

# **Town of Coupeville Climate Protection Results and Future Plan**

**Cathy d'Almeida, Sustainable Community Coordinator**

The Town of Coupeville adopted an ICLEI Climate Protection Plan in 2008. This plan has a target of reducing CO2 emissions 20% below 2000 emissions levels by 2020. To achieve this target, Coupeville must reduce annual emissions by 11,049 tons by the year 2020. The base line for this plan is an emissions inventory completed for the years 2000 and 2005.

The town hired a Sustainability coordinator at .5 FTE in July of 2008 to carry out this plan. Projects implemented in the first year will result in a reduction of 971 Tons CO2 emissions over a 1 year period of time. There are several other projects underway that have no measurable results as of yet. In addition there has been a significant increase in Island Transit rider ship which has not been factored in to the numbers.

There are several key factors present in our community which made it possible to achieve our results to date and will be critical to achieve our final goal of 20% reduction by 2020 below 2000 emissions levels. They are as follows;

1. Leadership from local government
2. Ability to work closely with local utility, Puget Sound Energy, to bring services directly to the community with a result of developing localized outreach programs and increasing penetration and effectiveness of existing programs
3. Strong working relationships and partnerships across other local governments, non-profits and private companies to develop grassroots partnerships on energy conservation and reduction in green house gas emissions. (ICLEI, Island Transit, Transition Whidbey, Whidbey Sun and Wind, WSU Extension, Opportunity Council).
4. Support from an “umbrella” organization, the Sustainable Whidbey coalition, to foster the relationships, partnerships and share best practices.

The following were the key programs/projects implemented between July 2008 and July 2009. The results represent how much CO2 emissions are reduced on a yearly basis. Note that many of the programs listed below were not specifically spelled out in the ICLEI plan. The ICLEI plan was developed in 2006 and since then many new utility conservation programs and other programs have been developed.

## Results of Projects Implemented July 2008 through July 2009 and Project plans for 2<sup>nd</sup> half of 2009

Program	Yearly Reductions: KWhrs, Tons CO2 and \$	Comment	<ul style="list-style-type: none"> <li>• Partnerships</li> <li>• Volunteer Hours Matching</li> <li>• Persistence of Program past yr. 1</li> </ul>
<b>Residential and Commercial</b>			
Porch Light Campaign	48,790 KWhrs 26.82 Tons \$4,878	Residential program reaching out neighbor to neighbor with the support of our local utility (PSE) and help of over 60 community volunteers; 1200 incandescent replaced by CFL bulbs	<ul style="list-style-type: none"> <li>• Partnered with PSE and lighting contractor</li> <li>• 300 hours</li> <li>• 48,790 KWhrs increasing at 5%/year for 3 yrs.</li> </ul>
Multi-Family Conservation Program	205,000 KWhrs 112.60 Tons \$17,606	Utility program, my involvement increased results by 96 tons. 85% of our multi-family units participated.	<ul style="list-style-type: none"> <li>• Partnered with PSE and UCONS</li> <li>• No volunteer hrs.</li> <li>• 205,000 KWhrs/yr</li> </ul>
* Whidbey Island Green Power Challenge (continue through Sept. 7, 2009)	1,072,979 KWhrs 590 Tons \$13,412(net cost) <b>Target end of '09: 72,727 KWhrs 40 Tons \$909 (net cost)</b>	Partnered with all cities and towns on Island and PSE. Results as of June (challenge ends Sept. 7). Represents 4.4% green power for community. Includes existing Green Power Customers .	<ul style="list-style-type: none"> <li>• Partnered with PSE, money funds renewable energy projects in region</li> <li>• 120 hours</li> <li>• 1,123,900 KWhrs increasing at 5%/yr</li> </ul>
Coupeville Schools Project	329,468 KWhrs 181 Tons \$19,760	Resource conservation work (including energy audit), Cool School Challenge and Solar 4R school Grant award. A significant impact (but not included because hard to measure) is energy efficiency education integrated into 8 <sup>th</sup> and 9 <sup>th</sup> grade curriculum.	<ul style="list-style-type: none"> <li>• Partnered with PSE and BEF.</li> <li>• 300 hrs</li> <li>• 329,468 KWhours/year</li> </ul>
*Energy Performance Contracting	TBD (continue with program through 2009)	Brought State of WA GA Services Energy Performance contracting to Island County public entities. Potential HVAC and Lighting projects at Coupeville schools.	<ul style="list-style-type: none"> <li>• Partnered with GA Services</li> </ul>
Commercial Programs and Outreach	TBD (continue with projects through 2009, incorporate into Green Business Seal in 2010)	Pull in PSE's energy advisors and rebate/grant programs into commercial facilities to increase participation. Do a small business lighting blitz to replace all incandescent and T12 bulbs. Provide free faucet aerators to help reduce water usage. Connected with County, Hospital, Red Apple Prairie Center, Coupeville Inn, Tobys and many other small businesses.	<ul style="list-style-type: none"> <li>• Partnered with PSE</li> </ul>
Home Print Program	TBD (continue through 2009, incorporate into Green Neighbor	Partner with PSE and WSU Extension to increase penetration of Home Print Energy Evaluations.	<ul style="list-style-type: none"> <li>• Partnered with PSE</li> </ul>

