
PSE's Green Power Program

Experiences of a REC Based Program

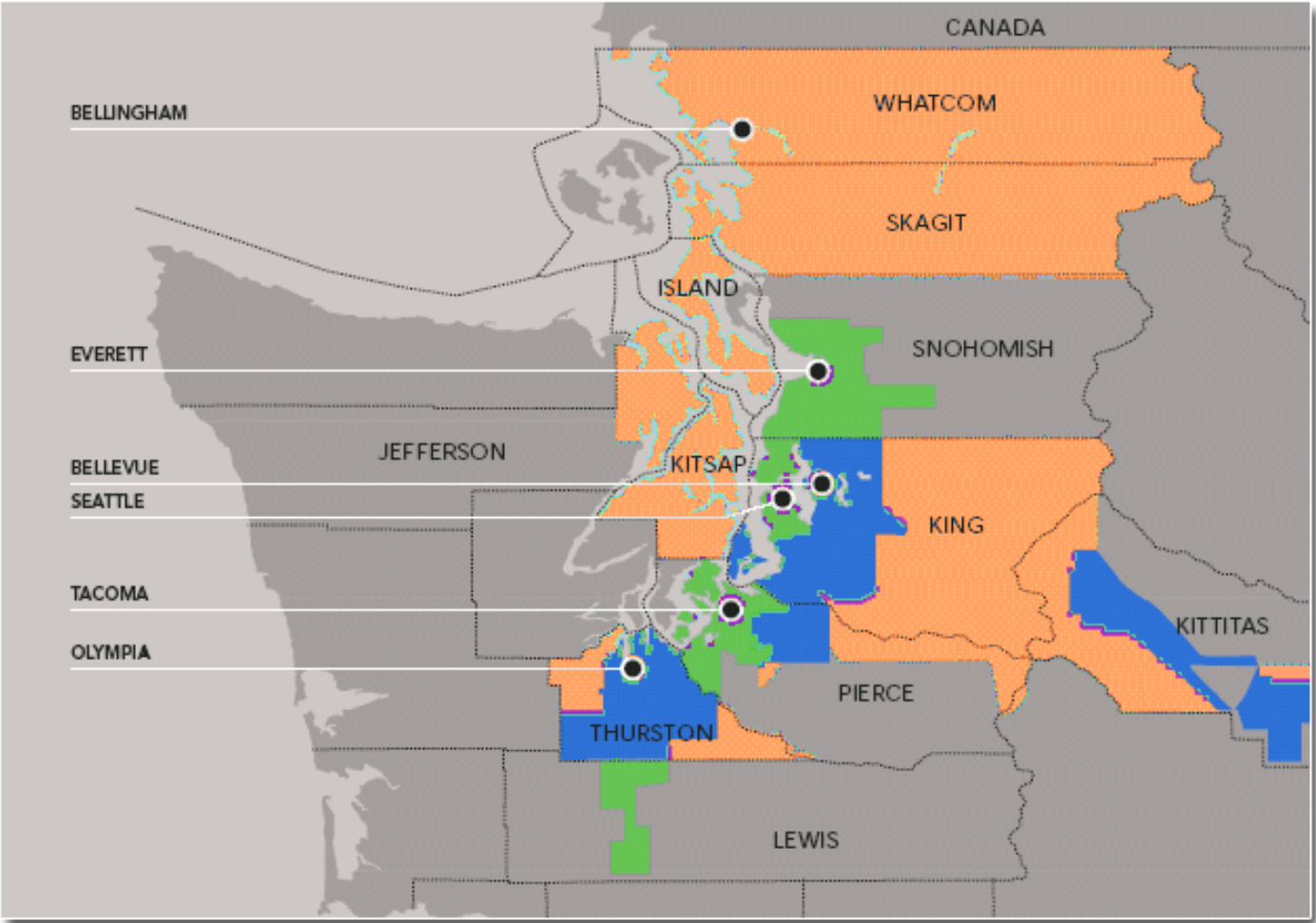
Heather Mulligan




Market Manager

2009



Puget Sound Energy – Where We Serve



-  Combined electric and natural gas service
-  Electric service
-  Natural Gas service

Green Power Program Overview

- ◆ Program launched in January 2002
- ◆ Open to residential and commercial customers
- ◆ Participation options include:
 - ◆ 100% of usage at 1.25 cents per kWh
 - ◆ Block purchases starting at \$4.00 a month (320 kWh)
 - ◆ Large Volume rate of \$0.006 cents per kWh
- ◆ Focus is on purchasing RECs from Pacific Northwest resources.



