

Portfolio Oversight Committee
November 16, 2007



Introduction to Smart Energy



Goals for Discussion

- Introduce Smart Energy
 - Program design
 - Early communication with customers
 - Take up and early implementation work
 - Challenges ahead
- Discuss possible role of POC in advising NWN
- Early input, next steps with POC

Program Overview

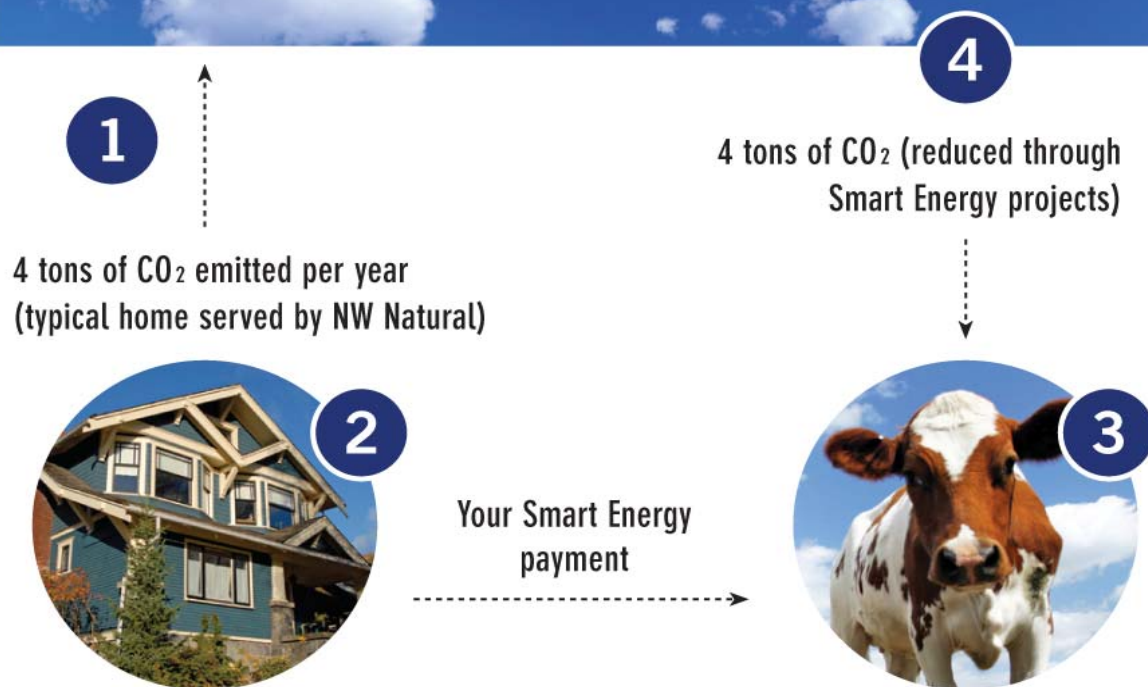
- Customers voluntarily offset the greenhouse gas emissions associated with their natural gas use
- First stand-alone gas company to offer offset opportunity
- Helps bring biogas—renewable gas—to the region
- Residential participants have two choices:
 - Average option: \$6/mo and based on average house
 - Carbon neutral option: Per-therm rate
- Commercial participants contribute any amount (\$10/mo. min)

Why Is NWN offering the product?

