



SMART  **ENERGY™** *Presented by NW Natural*

**NW Natural Annual Report on the
2007-08 Smart Energy™ Program Year**

INTRODUCTION

NW Natural is proud to be the first stand alone gas utility in the United States to offer its customers the opportunity to offset their environmental footprint through the purchase of carbon offsets. The Smart Energy™ program was launched September 1, 2007, under the Company's Schedule 400. Under this Schedule, residential and commercial customers may choose to purchase high quality carbon offsets. These offsets are acquired through the development of regional biogas projects. The Company has partnered with the Climate Trust, a nationally recognized leader in the carbon offset industry, which will quantify, verify and retire each carbon offset.

The Smart Energy™ campaign educates customers that it is environmentally responsible to reduce natural gas use when possible and to offset the rest. This is a bold and wise message that will ultimately serve Oregon well and prepare us for future carbon legislation. The Company credits the Commission and its Staff for establishing the framework through decoupling which allows the Company to present this message of efficient and sensible gas usage.

According to the terms and conditions of Schedule 400, NW Natural is annually required to present the participation details, an analysis of the funds collected and expenditures related to the product, and a review of the offset expenditures by The Climate Trust, all of which are contained herein.

HIGHLIGHTS

- NW Natural set an ambitious goal of enrolling 0.75% residential and 0.05% commercial of our customers. While it took tremendous effort we succeeded in meeting our enrollment goals.
- We contracted with The Climate Trust, one of only two U.S. based companies recognized as a provider of quality carbon offsets in a 2006 international study produced by Trexler Climate + Energy Services, Inc. for the non-profit organization Clean Air Cool Planet.
- To demonstrate commitment to this program's message, NW Natural invested enough to offset five years of its total carbon emissions from natural gas used in heating our facilities.
- We hired a full time Smart Energy™ Program Manager.
- The Company partnered with Energy Trust of Oregon (Energy Trust) on a community challenge in Corvallis where we educated the community on the need to both reduce and offset energy use. We are on track to meet the one year goal of homeowners and businesses offsetting 3% of natural gas consumed in Corvallis by March 2009.
- The Company engaged numerous farmers in productive discussions and plans to break ground by the end of the year with its first biodigester, in part funded by Smart Energy™ participants.

TOTAL ACTIVE ENROLLMENTS

Enrollment in the Smart Energy™ program is detailed in Table 1. As of August 31, 2008, we met our first-year enrollment goal for both residential and commercial customers. A total of 5,853 customers have enrolled in Smart Energy™. When the program was being developed in late 2006, we expected our customer base to grow more than it has. Nevertheless, we have surpassed our enrollment goal of 0.75% of residential customers and 0.05% of commercial customers. The total enrollment of 5,853 participants is made up of 5,783 residential customers and 70 commercial customers. Of the 5,783 residential customers enrolled, 3,092 or 53% have selected the volumetric option.

Table I demonstrates enrollments as of August 31, 2008.

Table 1 – Enrollment

	GOAL			Actual		
	# Customers	% of Customers	Enrollments	# Customers	% of Customers	Enrollments
Residential	608,800	0.75%	4,566	592,702	0.98%	5,783
Commercial	62,000	0.05%	31	61,639	0.11%	70

CARBON REDUCTION

Total carbon reduction for our first program year will be approximately 13,733 tons when offsets are purchased and retired.

THE CLIMATE TRUST

OFFSET FUNDS

As of August 31, 2008

All offset funds transferred to The Climate Trust to date are unspent and kept in a separate interest bearing money market account with ShoreBank Pacific.

The total amount transferred to the program account managed by The Climate Trust this program year is \$171,659, which includes offset purchases for program participants and NW Natural. This total is itemized in Table 2.