Program Statistics

- ◆ 24,192 participants
 - ◆ (23,221 Residential, ~950 Businesses Meters)
- ◆ 24,000 MWh (Megawatt-hours) per month
- ◆ 21 Large Volume Customers
 - ◆ The Evergreen State College - 100%
 - ◆ Local Governments
 - ◆ Whatcom County (100%)
 - ◆ City of Olympia (~50%)
 - ◆ the LOTT Alliance (100%)
 - ◆ City of Lacey (100%)
 - ◆ City of Kirkland
 - ◆ King County



Green Power Program Resource Supply

◆Large Wind*

- ◆Stateline Wind Project
- ◆Condon Wind
- ◆Klondike
- ◆Wolverine Creek
- ◆White Creek

◆Solar*

- ◆Northwest Solar Co-op
- ◆Hanford/White Bluffs Solar

◆Small Wind*

- ◆Our Wind Coop

◆Biomass

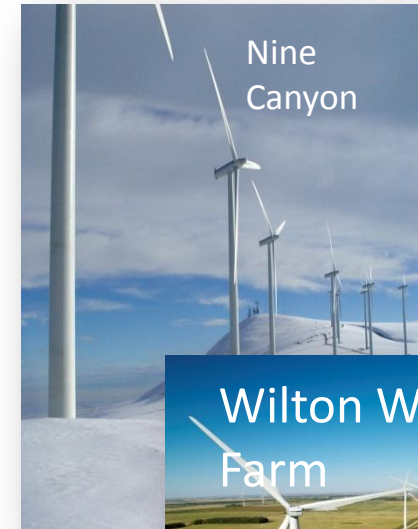
- ◆Lynden Dairy Digester
- ◆Qualco Dairy Digester
- ◆H.W. Hill Landfill Gas*
- ◆Grays Harbor Paper

◆Qualified Hydro*

- ◆Nooksack Hydro Facility

◆PSE Projects – Not part of GPP

- ◆Hopkins Ridge Wind
- ◆Wild Horse Wind and Solar



* Resources are Green-e certified. PSE's rate-based wind projects are separate from the Green Power Program and do not supply the tags to our program.



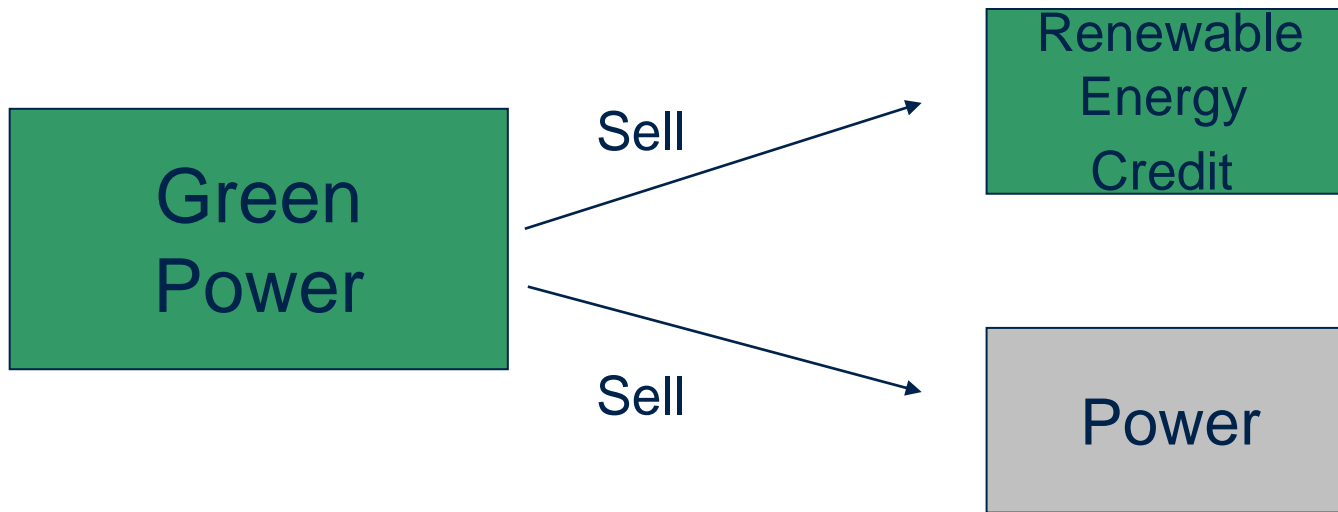
Local Resources - Methane Dairy Digesters

- ◆ PSE's Green Power Program - supporting local Dairies
 - ◆ VanderHaak Dairy – Lynden
 - ◆ Qualco Dairy – Monroe
 - ◆ Farm Power – Skagit
 - ◆ Farm Power - Enumclaw
 - ◆ Farm Power – Whatcom
- ◆ 1-2 Cows per kW of electricity generation.



The Green Power Model

- Renewable Energy Credits allow the energy and the environmental attributes to be sold separately.



