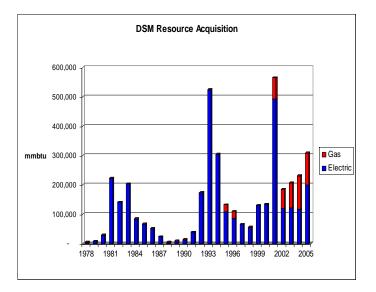


# Avista DSM Overview Energy Efficiency

## The Seven Distinct Era's of Avista DSM

- 1978 to 1991 "The Jimmy Carter Era"
- 1992-1994 "The Energy Exchanger Era"
- 1995-2000 "The Tariff Rider Era"
- 2001 "Year of the Western Energy Crisis"
- 2002-2005 "The Financial Recovery Era"
- 2006 2009 "The Era of Reinventing DSM"
- 2010 and beyond "The Era of External Interest"





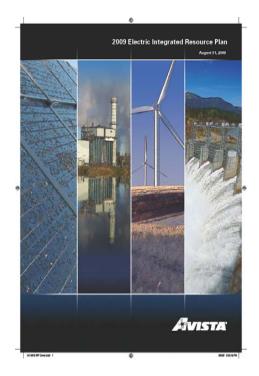
#### Avista's 2012 Energy Efficiency Results Exceeded electric IRP goal by 29% and underachieved natural gas IRP goal by 61% \*

- Total electric savings over 64.4 million kilowatt hours
  - Commercial/Industrial over 58.8 million kWh
  - Residential over 4.5 million kWh
  - Low Income over 1.1 million kWh
- Total natural gas savings over 1.1 million therms
  - Commercial/Industrial over 493,000 therms
  - Residential over 593,000 therms
  - Low Income over 33,000 therms
- \* The avoided cost of natural gas declined by approximately 50% in 2012, thereby causing a suspension of natural gas offerings due to concerns about cost-effectiveness.

ome Profile My Appliance	s MyE	inergy Bills My Repo		
	mpares with simi	the Top Ways to Save for your home. We've also far homes. Next, find out how much energy your		
Hame Profile	Appliance An	alysis 3 Find Savings		
	mation for mor	plances and find out how much they cost to run. Enter e personalized results.		
What are my top ways to s	2/10?	. How does my home compare?		
Savings Opportunities Annual Savings Weatherization Control air leakage \$49 - \$82		Annual Total Energy Use \$1,470 Avg. Nome		
		Least Vans. Least Most Energy		
Water Heating		\$1,127		
Install efficient showerheads	\$27 - \$44	Ny Home		
nsulate water heater tank \$4 - \$8		C Total C Electricity C Gas		
Lighting		s role s Decencity s des		
Lighting		My Energy Bills Congratulational Your home used less energy than most of the similar homes in your area.		
Use compact fluorescent bulbs	\$21 - \$28			
Use compact fluorescent bulbs in recessed fotures Use compact fluorescent bulbs	\$21 - \$28 \$17 - \$21	Congristuational Your home used lease energy than most of the similar homes in your area.		
Use compact fluorescent bulbs in recessed fatures Use compact fluorescent bulbs in high-use lamps		most of the similar homes in your area.		
Use compact fluorescent bubs in recessed fatures Use compact fluorescent bubs in high-use lamps Replace halogen torchieres	\$17 - \$21			
Use compact fluorescent bulbs in recessed fistures Use compact fluorescent bulbs in high-use lamps Replace halogen torchieres Heating and Cooling Instal a programmable	\$17 - \$21	most of the similar homes in your area.		
Lighting Use compact fluorescent bulbs in recessed fintures Use compact fluorescent bulbs in high-use lamps Replace halogen torchieres Heating and Cooling Install a programmable thermostal Seal leaks in ducts	\$17 - \$21 \$10 - \$12	Most of the similar homes in your area.		
Use compact fluorescent builds in recessed finitures Use compact fluorescent builds in high-use lamps Replace halogen tarchieres Heating and Cooling Install a programmable fluoressia	\$17 - \$21 \$10 - \$12 \$13 - \$21	most of the similar homes in your area.		



# **From Planning to Customer Programs**



2013 Washington / Idaho DSM Business Plan A Working Document to Plan and Guide our 2013 Strategy and Operations Avista Washington / Idaho DSM staff Ed Arnold Sue Baldwin Mark Baker Catherine Bryan Ann Carey Renee Coelho Leona Doege Chris Drake Bryce Eschenbacher Bruce Folsom Lori Hermanson Sandra Hoye Rachelle Humphrey Jason Hunnel Nicole Hydzik Matt Iris Doug Kelley Lorri Kirstein Tom Lienhard Carlos Limon Pat Lynch Camille Martin Andy Paul Jon Powell David Thompson Ron Welch Levi Westra Roxanne Williams Greta Zink Avista External Energy Efficiency Board People from various state commissions, nonprofit organizations, energy efficiency organizations, energy councils, and some large customers