Table 2 – Carbon Offsets in cost and tons

<u>Offsets</u>	Dollars	Offsets (tons)
NWN Shareholders	\$77,000	6,160
Smart Energy™ Participants	\$94,659	7,573
	\$171,659	13,733

ACTIVITIES

The Climate Trust accomplished the following:

- Negotiated and signed an agreement with NW Natural for the procurement of high quality offsets for Smart Energy™ customers

- Established accounting procedures to ensure proper tracking of Smart Energy™ funds
- Developed a tool to approximate potential greenhouse gas emissions reductions acquired from projects
- Met with potential biodigester developers and stakeholders including Energy Trust of Oregon, Oregon Department of Agriculture and individual farmers
- Worked with the NW Natural employees to assess development opportunities
- Provided NW Natural with expert assistance on offset valuation and communications
- Reviewed and assessed methodologies from Clean Development Mechanism (CDM), California Climate Action Registry (CCAR), Regional Greenhouse Gas Initiative (RGGI), and Environmental Protection Agency (EPA) Climate Leaders

COMMUNICATION AND CUSTOMER EDUCATION

Given the complexity and relative unknown nature of carbon offset programs, our communication efforts focused on broadly educating customers about global warming and the need to reduce greenhouse gas emissions. We used advertising and public relations to establish a general awareness. Later, we tried to obtain enrollments using direct communications such as traditional mail and email channels, customer communications in the bill, and community outreach and events.

Our paid media strategy was designed to garner a large reach during the April through September time period. The Company's goal was to touch our highest density service territories through multiple vehicles (radio, print, transit, online). Through this strategy, we focused on two key messages to encourage enrollment: *Reduce What You Use, Offset the Rest* speaks to promoting energy efficiency and offsets; *Fight Global Warming One Cow Pie at a Time* is accompanied with an explanation of the environmental benefits of Smart Energy™.

The paid media campaign was as follows:

- Radio 2,400,000 impressions
- Print 3,901,220 impressions
- Transit/Outdoor 19,071,320 impressions
- Online 5,000,000 + impressions
- Customer communications 3,000,000 + impressions

Our paid efforts were supported through earned media outreach and Public Relations. These efforts produced:

- Broadcast 562,593 impressions
- Print 24,759,307 + impressions

These communication efforts were effective at increasing customer participation. As represented in the chart below, when multiple communication vehicles were employed during the same month, we experienced more enrollments. The opposite is also true. That is, when we are not delivering messages to our customers, we have fewer sign-ups. In 2009, we plan to strategize program messaging based on what we have learned in this first program year.

Chart 1 – Communication and Enrollment

THE SMART ENERGY™ PROGRAM YEAR SPENDING

The charts below demonstrate the costs associated with Smart Energy's™ first program year. This first program year included non-recurring start-up costs for program development, capital improvements to the Company's information and phone systems made to accommodate the program, and initial educational materials. All of the 2007 one-time costs were paid for by NW Natural shareholders.