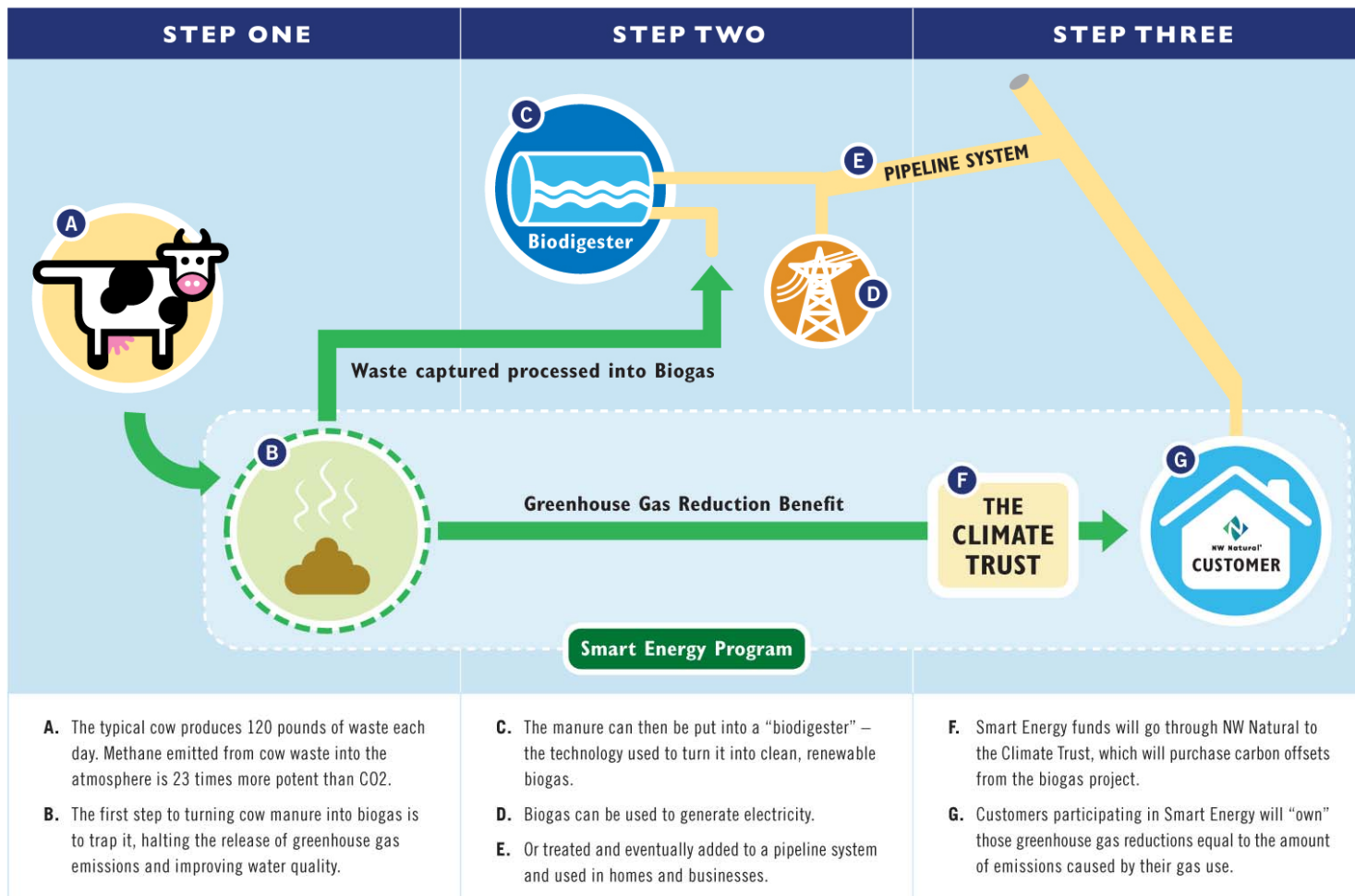
- We're as concerned about climate change as our customers
- Grows from history as a “decoupled utility”
- Energy efficiency comes first, offset what remains
- Provide a credible offset option for our customers
 - 81% say they value such an option
 - “Wheat from the chaff” – in the world of offsets
- NWN is first Smart Energy customer
 - Offsetting all of our heating at all facilities (4,200 tons CO₂)
 - Covering 25% of program costs

How does it work?

