

## Sustainable Wallingford Energy Efficiency Team (SWEET) Plan

*The purpose of the SWEET Plan is to support individuals, businesses and institutions in Wallingford as they take small steps that gradually lead to a path of local and clean energy security. Our ultimate goal is low cost neighborhood energy production with carbon equivalents reduced in the neighborhood to below 350 ppm. In order to realize our goal, we must educate and motivate Wallingford residents so that they decrease their energy consumption by making infrastructure improvements and behavior changes appropriate for them.*

Sustainable Wallingford projects begin with the individual, with you and with me. Our projects transform into activities we as people can take cooperatively with our neighbors and then take out to the larger community. The members of Sustainable Wallingford were motivated to write an energy plan after NASA scientist James Hansen stated in April 2008 that, "paleo-climate evidence and ongoing climate change suggest that CO<sub>2</sub> [equivalent in the atmosphere] will need to be reduced from its current 385 ppm [parts per million] to at most 350 ppm if humanity wishes to preserve a planet similar to that on which civilization developed." In other words, if we keep increasing our carbon output any longer, life on earth will be far less hospitable to people everywhere. To meet the 350 ppm target, before enough feedback loops kick in to irrevocably warm the planet, Hansen says fossil-fuel combustion, particularly coal, must cease around the planet by about 2030, and that it must happen sooner in the industrialized nations. Within the next few years it is likely that our governments will make massive investments in green energy. We at Sustainable Wallingford are convinced that the political will and the ingenuity needed to make a total transformation to green energy will come as much from local efforts as from federal and international policies. This local plan begins with us and our contribution to lower carbon use compatible with world emissions of 350 ppm. The SWEET Plan has five steps that are easy to understand and easy to implement as we move quickly to a green energy society. The steps are:

### Scope and Schedule

1. A survey of our home or business energy use. We will target 5%, or 1000 of the 20,000 people who live or work in Wallingford to complete the survey. The survey will be on-line by March 2009. It will remain on-line but workshops for people who prefer to answer questions in person will only be offered in the spring of 2009.
2. We will train local middle and high school students to follow up with one-on-one with people who live or work in Wallingford with on-site energy surveys. Students will conduct these surveys in their own households, with their neighbors, or in local businesses and institutions. Students will be mentored by adults. These on-site surveys will focus on 250 homes and businesses. **Schedule:** The on-site surveys will begin in the summer of 2009. Data collected will be publicized on-line through the summer.
3. We will recruit 100 people who completed energy surveys to expand their commitment to green energy. These are Wallingford residents and workers who want to learn more about local energy steps to savings. These early Green Energy adopters will meet individually with energy experts, as well as meet at least once in a facilitated groups of 10 each, to make plans, sign a contract of intentions, and provide peer support. **Schedule:** Peer group community meetings will work best in the fall and winter of 2009.
4. We will develop a shared resource bank of conservation tips, stories, experiences, contractor contacts, testimonials, and a menu of green energy options. The resource bank will be on-line, fully-interactive, and supported through the Wallingford Neighborhood Office. **Schedule:** The resource bank will begin in the summer of 2009 and will develop more fully as more people are trained in the fall of 2009.
5. We will encourage a community cooperative for energy efficiency. This cooperative will support a combination of decentralized home/building actions, microenterprise grants, and centralized large community-wide demonstration projects including a Community Supported Energy (CSE) project. **Schedule:** Some of the microenterprise grants could be done in the fall of 2009, larger projects will be pulled together as the green energy community evolves.
6. Repeat steps 1 through 5, with the assistance of the first set of people who are Green Energy adopters.

## Detailed Description of the SWEET Plan

### 1. A survey of your home or business energy use.

We will target 5%, or 1000 of the 20,000 people who live or work in Wallingford to complete the survey. All action starts from a baseline. What is Wallingford's local energy consumption and carbon footprint? How does my energy use compare individually to other householders? How do we rate as a neighborhood? Data will be collected from a home/small business energy bill review as well as a quick survey of age of building, heating type, insulation, appliance types, and some energy knowledge questions. This information will be gathered in an on-line survey or through a 1-hour workshop. Immediate feedback is important to participants. We all want to know what is our energy use and behavior is compared to that of our neighbors—and what it could be. Some SWEET people have detailed records of their energy use, including energy use for heat and appliances over time as they practiced conservation and upgraded their homes. Sustainable Wallingford is in the midst of a neighborhood opinion survey “What Do You Really Think About Climate Change?” and the data collected so far has been a useful education and outreach tool. See: [www.sustainablewallingford.org/Questionnaire](http://www.sustainablewallingford.org/Questionnaire). We expect the energy survey to yield even more useful information.

**Partnerships:** Study circles, Northwest Earth Institute programs, Citizen Councilors, Climate Dialogs, CoolMom, GreenDrinks, Community Matters Next Chapter of Puget Sound with City Club, IONS, Block Watch, and Meaningful Movies. These groups have already been partners in several Sustainable Wallingford outreach efforts and are all models of discussion groups that we will use to follow this survey (see especially step #3).

**Technical assistance requested from NW SEED Partnership Project:** Sustainable Wallingford needs assistance developing the most useful questions to ask on the survey and the best way to ask them and help with developing an on-line survey. We need expert advice on estimating a building's contribution to the neighborhood carbon footprint.

### 2. We will train local middle and high school students to follow up with one-on-one with people who live or work in Wallingford with on-site energy surveys.

