



**PACIFICORP**

# **Reducing Greenhouse Gas Emissions**

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Environmental Policy*

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# About PacifiCorp

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- ◆ 1.5 million customers
  - Oregon, Utah, Wyoming, Washington, Idaho and California
- ◆ Owned by ScottishPower
- ◆ 8,200 MW of power generation
  - Predominantly coal
  - Growing gas portfolio
  - Push for more renewables

# About Regulated Utilities

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- ◆ We are obligated to serve customers reliably and as cost-effectively as possible
- ◆ As a monopoly, we are overseen by public utility commissions
- ◆ As a result, most of our actions require approval by PUCs for cost recovery
- ◆ Thus, we cannot act unilaterally without PUC approval
  - This makes us different from many companies in setting internal policies
- ◆ We as good as our PUCs allow us to be!

# The ScottishPower Connection

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- ◆ Our UK colleagues face real regulations on greenhouse gas emissions and renewable energy
  - Lots of thought and work going into reducing emissions in the generation fleet and tracking policy developments in UK and European Union
- ◆ In the US, we face federal disinterest and mild state interest in tackling emissions
  - U.S. Congress moving slowly
  - Oregon and Washington have plant siting laws
  - Other states, such as California and Massachusetts, are setting limits on vehicles and power plants
- ◆ Nevertheless, climate change can translate into financial risk since regulations can materialize in the future
  - The UK experience shows that even after 2 decades of Thatcher and Major, regulations can suddenly happen when you least expect it!

# Our Climate Strategy

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- ◆ Planning
  - Incorporate carbon risk value in our resource modeling
- ◆ Procurement
  - Apply carbon risk value to bid evaluations in our RFPs for new generation
- ◆ Accounting
  - Joined California Climate Action Registry
- ◆ Policy
  - Support well-crafted policies that mitigate emissions growth
    - ▶ Renewables
    - ▶ Efficiency
    - ▶ Offsets
    - ▶ GHG Accounting

# Incorporating Climate Change into Planning

- ◆ Integrated Resource Plan: 10-yr, least-cost plan
- ◆ We included \$ adders for CO<sub>2</sub> plus NO<sub>x</sub> and SO<sub>x</sub>
  - CO<sub>2</sub> is a challenge since there are virtually no regulations to reference
  - Worries that a wrong estimate could lead to financial penalties from our regulators
    - ▶ But is the alternative - \$0/ton - better? We thought “no”
  - Extensive process - consulted experts, environmental representatives, internal managers
  - Settled on \$8/ton of CO<sub>2</sub> starting in 2009

# Clean Energy in Our 10-Year Procurement Plan

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- ◆ 4,000 MW of new resources
  - 1,400 MW of renewables (wind, geothermal)
    - ▶ 340,000 homes
    - ▶ Will require “learning by doing” for integrating intermittent wind into our grid
  - 450 aMW of energy conservation
    - ▶ 330,000 homes
  - Other resources will be fossil fuel
    - ▶ Balance between minimizing environmental risk and providing low-cost power to customers
- ◆ Contingent on bids from developers that meet our price requirements

# Comments on the Plan

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- ◆ “...the most sophisticated and most consequential IRP that has been prepared in the region in the last five to 10 years.”
  - Natural Resources Defense Council
- ◆ “This is one of the most impressive integrated resource plans I've seen.”
  - Oregon Office of Energy staff
- ◆ “PacifiCorp is really leading the way.”
  - Renewable Northwest Project
- ◆ Everyone (environmentalists, industrial customers, etc.) recognizes elements they do not prefer in the plan - which probably means we're doing something right...
- ◆ The commenters above recognize that a plan does not equal implementation - we all have a lot more work to do...

# Tracking emissions

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- ◆ Important to establish common rules on counting GHGs
  - Avoid accounting games
  - Helps build a foundation for early action credit and offsets
- ◆ We currently report GHG emissions in Environmental and Social Impact Report
  - [http://www.scottishpower.plc.uk/pages/aboutus\\_environment](http://www.scottishpower.plc.uk/pages/aboutus_environment)
- ◆ We have joined the California Climate Action Registry
  - Derived from WRI/WBCSD standards, CCAR should reflect emerging global norms for GHG accounting
  - Registry to focus on both owned generation and purchased power
  - Currently working together to set detailed rules on data certification, emissions factors, T&D losses, etc.

# Support Policies

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- ◆ Policies can push the envelope and ease rate recovery
- ◆ Supported a proposed federal renewable portfolio standard, requiring 10% of power to come from renewables in 2020
- ◆ Supported federal energy efficiency standards for appliances and equipment
- ◆ Engaged in West Coast Governors' Global Warming Initiative
  - States should share “best practices”
    - ▶ Regional Renewable Portfolio Standard?
    - ▶ Common efficiency standards?
    - ▶ Transportation pilots?
    - ▶ GHG Accounting?
    - ▶ Siting standard?

# Challenges Are Stiff

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- ◆ Demand for electricity is rising dramatically
- ◆ Supply trends are ambiguous
  - Long-term natural gas supply in question
  - Plentiful, low-cost coal available
  - Cost of wind has dropped dramatically
    - ▶ But will new wind farms be permitted by weekend urban liberals?
  - Are we facing a coal-renewables future?
- ◆ We see little national leadership
  - Many utilities are interested in policy certainty
- ◆ There's a need for further development of technology
  - Utilities typically underinvest in R&D
  - Federal government sending discouraging signals on willingness to deploy technologies in the marketplace

# For More Information

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- ◆ Environmental and Social Impact Report  
[www.scottishpower.com/pages/aboutus\\_environment](http://www.scottishpower.com/pages/aboutus_environment)
- ◆ Integrated Resource Plan  
[www.pacificorp.com/Navigation/Navigation23807.html](http://www.pacificorp.com/Navigation/Navigation23807.html)

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