MAKE YOUR NATURAL GAS USE "CLIMATE NEUTRAL" WITH SMART ENERGY



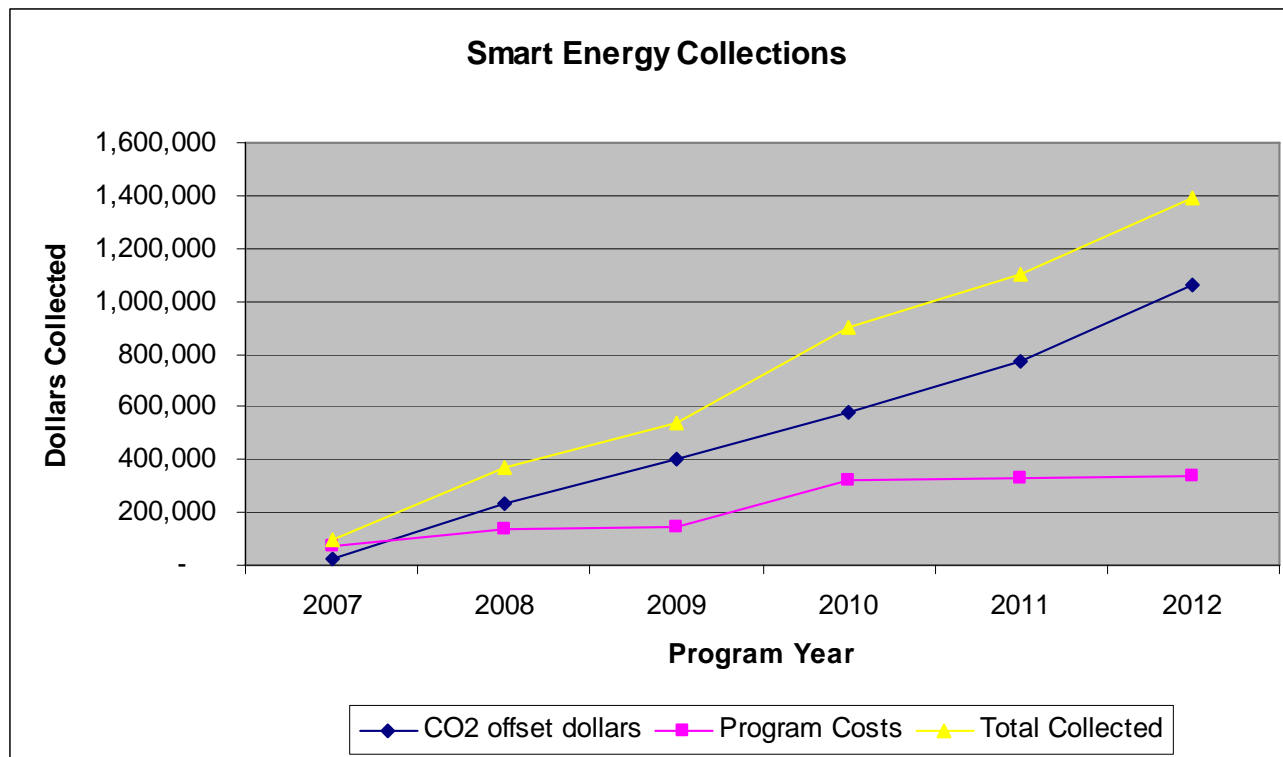
Smart Energy and Biogas



Regulatory Overview

- Smart Energy tariff approved, with Sept 1, 2007 effective date.
- Five year pilot with check in at year 3
- Staff found product “innovative and unique”, negotiated over costs covered in rates
- Breakdown of start up costs and their disposition
 - 2007: \$288K (NWN shareholders)
 - 2008: \$622K (deferral account, covered in rates)

Regulatory Overview



Collections does not include:

- Shareholder funding in '07: \$365K
- Deferral account in '08: \$622K

The Climate Trust

- Who is The Climate Trust?
 - Mission of high quality offsets
 - One of nation's largest offset providers
(9 years of experience, \$9 million portfolio)
- Role in Smart Energy
 - “Soup to nuts” offset development
 - Project ID, contracting, monitoring & verification
- Why biogas is the right offset?
 - Sweet spot among options
 - Role of Smart Energy in emerging biodigester market