Chart 2 – Costs: Education

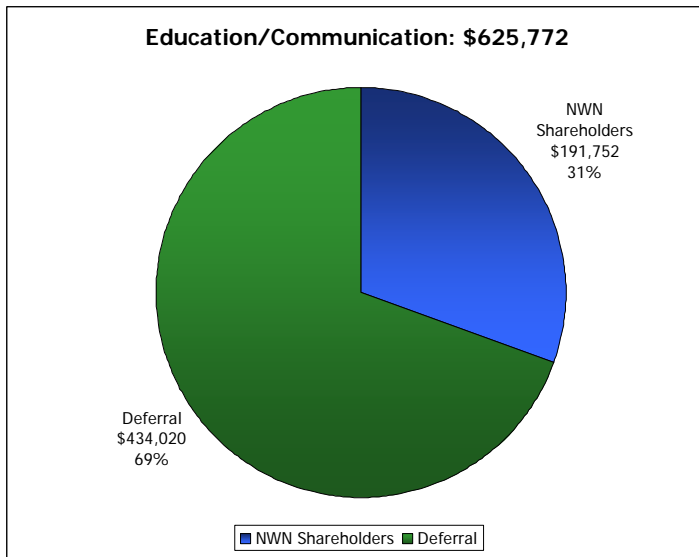


Chart 3 – Costs: The Climate Trust Fees

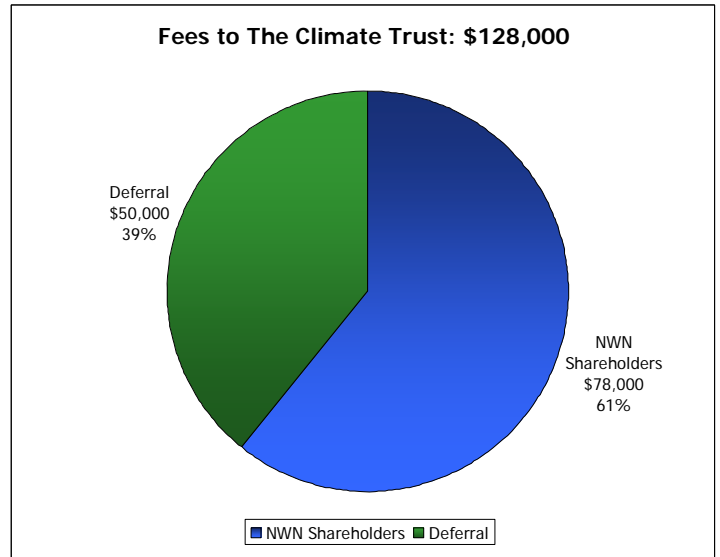


Chart 4 – Carbon Offsets

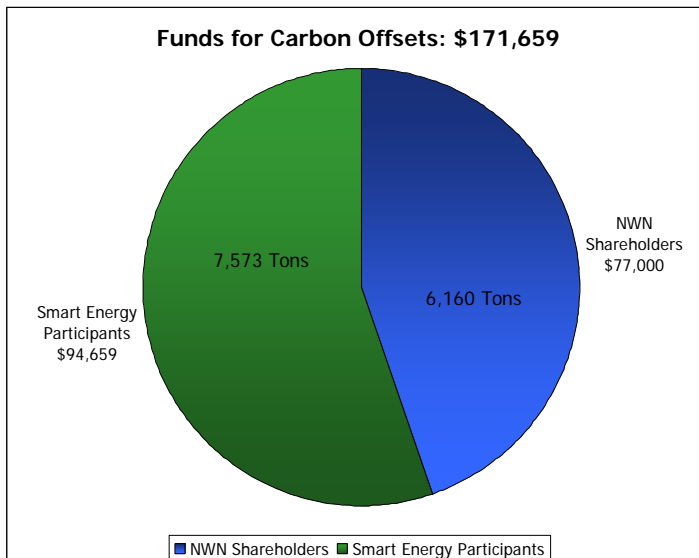


Chart 5 – Total Expenditures

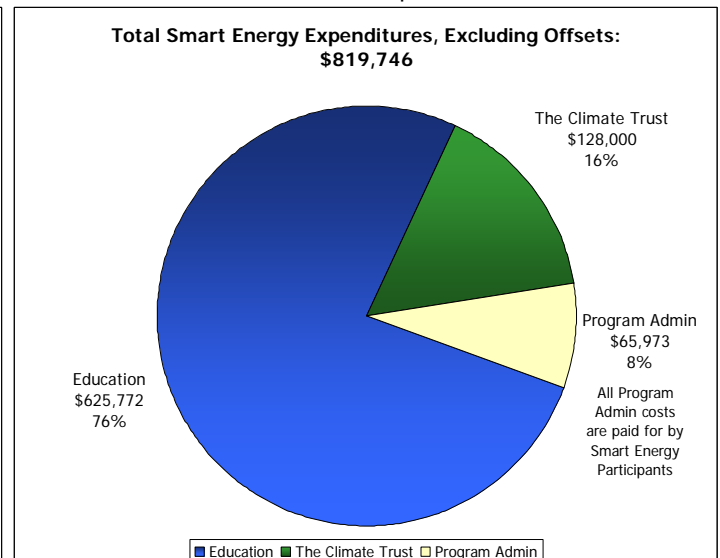


Chart 2 illustrates that the costs spent on customer communications and education totaled \$625,772 and were shared between customers and shareholders. Currently, the costs shared with customers are deferred for later inclusion in general rates.

Chart 3 provides an analysis of fees paid to The Climate Trust during the program year. Per the agreement between the Company and The Climate Trust, a total of \$100,000 for the program implementation will be paid in 2008 calendar year. The Climate Trust invoices the Company quarterly for \$25,000. As of August 31st, the end of the program year, the Company has been invoiced for \$50,000. This expense has been deferred for later inclusion in general rates. Company shareholders paid the 2007 implementation fees of \$78,000.

Chart 4 details the funds sent to The Climate Trust for the purchase and retirement of offsets and the resulting tons offset. Smart Energy™ participants have funded \$94,659 towards the offset of 7,573 tons of carbon emissions. In addition, NW Natural shareholders have contributed \$77,000 to offset 6,160 tons representing a total offset of the natural gas used to

heat our offices, services centers and shops for the five-year period of the Smart Energy™ pilot program. Additional detail is provided above in Table 2.

