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Solarizing Portland: Expanding the City's Use and Access to Solar Energy

Clean, renewable solar power is one of the key solutions to addressing climate change and air pollution. The use of solar lowers and stabilizes energy costs for residents and businesses, and it reduces our expensive and dangerous dependence on costly fossil fuels like methane ("natural gas"). Additionally, investment in solar energy has proven to be a significant economic driver, creating good, local jobs.

The City of Portland has already taken positive action with installed solar at schools (Lincoln High School and Greely and King Middle Schools) and by issuing a RFP for solar installation on several municipal buildings and the closed landfill on Ocean Ave.

But the City is currently very behind other cities in our region and around the nation in installed solar. According to a 2014 report by Environment America, Portland ranks 44th in PV solar capacity per capita, with just 0.2MW of solar, the lowest per capita of the cities surveyed in New England. For comparison, Manchester, NH and Providence have 1 MW of installed solar each, while Burlington has 2 MW.

(Source: http://www.environmentamerica.org/sites/environment/files/reports/EA_shining_cities_scrn_0.pdf).

Developing a Robust Solar Plan for Portland

To take advantage of the many overlapping environmental and economic benefits of solar, the City should develop and carry out a thoughtful, realistic plan to increase the amount of solar used by the city's residents, businesses, and municipal operations.

Solar Growth Goals and Programs

The first step is for the City to set realistic, aspirational solar goals. Mayor Strimling's goal of getting 25% of Portland homes and businesses on solar power within ten years is an excellent start. We recommend that the City also adopt goals of installed solar MWs. The Maine Public Utilities Commission's on-going solar stakeholder process to develop new statewide solar policies has set a goal of 255 MW by 2021. Based on this statewide goal and the City's population and economic and political climate, we believe that a realistic, stretch goal for the City to be 20 MW by 2021.

To achieve the Mayor's goal and a MW goal, the Portland Climate Action Team proposes the following three-part solar program:

1. **Lead by Example.** The City should lay out a plan to install solar panels on all suitable municipal buildings and property. A solar MW goal for this sector should be established based on an inventory of potential sites. In addition, new municipal construction should be required to include solar and other practical, sustainable energy technologies.

- 2. Facilitate and Support Community Solar Farms.** Community Solar Farms (CSFs) allow businesses and residents to invest in shares in a common solar farm located anywhere in the same utility district. The electricity generated at the CSF is fed directly into the utility's distribution grid, and the investors' electric bills are credited with that energy.

CSFs open the door for energy self-reliance to the many Portland residents who rent apartments, own condominiums, or have shaded or small rooftops. Because of the scarcity of large plots of cleared land in Portland, the City should allow CSFs to be located on city-owned properties, especially land (or rooftops) unsuitable for other kinds of development (e.g. closed landfills). The City may also want to consult with nearby communities for potential CSF sites.

- 3. Initiative a "Solarize Portland" Program.** The price of residential, rooftop solar continues to drop dramatically, but the upfront costs are still a hurdle. In order to reduce the cost, the City should set up a community bulk-purchasing program similar to the one piloted in Maine by the City of Freeport (<http://www.solarizefreeport.com>).

In addition, the City should adopt a solar access ordinance that makes it as easy as possible for property owners to install solar. The Vote Solar Initiative has laid out a series of best practices that local governments can follow in ensuring that their permitting process is solar-friendly (<http://votesolar.org/policy-guides/>). The U.S. Department of Energy's SunShot Solar Outreach Partnership provides online tools and case studies to help cities streamline their permitting processes for solar power (<http://energy.gov/eere/solar/downloads/solar-powering-your-community-guide-local-governments-book-energy-efficiency>).