Program Design

- Offsets acquired by TCT according to “hierarchy” of project types:
 - Biogas (in Oregon, PNW region)
 - RFP targeting biogas (open to “clean energy in the region”)
 - TCT future acquisition initiative
 - TCT project portfolio
 - Spot market purchase
- Designed schedule with “trigger points” – actions determined based on sign ups and market development

Program Design

- Agreement between TCT and NWN in draft form, for review by OPUC staff. Contains:
 - Carbon pricing provisions
 - Monitoring and verification provisions, payment
 - Fund transfers (from NWN monthly, managed according to TCT guidelines, interest accrues)

Press Launch

- Media relations launch: 28 positive news stories!



Portland Tribune Friday, September 7, 2007

NW Natural harnesses the power of manure

By JIM REDDEN
The Tribune

Renewal energy from cow manure — It's not a pie-in-the-sky idea.

Thanks to help from the Climate Trust, NW Natural is launching a five-year pilot project to test the viability of capturing and burning methane from decomposing cow manure.

The bulk of the money will come from a \$6 a month fee that NW Natural customers voluntarily will pay to offset the carbon dioxide they generate burning natural gas. But the involvement of the Climate Trust is necessary to manage and help finance the project before it generates its own revenue.

The Portland-based Climate Trust is one of numerous non-profit organizations created to trade in carbon offset tax credits. It was formed after the 1997 Oregon Legislature passed the first law in the nation requiring utility companies to offset a portion of the carbon dioxide emissions from new power plants.

Although no standards yet exist to cover such trading, the Climate Trust was highly rated by an independent 2006 assessment of similar programs called A Consumer's Guide to Retail Carbon Offset Providers, by Trexler Climate & Energy Services Inc.

According to Sean Clark, director of the organization's offset program, the Climate Trust so far has invested around \$9 million in utility payments in projects that will offset 2.7 million tons of emissions. Projects range from diesel reductions to tree plantings.

NW Natural announced the program — called Smart Energy — Thursday.

"We care as much about climate change, and are worried about climate change, as much as our customers," said Bill Edmonds, director of environmental policy and sustainability for the company.

How much manure-generated methane could be converted to energy?

According to Edmonds, the typical cow produces an amazing 120 pounds of waste every day. The Dairy Farmers of Oregon estimates there are approximately 122,000 cows at the state's 350 dairies, meaning they are producing 14.5 million pounds of waste a day — around 2.6 million tons a year.

That's a lot of potential "biogas," as NW Natural politely calls it.

Currently, cow manure either is spread on fields or collected in large lagoons. In both cases, it releases methane into the air as it decomposes.

But Edmonds believes that

Wong's Best Floors INC
Floors • Cabinets • Granite • Tile

Gas utility now offers moo-power options

NW Natural |
Households can pay \$6 per month to help methane-from-manure projects

By **SCOTT LEARN and GAIL HILL**
THE OREGONIAN

If you're a NW Natural customer in Oregon, you now have a chance to invest in cow power.

The natural gas utility just won state approval to help turn a potent greenhouse gas, methane from cow manure into electricity or recycled gas.

Customers worried about global warming can choose to pay \$6 a month or pay a variable fee based on their gas use. That voluntary contribution will buy carbon offsets from The Climate Trust, a Portland-based nonprofit that will work to set up several biogas production sites in the state.

Customer Communication

HOW CAN YOU REDUCE YOUR
CARBON FOOTPRINT WITH
cow manure?

INTRODUCING SMART ENERGY FROM NW NATURAL



We've stepped squarely into the battle
against global warming, so to speak.



Introducing Smart Energy™ from NW Natural.

Hold your breath. A typical cow produces 120 pounds of waste each day. Not very pleasant to smell, but even worse for the environment. Manure produces methane, which is a powerful greenhouse gas. The good news is that gasses emitted from cow waste can be captured and used as a renewable energy source.