Chart 5 summarizes all costs related to the program excluding the funds for offsets. A total of \$819,746 was spent for the communication and education of customers, Climate Trust fees and program administration. 76% of all costs were for customer education and communication. Program administration costs of \$65,973, 8% of total costs, were funded totally by program participants. Additional breakdown of these costs are provided in Table 3.

Table 3 – Expenses by type and source

<u>Expenses</u>	NWN Shareholders	Deferral	Smart Energy™ Participants	Total
Education	\$191,752	\$434,020	\$0	\$625,772
The Climate Trust	\$78,000	\$50,000	\$0	\$128,000
Program Admin	\$0	\$0	\$65,973	\$65,973
Total	\$269,752	\$484,020	\$65,973	\$819,746

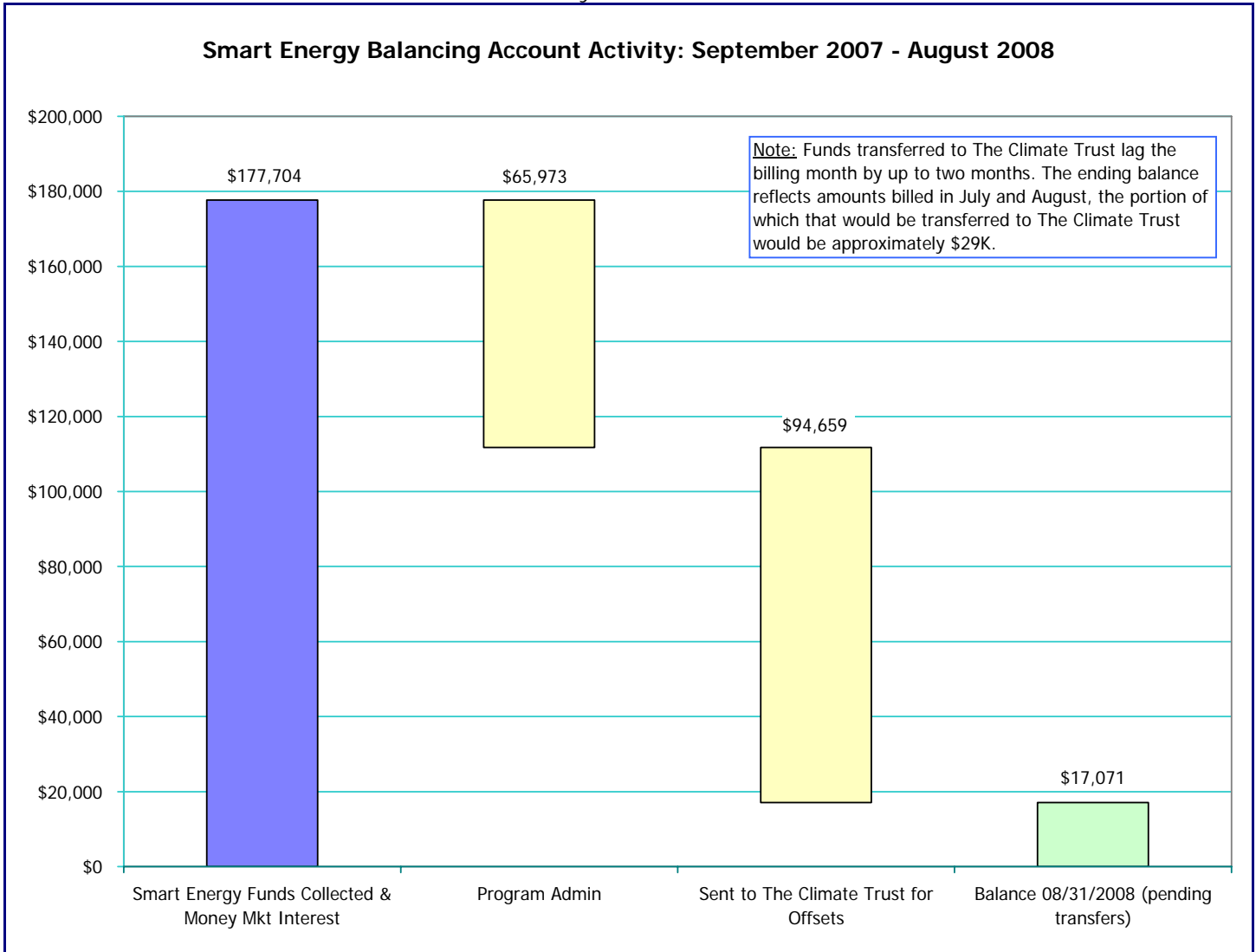
ANALYSIS OF PARTICIPANT FUNDS COLLECTED

The Company uses a balancing account to record the activity of the Smart Energy™ program. Increases (credits) to the account include monthly receipts from customer billings and money market interest on the bank account the Company has set up solely for Smart Energy™ funds. Decreases (debits) to the account include the cost of the program administration and the transfer of funds to The Climate Trust for the purchase of offsets. Program administration costs consist primarily of the payroll and payroll overheads associated with the program manager. Prior to the hiring of the program manager, we incurred costs for a temporary employee who acted as program manager. Schedule 400 provides for the payment of program administration costs from funds collected.

The Company transfers 70% of the funds collected from participants to The Climate Trust. This reflects the projected split of program administrative costs and funds for offset purchases over the course of the five year pilot program. This 70% was determined when the program price was originally established. Using 70% will mitigate the funding mismatch due to the seasonality of Smart Energy™ funds collected (half of the participants enrolled in the program select the volumetric option) versus the fairly fixed expenses of program administration. It is also anticipated that the use of the 70% transfer practice will mitigate additional funding/cost mismatches in later years of the program, when customer education and communication expenses will be paid by program participants.

The activity and current balance of the Smart Energy™ balancing account is detailed in Chart 6. The ending credit balance reflects the lag that occurs between when customers are billed and when funds are ultimately transferred to The Climate Trust. Collections through June have been transferred. The portion of July and August collections due to be transferred are approximately \$14,500 and \$14,400, respectively, and will be transferred in October and November, respectively.