How this Model Supports Local Development

- ◆ PSE offers an off-the-shelf Power Purchase Agreement
 - ◆ Renewable Energy Projects
 - ◆ Under 2 MW
 - ◆ Located in PSE's Service territory
 - ◆ Guaranteed Ten-year price strip
 - ◆ Separate agreement for RECs

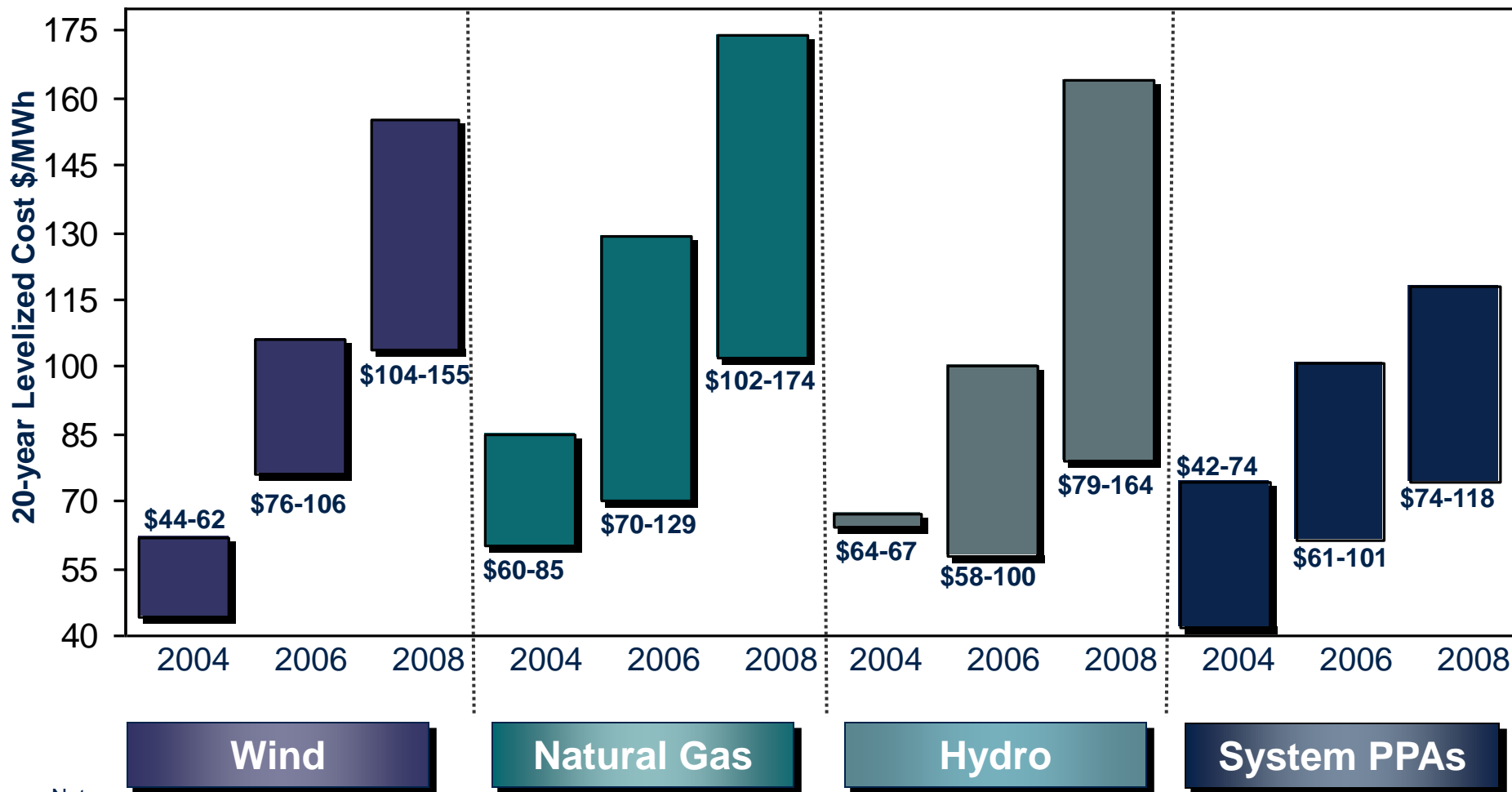


A Few Pro's and Con's of the REC Model

- ◆ Pro's
 - ◆ Provides clear added value for environmental attributes
 - ◆ Affordable way for customers to support renewables
 - ◆ Offers Flexibility
 - ◆ Purchases grow with customer demand (no waiting list)
- ◆ Con's
 - ◆ Difficult for customers to understand RECs
 - ◆ Doesn't provide a hedge against rising energy costs

Questions?

Resource Cost Comparison



Notes:

2004 prices represent Mid-C delivery.

2006 and 2008 prices represent deliveries to PSE's system

System PPAs are offers that are shorter term in nature and not tied to a specific resource.