carbon emitting sources of heat.

Just Transition

Equity and justice are core principles embedded throughout the resolution. Justice is expressed in the resolution as a set of priorities around community-based development of renewable energy infrastructure; capacity-building and investment in frontline communities; utilization of minority- and women-owned businesses in clean energy development projects; and resources for training and hiring people from within communities of color and women that have traditionally been under-represented in renewable energy and energy efficiency.

What the Resolution Commits the City to Do

There are 26 directives within this resolution. They can be grouped into several broader themes:

- Advancing community-based ownership of renewable energy.
- Improving equitable workforce development, contracting and jobs focused on a just transition.
- Intervening in federal and state policy and regulatory processes.
- Collaborating with and influencing utilities on several fronts: to reduce investments in fossil fuel infrastructure; to maximize programs and funding for energy efficiency, renewable energy, demand response and storage; to reduce energy burden for low-income customers.
- Electrifying transportation.
- Greening City government operations electricity supply and going beyond on renewable energy credits (REC) purchasing.
- Building green infrastructure in neighborhoods that have not historically benefited from City investments.
- Creating new avenues for more people to engage in climate work with the City, especially youth, Oregon tribes, people of color and low-income people.