Chart 6 – Analysis of funds collected

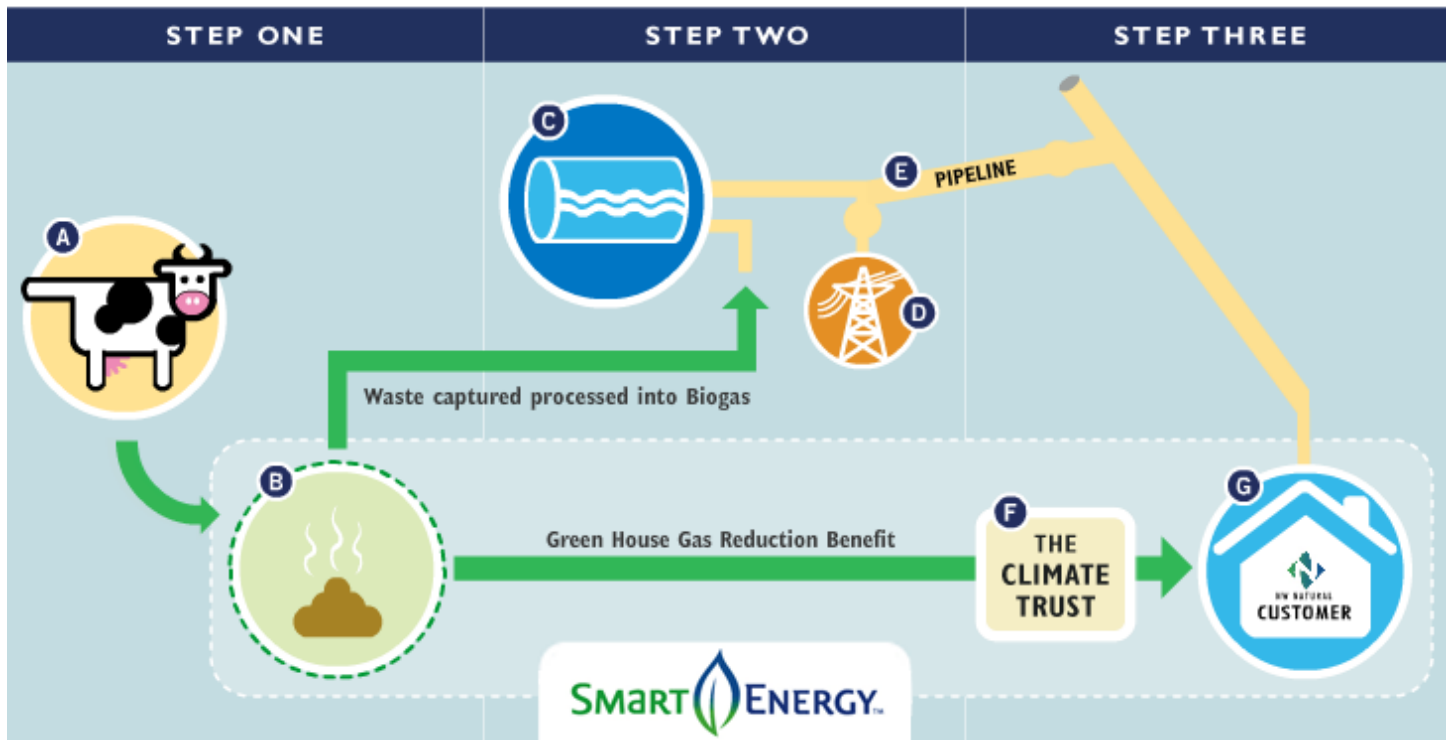


CARBON OFFSET PROJECTS

BIODIGESTERS

The Smart Energy™ Program offers customers the option to purchase carbon offsets acquired through high quality, project-based emissions reductions. NW Natural chose to focus on developing biodigester projects since these projects capture methane which is at least 21 times more potent of a greenhouse gas than carbon dioxide. Biodigestors also produce biogas which can be used as a fuel onsite to replace propane or oil, can be eventually used as a pipeline supply or can be used to generate electricity. Ultimately, Smart Energy™ funding will support the development of regional biodigester projects, helping to protect the viability of large and small Oregon farms that need a cost-effective way to manage livestock waste.

The graphic below illustrates how a biodigester produces biogas and reduces methane emissions.



BIODIGESTERS – PROJECT STATUS

For the reasons stated above, NW Natural is committed to the development of regional biodigesters. We have learned that our efforts are accelerated when we engage partners like the Bonneville Environmental Foundation (BEF). Besides partnering with BEF in Project 1, NW Natural continues to explore other partnerships that will help move biodigesters forward. To date, the Company is in detailed discussions on the following two projects:

Project I

- Project I is a commercial demonstration project. The agreement to proceed has been signed by the participants and a public announcement is expected in November. We expect to break ground on the project before the end of the year. On this schedule the biodigester would be operational in early March 2009. This project is being developed through a partnership with NW Natural, BEF, the owner of the dairy operation where the biodigester will be sited and a biodigester technology company. This project will convert waste into biogas that will then be used to offset onsite propane use for the dairy operations. Conservative estimates suggest this first test unit will reduce carbon emissions by 3,300 tons annually. The Climate Trust will purchase and retire the offsets associated with this project on behalf of Smart Energy™ customers.

