



Sustaining Edmonds

2012 AWC “Going Green” Municipal Excellence Award Application

Project Statement

The City of Edmonds has established a coordinated set of plans, programs, and organizational relationships designed to integrate sustainability into the City’s operations. By taking a leadership role, the City has shown that coordinated actions – both large and small – can be linked to achieve progress even in difficult economic times.

Project Summary

The City of Edmonds recognizes that human activities are largely responsible for impacts to the natural environment and that there is a strong need to address environmental sustainability issues through its actions and initiatives. With the 2009 adoption of its Community Sustainability Element into the City’s Comprehensive Plan and the establishment of Environmental Principles and Policy (City Council Resolution 1170), Edmonds set in motion a commitment to addressing environmental, economic, and social issues in a coordinated and holistic way. A result of this commitment emerged in 2010 with a series of actions intended to take a leadership role in addressing sustainability issues through policy, education, advocacy, and action.

A key component of the City’s commitment has been to institutionalize sustainability within the organization. The City’s dedication to prioritizing sustainability was initiated in 2006 with the establishment of the Mayor’s Climate Protection Committee. This committee of citizens meets monthly with the Mayor and city staff to work towards addressing the future impacts of climate change, while also focusing on sustainability in general. The Committee has been integral in much of the progress the City has made over the past several years in addressing sustainability.

Two important planning documents resulted from the Climate Protection Committee’s work. First, the Community Sustainability Element was adopted into the Edmonds Comprehensive Plan in 2009. This element was intended to provide a framework tying the other Comprehensive Plan elements together, illustrating how the overall plan direction supports sustainability within the Edmonds community. Additionally, this element set the stage for the City’s actions and initiatives that strive towards enhanced environmental protections and reductions in energy usage. This was followed up by the development of a Climate Action Plan in 2010, which established a series of priorities to guide city action.

City staff has taken a proactive role in the City’s commitment to addressing sustainability issues by forming a “Green Team,” which includes employees representing most departments of the City. The “Green Team” meets regularly to discuss ideas for reducing energy use related to city

functions. These ideas can range from seemingly smaller administrative actions, such as changes to photocopying procedures in order to reduce paper consumption, to larger projects, such as retrofitting building HVAC or lighting systems with energy-efficient systems. The “Green Team” affords staff an opportunity to bring new ideas to the table and to “borrow” energy savings ideas from methods that other departments and municipalities have successfully achieved. This has created a strong inter-departmental effort with one common goal: sustainability.

The City of Edmonds has prioritized and embraced sustainability with a number of coordinated initiatives and programs. Examples of sustainable actions and achievements by the City from the previous two years include the following:

Green Plans

- Following a thorough assessment, city staff worked with Cascadia Consulting Group to develop an “Energy Plan” for the City, which was completed in early 2012. The plan summarizes key energy-saving accomplishments and highlights future energy-savings opportunities for the City’s municipal operations.
- In collaboration with the Northwest-based nonprofit Climate Solutions, the City completed a “New Energy Cities Action Plan” in May of 2011. The plan was developed following a community workshop held in early 2011 and describes a series of actions the City can take to address energy efficiency and conservation now and in the future – both in its own operations and in the larger community. The purpose of the plan is to guide the collaborative work of regional public, private, and civic leaders in the City of Edmonds to create a model for new energy leadership so successful that it inspires others to follow.
- In keeping with the City’s goal of promoting reduced energy consumption, the City Council passed a Complete Streets Ordinance (Ordinance No. 3842) in June of 2011. The Complete Streets policies promote multimodal transportation, which in turn will improve safety of city streets, encourage active living, and reduce traffic congestion and carbon emissions.
- Following the direction of the Community Sustainability Element of the Comprehensive Plan, the City has embarked on a new strategic planning process designed to link long-term planning with annual and bi-annual budget decisions.