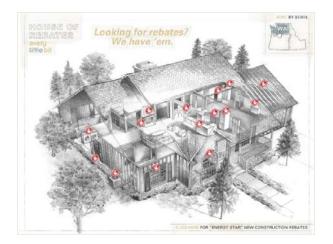
Total Company Planning with >3000 DSM measures considered From Planning to Tariffs and Programs

>30 Programs and >300 measures offered



## **Incentives/Rebates Paid in 2012**





- Nearly \$19.6 million paid to Avista customers.
  - \$13.8 million to non-residential customers
    - Over 5,500 completed projects received an incentive
  - \$3.1 million to residential customers
    - More than 14,000 residential incentives paid
  - \$2.7 million to low income customers

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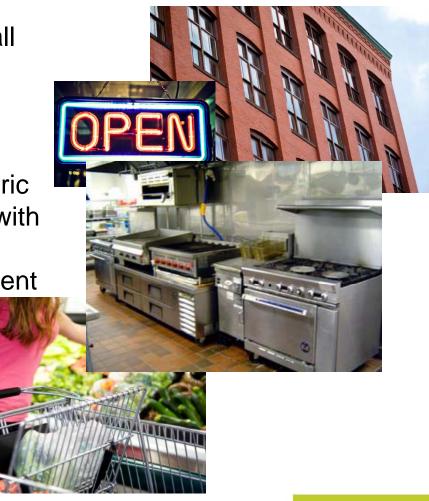
• More than 1,400 low income rebates paid

#### What We Do

Deep and broad energy efficiency programs with strong messaging for all customers.

We provide:

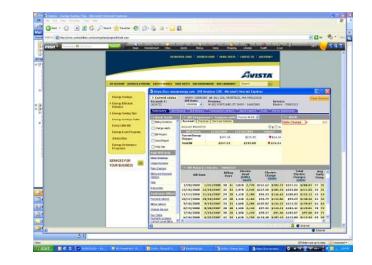
- Financial rebates for most C&I (electric and natural gas) savings measures with a payback over one year
- Rebates for weatherization and efficient appliances as well as low-cost/no-cost tips
- Renewable options



AVISTA

# Why We Do It

- Acquire lower cost resources to benefit all customers (IRP implementation)
- Customer assistance
  - Reduction in participating customers' bills
  - Allows customers to have some control in a higher energy cost environment
- Regulatory obligation <u>and</u> sensibility
- Reduced pressure on, or alternatives for, the capital budget
- Carbon reduction and environmental focus





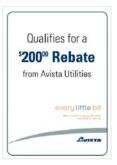
## How We Do It

### •Pursue the Best Delivery Mechanisms for the Targeted Market

Standard Offers ("Prescriptive") for residential & small commercial customers

- ≻Custom ("Site Specific") for C&I customers
- Low Income through community action agencies
- Regional through the NW Energy Efficiency Alliance
- ➢Special projects—RFPs, Pilot Programs, etc.
- Promotion of Codes and Standards









# **Residential Prescriptive** (Standard Offer) Programs

**Delivery Mechanisms** 

- Standard Offers ("Prescriptive")
- Custom ("Site Specific")
- Low Income
- Regional
- Special projects

- Ceiling, Attic, Wall Insulation
- Space & Water Heat Conversion
- High Efficiency Windows
- Second Refrigerator Recycling
- Fireplace Damper
- Multi-family Housing Conversion

- High Efficiency Tank Water Heater
- High Efficiency Tankless Water Heater
- High Efficiency Furnace/Boiler
- High Efficiency Variable Speed Motor
- High Efficiency Heat Pumps
- ≻ High Efficiency Replacement Air Cond.







#### Low Income



#### **Delivery Mechanisms**

- Standard Offers ("Prescriptive")
- Custom ("Site Specific")
- Low Income
- Regional
- Special projects

Avista contracts with six local Community Action Partnerships to deliver programs and funding to increase the efficiency and reduce energy usage for limited income customers.

Low Income funding approximately \$2.813 million in 2012 (Idaho at \$774k and Washington at \$2.039 million)



Helping People. Changing Lives.



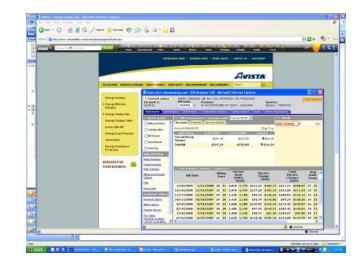
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# C/I Energy Efficiency Site Specific

- Custom Projects
- Technical Assistance
- Free Energy Audits
- and Analysis
- Design Review
- Cash Incentives

#### **Delivery Mechanisms**

- Standard Offers ("Prescriptive")
- Custom ("Site Specific")
- Low Income
- Regional
- > Special projects





# C/I Prescriptive (Standard Offer) Programs

- Lighting
- Food Service Equipment
- PC Network Controls
- Premium Efficiency Motors
- Demand Controlled Ventilation
- Natural Gas HVAC



- Refrigerated Warehouse
- Electric to Gas Water Heater
  Conversions
- Variable Frequency Drives
- Commercial Clothes
  Washers
- Customer Retro-Commissioning





# Regional

•Avista is one of fourteen funding utilities of the Northwest Energy Efficiency Alliance (NEEA).