Project I is sited on a large farm that could accommodate another 12-15 biodigesters, potentially capturing an additional 40,000 plus tons of carbon each year. Future projects at this site will consider a more diverse use of the biodigester-produced biogas including using the gas to run a gas chiller (for milk cooling), to generate electricity, or to offset a neighbor's energy needs.

Project II

- The second project is with a small dairy operation that has 1,500 cows (750 at 2 separate farms). In the first phase, two farms will be sited with biodigesters. NW Natural is serving in an advisory role to this project. In addition to the 4,500 tons of carbon that will be captured annually, the Company expects to gain the experience and understanding necessary to replicate this solution for other small sustainable farms. As this project moves forward, The Climate Trust will lead the effort to quantify, verify and retire offsets on behalf of Smart Energy™ customers.

PROGRAM ADJUSTMENTS

We refined our financial forecast based on knowledge gained during this first program year. Our initial forecast assumed the total number of participants for each year's enrollment goal would contribute a minimum of \$6 per month for all twelve months. In reality, most enroll between April and August. This errant assumption resulted in fewer revenues than anticipated. This means that meeting our long term revenue goal may require more time than initially projected. However, we are confident that we can generate more revenue in less time by increasing the number of total participants each year through aggressive and focused educational efforts.

SUMMARY

NW Natural believes this first program year was a success. We reached our participation goal, and in so doing, we observed enrollment patterns based on the media channels used and the frequency of the delivered message. We also learned where our initial budget assumptions require refining. The Company made excellent progress towards the development of biodigesters through partnering with other stakeholders and expects to learn more in the following program years as we continue to make strides toward the development of additional regional biogas development.