If you request a home/business energy survey, student and adult volunteer teams of energy surveyors will make site visits. These on-site surveys will focus on 250 homes and businesses. Our survey will look at infrastructure, behavior, and barriers to making optimal energy choices. Sustainable Wallingford is actively getting our neighborhood prepared for emergencies. (Note that we refer to our emergency preparedness team as Community Preparedness since it provokes less anxiety than “emergency”, and we've also decided to call our energy auditing work an “Energy Survey” rather than an audit because people in our neighborhood report this as a more positive term.) We'll team up our active Block-watch leaders with middle and high school students to do on-site in-depth surveys that focus on energy efficiency and conservation. The questions and in-depth analysis will be developed with the assistance of Sustainable Wallingford members who have completed the Puget Sound Energy auditors program. The purpose of our on-site survey is to get a baseline of existing conditions and a better understanding of the behaviors that motivate energy saving behavior. For example, we'll count fluorescents light fixtures and survey homeowners about why they made the lighting choices they did (e.g., high cost of new energy efficient fixtures, light quality, coverage in security areas). We'll record insulation choices, Energy Star (or not) appliance choices, and estimate vampire loads on outlets. This step is important to establish a more robust baseline of the Wallingford community energy use. Even more important, from Sustainable Wallingford's perspective, is that we'll be training new community surveyors, learning about the rationale for community energy choices, and subtly modifying community behavior in the process.

**Partnerships:** Middle and high school students and their parents, Senior Center, Block Watch and Seattle Office of Emergency Management, Puget Sound Energy Auditor's program to train people to do local energy audits that focus on both infrastructure and behavior, Office of Sustainability and Environment Green Building Team (with a subgroup of Existing Buildings), Footprint/indicators with Sustainable Seattle, Sustainable Wallingford Community Preparedness team (part of the Sustainable Wallingford and Wallingford Community Council Emergency Preparedness).

**Technical assistance:** Sustainable Wallingford needs assistance with the on-site survey and training material for local surveyors. We'd like to talk to experts about compiling data on conservation and energy behavior.

**3. We will recruit 100 people who completed energy surveys to expand their commitment to green energy.**

These are Wallingford residents and workers who want to learn more about local energy steps to savings. These early Green Energy adopters will meet individually with energy experts, as well as meet at least once in a facilitated group of 10 people to make plans, sign a contract of intentions, and provide peer support. We know incremental steps lead to enormous energy savings. This support network for early adopters of Green Energy will allow neighbors to work with trained volunteers to make plans for conservation, insulation and energy purchases that make sense for their lifestyle and budgets, and sign contracts of intention to reinforce new greener energy behavior. Experts and other home/business owners can meet in small support groups to learn more about costs for insulation, appliance upgrades, etc. The bottom line is, "What are the quickest, easiest, and least expensive changes I can make immediately that make sense to me?" Our action team for Community Preparedness will also write contracts at this time with individuals to help them in getting ready for emergencies as well as energy savings. We'll focus on Conservation First and have small group or neighbor-to-neighbor (or business-to-business) discussions about energy savings through conservation. We'll also start to explore other carbon loads on the Wallingford environment, and help people to rediscover local choices in food, local retail, travel, smart driving and tire pressure – the simple consumer choices that make huge impacts on our local environmental health and global climate.

**Partnerships:** Wallingford Chamber of Commerce is eager to implement green practices, Solid-Ground, our local social service agency, wants solar panels and supports local food, Seattle Tilth teaches healthy organic gardening and sponsors the Master Composters' program, Seattle Public Schools uses an energy calculator program for school energy use. High schools in the area are starting programs in green energy systems. We will continue to work with the Office of Emergency Management and Office of Sustainability and Environment.

**Technical assistance:** Some outreach help is always appreciated but much of this peer-to-peer activity is best led by Sustainable Wallingford.

**4. We will develop a shared resource bank of conservation tips, stories, experiences, contractor contacts, testimonials, and a menu of green energy options.**

The resource bank is a powerful tool will allow the project to snowball. The resource bank should be on-line, fully interactive, and supported through a live person at the Wallingford Neighborhood Office. The information in the bank would include a community-verified resource list (for example, I did this insulation project or used this contractor) and testimonials for local people interested in learning about conservation and energy upgrade projects from their neighbors before adopting them. The tool could allow group bids on contracting services, for example, neighbors could purchase insulation or solar panels in bulk. It is not clear until it is on-line exactly how this tool will be adapted and adopted but the goal is to allow more Wallingford community members to participate in green energy behavior and ultimately spread this behavior to other communities.

**Partnerships:** North and Central Community College trade apprentice programs in green energy will be contacted as well as contractors from green energy building groups in the region. The Wallingford Neighborhood Office can sponsor Home Tours of projects in passive solar, conservation, and insulation.

**Technical assistance:** The SWEET team needs help developing an interactive on-line resource bank.

**5. We will encourage a community cooperative for energy efficiency.**

This cooperative will support a combination of decentralized home/building actions as well as centralized large community-wide demonstration projects including a Community Supported Energy (CSE). The community cooperative demonstration sites might include: Solid Ground solar panels, MacDonald School geothermal, Tilth compost to methane gas, Dick's Drive-In biodiesel, and the North Transfer Station waste to energy incenerator. The cooperative could also provide microenterprise grants for new and innovative ideas such as bicycle-powered appliances, water-wheel battery-activated in-storm drains, Elementary and Middle school Green Science Fairs, shared geothermal projects. The cooperative could receive funding from future "cap and share" projects (as described by Peter Barnes) that would return the revenue raised from energy savings directly to neighbors.

**Partnerships:** UW has a variety of energy programs that could model new energy systems, Bonneville Power provides incentives for school fairs and program.

**Technical assistance:** SWEET will need expert assistance with large community projects.