“Bring Your Own Bag” Campaign

- Edmonds was the first city in Washington State to pass an ordinance prohibiting the use of single-use plastic checkout bags at retail establishments. This ban became effective on August 27, 2010 and was met with nearly all businesses throughout the City in compliance.
- As part of the City’s preparation for the effective date of this ordinance, a “Bring Your Own Bag” campaign was established. This campaign centered on community outreach focusing on the benefits of bringing reusable bags when shopping in Edmonds. The campaign also included outreach to local middle and high schools through a student poster contest.

Energy Meter Program

- Through the Federal Energy Efficiency and Conservation Block Grant (EECBG) program, the City received funding to purchase 36 energy use meters. These meters have been made available to residents and small business owners to check-out for a free two week period.
- The goal of this program is to provide local residents and small business owners with an opportunity to quantify the energy consumption of various household or business appliances and to provide guidance on how to reduce energy consumption within their home or business.

Electric Vehicle Program

- Through the Federal Energy Efficiency and Conservation Block Grant (EECBG) program, the City received funding to upgrade standard vehicle purchases to acquire hybrid and electric vehicles for its municipal fleet. Between 2010 and 2011, the City purchased four Toyota Prius hybrids and two Nissan Leaf electric vehicles.
- In 2011, the City changed its operations management of fleet vehicles in order to increase the use of the new electric vehicles. Staff has been committed to using the City's hybrid and electric vehicles whenever available for site visits and field work.
- Through a partnership with ChargePoint Northwest, six electric vehicle charging stations were installed in 2011 around the City for public use. These stations are part of a nationwide system that allows users to view availability of charging stations within their network.

City Building Energy Improvement Program

- Edmonds City Hall, a 1979 facility, was awarded ENERGY STAR labels in 2011 and 2012 for the years 2010 and 2011 respectively, acknowledging that it performs in the top 20 percent of similar structures across the United States.
- Energy usage at the City's Public Safety Complex (comprised of the Public Safety Building and Fire Station No. 17) has been significantly reduced over recent years. This was accomplished by adding insulation, controls software and commissioning measures as well as implementing preventative maintenance of HVAC equipment and adjusting heating and cooling times based on when portions of the buildings are occupied. Due to these improvements, the total energy cost savings at the Public Safety Complex in 2011 alone was \$13,900.
- Facilities maintenance staff utilizes "Portfolio Manager" to track the energy consumption of 16 City-owned buildings with a total of 30 energy accounts. This has enabled the City to track a total of over \$34,000 in energy savings in 2011 alone from energy management and improvements made throughout the seven buildings that house major City operations.
- 26 LED soffit lights with motion detector set-backs were installed at the Public Works yard to replace previously existing 100 to 400 W high intensity discharge lights for a total savings of 16,700 kWh per year. The city is expanding on this program by including LED lighting in its future Public Works projects. For example, the Main Street Project,

which is anticipated to be completed by the end of 2012, includes new LED light poles along both sides of the street along one main downtown block.

- In 2010, the City replaced its aging computer servers with energy efficient models for a total savings of over 5,200 kWh per year.
- In 2010, the city purchased software for each city computer, resulting in an automatic system for conducting computer updates and shutting down computers during non-business hours for a total savings of over 225,000 kWh per year.

Wastewater Treatment Plant Energy Challenge

- During 2010 and 2011, the City of Edmonds Wastewater Treatment Plant participated in an Energy Challenge with Snohomish County PUD and Bonneville Power Administration. During the Energy Challenge, several energy saving projects were identified, evaluated and implemented.
- Light fixtures at the City's wastewater treatment plant were retrofitted from standard lighting to high performance lamps and ballasts, CFLs and occupancy sensors. This is estimated to save approximately 56,205 kWh per year, for an annual savings of approximately \$4,122.
- The existing effluent pump outfall lines were modified with larger orifices, reducing the system backpressure and allowing more gravity flow conditions, which reduced pump run times. This is estimated to save approximately 175,489 kWh per year, for an annual savings of approximately \$12,109.
- The existing blowers were replaced with turbo blowers and the dissolved oxygen control was upgraded. Additionally, diffusers were installed in the bottom of the sludge tank to improve aeration. This is estimated to save approximately 451,883 kWh per year, for an annual savings of approximately \$26,589.