	program in 2010)		
Opportunity Council Home Weatherization Program	TBD (continue through 2009, incorporate into Green Neighbor program in 2010)	Connect Opportunity Council weatherization and conservation teams (federally funded program) with low to medium income residences with a goal of increasing participation in our community.	<ul style="list-style-type: none"> <li>Opportunity Council</li> </ul>
Reusable Bags	9.15 Tons	Program to promote reusable bags at local grocery store.	<ul style="list-style-type: none"> <li>Partnered with local grocer.</li> </ul>
Reusable Coffee Mugs	.5 Tons	Program to increase use of reusable mugs in local coffee shops.	<ul style="list-style-type: none"> <li>Partnered with local coffee shops.</li> </ul>
<b>Transportation</b>			
Island Transit Increase Rider ship	Island County Wide= 3211 Tons	45% increase in rider ship between 2005 and 2008 representing a total of 428,100 additional riders. On a yearly basis this represents a reduction in CO2 emissions of 3211 tons. It would be hard to equate this directly to Coupeville.	
<b>Waste</b>			
*Curbside Recycling	Target: 290 Tons	Recycling program has been developed. Will begin end of 2009.	<ul style="list-style-type: none"> <li>Partner with Island disposal and WSU Wastewise coord.</li> <li>40 hours</li> <li>290 Tons CO2/yr (not KWhrs).</li> </ul>
<b>Total Community Measures = 920 Tons (subtracted out Municipal operations Green Power)</b>			
<b>Municipal Measures</b>			
* Whidbey Island Green Power Challenge	50,921 KWhrs 28 Tons \$636 (net cost)	Purchased 6% green power. Part of Green Power challenge across Whidbey Island.	See above Green Power Challenge
Water Treatment Plant lighting upgrades and other measures, LED Christmas Lights	27,077KWhrs 14.9 Tons \$2357	Results from water treatment plant in town lighting upgrades and other measures. Replaced several strings of incandescent Xmas lights with LED lights.	<ul style="list-style-type: none"> <li>Partnered with PSE</li> <li>No Vol. hrs</li> <li>27,077 Kwhrs/year increasing by 10%/yr over 3 yrs.</li> </ul>
Resource Conservation Manager Work	TBD	We received a grant (SW and training only) from PSE in 2/09. This focuses on behavior and operation changes to reduce resource usage. Facility audits have been completed, data base filled, and plans are in draft forms.	
<b>Vehicle Fleet</b>			
Gators	832 gallons fuel 8.33 Tons \$2080	2 gators purchased to place the use of light trucks for maintenance and operations.	
<b>Total Municipal Measures = 51.23 Tons CO2</b> Total CO2 emissions Realized = <b>971.3Tons</b> Total KWhours reduced = 610,335+1,123,900 (GreenPower) = 1,734,235 Total \$ Saved = \$46681-\$14,048 (Green Power) = \$32,633 Existing Community Measures (Table 10 in ICLEI Plan) = <b>726 Tons (subtracted 153 out for existing</b>			

**Green Power)**

Total = 1697 Tons representing 15% of target 11,049 lbs by 2020.

\*Programs called out in ICLEI Climate Protection Plan

## Lessons Learned

To achieve a 20% reduction of CO2 emissions below 2000 levels by 2020 is a significant challenge. I have already mentioned above there are several key factors in place in our community which has helped us achieve our results to date. Other critical success factors include;

- A Multi-year program of at least 3 years is critical. As you can see after year 1 we are only at 15% of our plan.
- There has to be a focus on transportation to achieve results. We have significant reductions from the increase in Island Transit Rider ship however without further study we cannot directly claim the reduction numbers for Coupeville.
- Green Power Purchasing is easy and can make a significant reduction in CO2 emissions, but has a net cost. Energy efficiency projects are a little more difficult but result in larger \$ savings to the community. A balance of both programs is important in a CO2 reduction plan.