•Based in Portland, NEEA pursues market transformation efforts to encourage adoption of energy-saving technologies and services.

•Initiatives include promotion of highefficiency appliances and lighting in retail outlets.

•Historically, over 20% of Avista's kilowatt hour savings come from NEEA programs, which have been among our lowest cost acquisition programs.

#### **Delivery Mechanisms**

- Standard Offers ("Prescriptive")
- Custom ("Site Specific")
- Low Income
- Regional
- > Special projects





# Messaging and Outreach: Every Little Bit

Market research found that Avista's customers believed they "were already efficiency, that energy efficiency is too expensive, and it doesn't make much difference."

In response, the EveryLittleBit campaign was launched with website, broadcast and print media, and collateral materials in a multi-channel, multi-year approach.

ANISTA



# Messaging and Outreach: Online Resources

	every	HOME AVISTA ENERGY EFFICIENCY RENEWABLE ENERGY CONTACT US						
	little bit	Energy Efficie	Energy Efficiency Programs and Rebates					
	Don't cry.	ntives. rence today.						
	Recycling an <u>old fridge or</u> your <u>CFLs</u> sends them to a better place.	• Washington • Id • Oregon	aho					
	Keep Cozy Stay warm and safe as things pet cooler with Winter Weather Tips							
	Use our online home energy analyzer and learn what you can do to be more efficient.							
Northwest HVAC/R Association washington/IDako								
	Registered Dealer Netwo	ork 2008	© 2008 Avista Corporation. All rights Reserved.					
	A & M Quality Heating, Inc. Spokane A J Heating & A/C Spokane Brown, Ar Gottama	509-929-21-00 Hurliman Heating & A/C 509-838-4223 KTU of Spokare, Inc latey 509-021-1005 MrcGeary Heating & A/C, LLC	Spokane 509-031-5110 Spokane 509-447-400 Spokane 509-515-5095		🐻 🎒 Internet			
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- www.everylittlebit.com
- www.avistautilities.com
- Energy Saving Tips
- House of Rebates
- Efficiency Ave
- Downloadable Forms
- Energy Audit
- •Bill Analyzer
- You can also call us
  - **800-227-9187**

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# Messaging and Outreach: Low-Cost and No-Cost Options



**Energy Saving Tips** 

- How to program your thermostat
- Recommended tstat settings
- Learn about phantom plug-loads
- Infiltration tips stopping the air leaks

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Case studies

#### Messaging and Outreach: Events



Delivery Mechanisms

- Standard Offers ("Prescriptive")
- Custom ("Site Specific")
- Low Income
- Regional
- Special projects

Reached over 4,000 individuals in 2012:

Avista workshops

Energy fairs

**Outreach** activities

Promotion of rebates

Information on low/no cost tips

AVISTA'

#### **Demand Response Pilots**

#### **Delivery Mechanisms**

- Standard Offers ("Prescriptive")
- Custom ("Site Specific")
- Low Income
- > Regional
- > Special projects



Direct Load Control Switches Water Heating, Central Air Conditioning, Heat Pump, Pumps (Spa/Pool) Direct Load Control Thermostats Central Air-Conditioning, Heat-Pump, Electric Forced Air Heat In-home Display units Does real time energy usage feedback have an impact?







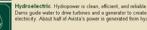
#### **Retail Renewable Programs**





Avista supports the use of renewable resources and has long shown leadership in energy production from renewables. Currently, there are five main types of renewable energy. Here's how they work:

Wind. Wind power is the world's fastest growing renewable energy resource. Wind spins the turbine blades to generate on-free electricity.



ms guide water to drive turbines and a generator to create ctricity. About half of Avista's power is generated from hydro



Geothermal. This technology produces electricity from hydrothermal resources. There are two types of geothermal, steam and binary. Steam uses very hot water resources white binary utilizes lower temperature resources with a heat xchanger.



Blemass. Byproducts are converted into blogus through the natural process of aniverbic digettion. The gas is three barned to create alterizery Byproduct, like word water at Avata's Kettle Faits, Washington, facility, may also be bound directly to generate stams to produce electricity. Blomass generation emission are significantly lower than forsil foeigneneted forms of energy. Solar Energy from the sun is captured and converted to electricity with photovoltaic cells. This inexhaustible source of energy does not produce carbon dioxide emissions but remains



 National Renewable Energy Laboratory DOE's Energy Efficiency and Renewable Energy Site

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#### Buck a Block

#### Renewable Generation Incentive

#### **Net Metering**

Interconnection Standards



### **Stakeholder Involvement**

External Energy Efficiency Board (Advisory Group)

Non-binding oversight, technical advisory committee

Meets several times each year (in person and webinars)

Regular reporting

**Periodic Newsletters** 