Edmonds Community Solar Project

- Edmonds is a proud host to one of the first community solar installations in the Puget Sound region. The installation is located on the Frances Anderson Center, which houses the Parks and Recreation Department and acts as a community hub. This location provides wide spread community education about solar energy. The installation was developed by the Edmonds Community Solar Cooperative, supported by Tangerine Power, in cooperation with Sustainable Edmonds, a local non-profit of citizens dedicated to sustainability.
- This project is a unique public/private partnership enabling Snohomish County PUD customers to participate in a collective solar project that reduces the costs of access and ownership while reaping the benefits of generating clean, solar energy for the community. Additionally, as part of the installation, the City receives a rebate from Snohomish County PUD on its energy use at the Frances Anderson Center.
- This project is the first community-owned solar cooperative in Western Washington and is also the first such project in the state for a municipality that does not own its own electric utility.
- The cooperative is planning a 30 kW expansion of the existing installation by the summer of 2012.

- The Parks and Recreation Department is currently in the process of scheduling green initiatives education for residents, which is co-sponsored by the Edmonds Community Solar Cooperative as part of the Community Solar Project.

Greening Park Maintenance Project

- Parks crews have eliminated the use of insecticides through incorporating Integrated Pest Management. For example, when aphids become a problem, the City purchases lady bugs to control the spread of the aphids.
- Parks crews have reduced spraying of “Round Up” herbicide by approximately 25 percent over the last 5 years due to more efficient management of unwanted vegetation such as weeds, horsetail, and blackberries. This approach takes less herbicide to control unwanted vegetation when small, rather than waiting until unwanted vegetation has grown tall and is difficult to control.
- Parks crews spread wood chips to help control unwanted vegetation and reduce the amount of herbicide spraying by 50 percent. Wood chips are generated from trees that are cut during tree pruning projects or trees that have blown over during storms. Snohomish County PUD also provides the City with wood chips from their tree pruning projects, allowing the City to recycle this material back into the park system and city landscaped areas, eliminating the need to purchase this type of material.
- The Parks and Recreation Department has installed 17 irrigation rain sensors in the City’s larger parks and ballfields. These devices sense moisture and will shut off automatic irrigation until weather improves. This method reduces water consumption and monthly water bill costs.
- Parks crews have installed drip irrigation systems to replace overhead irrigation in the downtown planter beds and portions of the Frances Anderson Center. This method of delivering water directly to vegetation has outstanding results and these plants and flowers have flourished. There is also no wasted water running down the street, and it has reduced water consumption and costs by 70 percent. Parks crew will continue to install drip irrigation systems throughout the City’s park system.

Administrative Measures

- In 2011, city inspectors began using an iPad field module that provides mapping and immediate data entry. This saves paper and time. The mapping component allows for easier and better route planning for inspections, thereby reducing resource demands.
- Staff has set up a city-wide “Office Supply Exchange” to share used or surplus office supplies.
- The Parks and Recreation Department has implemented online registration for all classes, eliminating the need to copy, fax, and mail registration forms.
- Online permitting has been expanded, reducing the resources necessary, such as fuel, trips, and paper, to apply for and obtain certain permits. Additionally, the City’s internal permit review process has been digitized, reducing paper demands and increasing efficiency of permit reviews.

- There has been a shift over the past couple of years to providing the City Council as well as the City's other boards and commissions with meeting packets electronically, dramatically reducing the number of photocopies necessary to provide members with printed packets. For example, city elected officials and directors were issued iPads in 2011, which provides these individuals with the opportunity to access paperless City Council packets, thus saving a significant amount of paper, energy, and time.