That's where Smart Energy comes in. NW Natural has partnered with The Climate Trust to offer a voluntary

program that supports projects designed to reduce greenhouse gas emissions, like biogas from cow manure. With 14 million pounds of cow waste generated in Oregon each day, there's a lot of potential energy just waiting to be utilized.

Ready to join the battle against global warming by reducing your carbon footprint? Learn how you can make a difference at nwnatural.com/smart.



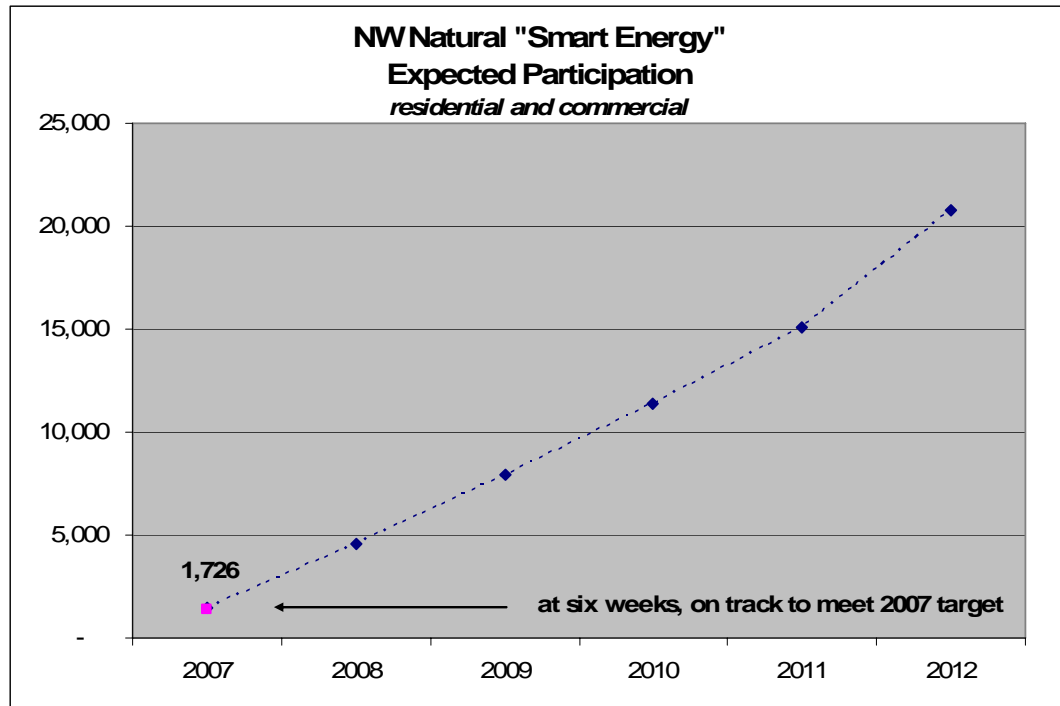
Advertising Schedule

- Bill inserts and website promo/enrollment
- Advertising
- Commercial program being developed
- Larger paid media push in 2008
 - Use customer research to refine messages

On the Street



Early Take-Up



- Residential “expected participation” – 3% over five year pilot phase
- Commercial set at .4%, based on NREL average
- Early sign-ups on target for first partial year – more than half residential customers selecting volumetric option

Engaging Stakeholders

- CUB, NWECC, EMO, BEF and NRDC engaged during development – with CUB in the lead
- Communication pow-wow included ETO, RNP, TNS and others
- Ongoing project implementation coordinated closely with ETO's biogas efforts

Engaging POC

- Smart Energy not response to legislated mandate, but would benefit from advisory function of POC
- Oversight by OPUC staff not yet in place
- POC review for discussion of the group
 - Which issues are of most interest?
 - How best provide input while avoiding communication delays
 - Resolve contractual confidentiality provisions regarding TCT agreements
 - Other issues