

Developing an Energy Saving Program Plan for Bellingham

June 27, 2014

Introduction.

As described in our background report, the City of Bellingham, and the Bellingham community, can draw upon a substantial body of successful work in designing and implementing energy conservation measures, and has most of the infrastructure in place needed to advance energy saving efforts to the next level. Local factors include technical expertise, a skilled workforce, a broad base of support from community organizations and public agencies, and an active and engaged citizenry. This document briefly discusses how we will build upon this base to construct the energy use reduction plan.

Partnerships and Leadership Team.

First, we will further engage existing partnerships, with the City playing a convening role, to identify next steps and further develop the infrastructure and activities to write and carry out the plan. To formalize the project partnership we are putting together an Energy Leadership Team, to include representatives from organizations that have played a major role in developing our areas' current energy efforts. Leadership team members will include staff from the major private utilities, the Bellingham School District, and the City of Bellingham. The team also includes representatives from community groups that play a leading role in energy issues, including Sustainable Connections, RESources, and the Opportunity Council. We also expect to recruit one or more participants from among low-income housing providers, which will assist in the achievement of the multifamily conservation component of the energy reduction plan. Western Washington University's Energy Studies Program is also contributing by providing an intern for the project, and may also provide technical assistance as we implement the plan.

The City of Bellingham will serve as the lead agency for the project and will staff conservation efforts at municipal buildings and assist with public outreach and education. The City will also take the lead in writing the reduction plan and will coordinate partner participation in the plan and its implementation. The City will oversee the collection and reporting of data to the GUEP and will write the final report.

The leadership team will develop or review the energy reduction components of the plan. We have held our first meeting to start discussing process and contents of different elements of the plan. Initial ideas regarding these components are described below.

Municipal Conservation Efforts.

As part of the energy savings plan, the City will identify a process to review the effectiveness of existing programs and look for opportunities for fine-tuning or strengthening various practices. Likely processes for this effort include review of prior diagnostics work, such as a report by our

contractor Johnson Controls evaluating our energy systems, to identify additional areas for operational improvement. In addition, an examination of detailed use by facility may identify areas for further reductions. An energy audit of street lights, and development of a schedule to switch out to LED's, will also occur during the prize competition phase. Additional City efforts may include hiring a Resource Conservation Manager (RCM) to help oversee the energy savings plan and related conservation efforts, subject to 2015 budget deliberations. The City will also continue its efforts to reduce water waste given that it takes energy to produce treated water. As described in our program history document, this will rely on continual engagement with the Community Energy Challenge program. Other likely City efforts will include an energy savings involvement plan for employees, to include both a workplace focus and the provision of materials to encourage energy reduction at home.

The updating of other critical City plans will also occur during the prize period, providing us with an opportunity to synchronize the energy reduction plan with long-term planning documents. These include an update of the City's Climate Action Plan, likely to begin this year, and its citywide Comprehensive Plan, to occur in 2015 and 2016.

Public Schools.

The Bellingham School District has one FTE Resource Conservation Manager position distributed across two employees, and will continue efforts to ensure that additional facilities achieve energy reductions during the prize period. A representative of the School District will participate in the project's Leadership Team.

The District has procured many of the financial resources needed to support the energy savings to be included in a plan. A recent voter-approved school capital bond will fund a number of energy-use reduction projects. With proceeds from the bond, one elementary school will be completely rebuilt to high energy standards, and another will be expanded and remodeled in 2016 to include energy upgrades. Also, in 2014 the District received a grant of \$310,000 from the state to be used for additional energy saving investments, such as the installation of an energy control system at Bellingham High School and additional lighting upgrades.¹

The energy savings plan will likely include an education campaign directed at students, teachers, and school administrators, to focus on conservation both at school and at home. Such efforts will be assisted by the Bellingham-based organization RESources, which works with individual classrooms to help them become "Green-certified" through a Green Classroom Certification Program, and encourages students to adopt at least one energy-conserving behavior. The program also includes community action projects focusing on water, energy, and waste reduction. In 2014 a pilot project involved 31 elementary schools countywide, and 1000 students. This program will continue in 2015. Additionally, in the 2015/2016 school year, the program plans to add new offerings for middle and high schools, to include revamping materials to leverage the City's participation in the GUEP.