Environmental Education and Outreach Programs

- The City rolled out a new website in late 2011. The new website includes a strong emphasis on sustainability, including a direct link from the main home page to information on sustainability, which includes greater information on topics such as climate, environment, water, energy, and green development.
- In April of 2011, city staff partnered with Seaview Elementary School for a "Puget Sound Started Here" event, where fourth and fifth grade students cleaned up a reach of Perrinville Creek. As part of this event, the students were taught that the trash they were cleaning up was from stormwater runoff and the importance of only letting clean rainwater enter storm drains.
- In May of 2011, the theme of the annual Watershed Fun Fair held in Edmonds was "Puget Sound Starts Here". Total participation at the event was over 150 people, and the event included exhibits by public agencies and non-profit organizations on topics such as water quality, stormwater, recycling, amphibians, bats, Puget Sound stewardship, and solar power.
- In the summer of 2011, the City of Edmonds partnered with the neighboring cities of Lake Forest Park and Mountlake Terrace to broadcast three separate public service announcements for a period of two weeks at the Cinnebarre Theater in Mountlake Terrace, which is frequented by Edmonds residents. The announcements were built around the theme that stormwater runoff is not treated prior to discharge to receiving waters and that nothing other than clean rain water should go down the drains.
- Between 2010 and 2011, the City installed 850 "Puget Sound Starts Here" storm drain markers throughout the City in order to educate the public on the importance of preventing anything other than clean rain water from entering storm drains. These markers were prioritized in locations with high pedestrian traffic and areas near Puget Sound.

As demonstrated with the above examples, the City of Edmonds has put in place a coordinated set of plans and programs designed to support the City in taking a leadership role in moving toward sustainability. Most of the resultant actions have been accomplished by integrating these principles into city operations; these accomplishments have been achieved during difficult economic times, with shrinking city budgets and limited resources. From being first in Washington State to ban single-use plastic bags to partnering with the private sector to increase the production and use of alternative energy and technologies through the Community Solar Project, this commitment benefits the citizens, environment, and economy of Edmonds.

By implementing a proactive multi-faceted approach in accelerating initiatives impacting environmental sustainability, the City of Edmonds hopes to inspire other cities throughout Washington State to take action towards addressing sustainability within their jurisdictions and beyond.

Attachments

The following is a list of attachments provided with this application. These include photographs, various plans prepared by the City, resolutions and ordinances adopted by the City Council, and a selection of articles published in local newspapers featuring sustainable actions and achievements discussed within this application. This is not meant to be a complete list, but a sampling of documentation of the City's recent sustainable actions and accomplishments. You are invited to visit the City's website at www.edmondswa.gov and explore the "Sustainability" link for additional information.

1. Photo: Reusable Bag Committee
2. Photo: Energy Meter
3. Photo: Nissan Leaf with Public Charging Station
4. Photo: Nissan Leaf Charging
5. Photo: Energy Star Award
6. Photo: Community Solar Installation
7. Resolution No. 1170 – Addressing Environmental Principles and Policy
8. Resolution No. 1252 – Energy Independence
9. Community Sustainability Element of Comprehensive Plan
10. Article: "Energy Conservation Saves Money"
11. Edmonds Energy Plan
12. Edmonds Energy Plan Appendices
13. Article: "Edmonds students say plastic bags are so out of here"
14. Article: "Electric Cars Filling Up on Main Street?"
15. New Energy Cities Action Plan
16. Ordinance No. 3842 – Complete Streets
17. Ordinance No. 3749 – Plastic Bag Reduction
18. Article: "Edmonds Debuts New Website Devoted to Energy Conservation"
19. Article: "Mayor signs contracts for electric vehicle charging stations"
20. Article: "Update: All Electric-Charging Stations Are Installed in Edmonds"
21. Article: "Edmonds Manager: Charging Stations 'Having an Increasing Impact on Visitors'"
22. Article: "City Hall awarded Energy Star label for 2012"
23. Article: "City substantially reduces energy use at 2 facilities"
24. Article: "Edmonds Community Solar Cooperative turns lights on at Frances Anderson Community Center"