Residential Conservation.

The Opportunity Council and affiliated contractors will continue to take the lead in efficiency retrofits at residential homes, to include both ongoing low income weatherization work and the Community Energy Challenge. In developing the energy savings plan, the leadership team will identify ways to further promote these programs. Sustainable Connections will be outreach lead to recruit residences to participate, and will continue education efforts involving local businesses. Puget Sound Energy and Cascade Natural Gas will support retrofits and conservation via incentive programs and consumer education. An outreach and education plan, described below, will assist in ramping up participation in these programs or prompt residents to initiate efficiency upgrades on their own. We will also cooperate with other energy-related residential programs, such as solar campaigns, since renewable investments are optimized with prior efficiency upgrades. We are exploring whether there is an opportunity to take advantage of OPower savings reports as part of our community's participation in the GUEP.

Multifamily Conservation.

Developing the energy savings plan will require finding ways to mesh existing local multifamily efforts with innovative best practices. Staff from the City's housing office will participate in development of the plan and will help identify ways to leverage energy use reduction in low income and rental housing. City staff are currently reviewing best practices for multifamily dwellings to identify promising options for program innovation, including financing or incentive programs that work around the "split incentive" problem with rental housing.

We will invite the Bellingham Housing Authority or other non-profit housing providers to join the project Leadership Team in order to tap into their knowledge of multifamily conservation methods and help develop new conservation ideas that could apply to affordable housing. We will also explore working with the utilities to maximize participation in existing utility programs targeting multifamily developments.

Some enhanced conservation activities have already been identified for the 2015-16 period. For example, Puget Sound Energy is expanding its multifamily program and will provide incentives for replacement of old refrigerators in multifamily dwellings. As mentioned in our background report, new construction of affordable housing to be financed by the City's housing levy will require construction to the state's Evergreen Sustainability standards.

Goal setting.

As part of plan development, we will conduct a thorough review of existing goals and targets, and will also identify synergies with new state guidelines and programs. We will build from these goals to identify an appropriate, ambitious target to accelerate energy savings that take into account the latest energy saving programs and technologies. As mentioned previously, we will be updating the community's Greenhouse Gas Reduction Plan in the near future, which will help to identify useful goals and benchmarks. As we get further into the planning process, the

Leadership Team will work to develop a series of sub-goals to achieve the desired overall levels of savings. In addition to short-term goals related to the GUEP, the city will also establish longer term targets with attention to opportunities like the district heating plant serving the Bellingham waterfront, and development of increasingly efficient housing. Operational goals could include the following:

- Number or percent of residences either retrofitted by or involved in an energy reduction program;
- Reduction in energy use in city facilities;
- Percent of city employees engaged in energy reduction at the workplace and at their residences;
- Reduction in energy use in Bellingham School District facilities;
- Percent of schools involved in a targeted energy savings effort; percent of students involved in energy savings activities at school or home.

Public involvement and promotion of the energy reduction plan.

The City and its partners will kick off a series of activities to help develop the plan, and to get citizens and employees involved in the steps necessary to substantially reduce energy consumption. We will also develop processes and events to bring additional expertise from citizens and energy-related businesses into the plan. The partner organizations will assist with development of a public involvement and outreach plan. Possible elements that have been identified thus far include the following:

- Kickoff events to involve municipal and community leaders;
- Hosting an energy fair focused on residential conservation;
- Involvement of City neighborhoods in developing targets to achieve residential savings;
- Use of City and energy utility bills and newsletters for distribution of information on the program, and to publicize trends in energy use or savings.

Notes

¹ Bellingham School District, "Bellingham Public Schools Awarded Energy Efficiency Grant," <http://bellingshamschools.org/news/2014-04/bellingham-public-schools-awarded-energy-efficiency-grant>