









OREGON SMALL-SCALE HYDRO: FINANCIAL INCENTIVES

May 16, 2007

Kip Pheil



Presentation Overview

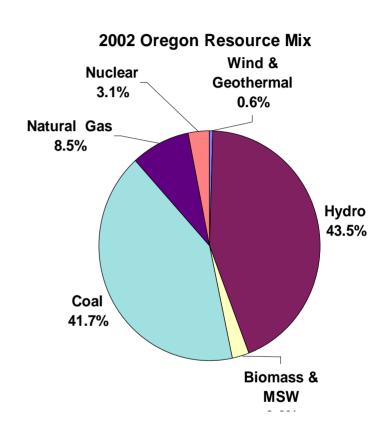
- Oregon's Energy Use
- Energy Conservation
- Renewable Energy
- Incentives
 - State
 - Federal
 - Other
- ◆ Resource List





Sources of Electricity Used in Oregon

- Not all based in Oregon
- Actual hydro generation depends on water year
- Recent sources mostly natural gas-fired
- Western Interconnection creates a single market
- Resource mix to a user depends on utility
- Retail Customers have some choice





Oregon Renewable Resources



Incentives for Energy Projects

Can combine most incentives most of the time

- State Programs
 - Feasibility Study Funds
 - Residential Energy Tax Credit (no hydro)
 - Business Energy Tax Credit
 - Energy Loans





Feasibility Studies

- ◆ Up to \$50,000 from State of Oregon
 - initial resource assessment
 - investigate siting and permitting
 - transmission and interconnection issues
 - ownership structure and funding mechanisms
 - project costs and economic viability
 - evaluate potential financial incentives
 - available output contracts and price
 - fatal flaw analysis
 - community issues and acceptance
- ◆ 25% Cost Share from Applicant
- ◆ Coordinated with Other Funding Sources



Feasibility Studies

- Renewable Energy Feasibility (REF) Fund
 - Oregon Economic & Community Development
 - available to Municipalities
 - Special Public Works Fund
 - first round: 3 of 4 awards for hydro
 - econ.oregon.gov/ECDD/REFF.shtml
- Community Renewable Energy Feasibility (CREF) Program
 - Oregon Department of Energy
 - available to other entities and individuals
 - Reliant settlement
 - repayment conditions



Business Energy Tax Credit

- Businesses, tribes, non-profits, public entities
- ◆ 35% of eligible project costs
 (\$10 million max = \$3.5 million max credit)
- maximum hydro plant size = 1 MW
- ◆ Tax credit taken over 5 years (10% x 2, 5% x 3)
- If eligible costs are \$20,000 or less, credit can be claimed in first year
- Pass-through option available
- Proposed increase for renewable projects:
 - 50% of eligible costs
 (\$20 million max = \$10 million max credit)
 - maximum hydro plant size = 10 MW



Energy Loan Program

- Public entities, Tribes,
 Businesses, Individuals,
 Non-profits
- Study, Design, Build Costs
- Funds from State GO bonds (renewable is tax-exempt)
- Fees and interest spread pay program costs
- ♦ > 680 loans, over \$335 million
- Energy Savings/Production\$44 million per year



Ashland City Hall

Projects that serve an Oregon energy need.



Energy Loan Program Terms

- ◆ \$20,000 to \$20 million
- ◆ 5 to 20+ year terms
- Construction and take-out
- Fixed rates (May 2007) for 15 year term
 - Taxable 6.95%
 - Tax-exempt below 6%
- Collateral required
- Prepayment penalty except small/short term loans

Flexible terms and loan structure!



Abundant Renewable Energy 10kW



Other Incentive Sources

- ◆ Federal Energy Programs (more after lunch)
 - USDA
 - Production Tax Credit
- Energy Trust of Oregon
- Utility Programs
- ◆ Renewable Energy Credits (green tags)
- Carbon Credits



Resource List

- ◆ Oregon Department of Energy
 - http://www.oregon.gov/ENERGY
 - Tax Credits, Loans, Technical Assistance
- ◆ Energy Trust of Oregon
 - http://www.energytrust.org
 - Energy Analysis, Cash Incentives/rebates
- **◆ USDA**
 - http://www.rurdev.usda.gov/OR/
 - Loans, Loan Guarantees, Gra
- ◆ The Climate Trust
 - http://www.climatetrust.org
 - Carbon Offset







Contact Info

Oregon Department of Energy

625 Marion St. NE Salem, OR 97301-3737 1-800-221-8035

Kip Pheilkip.pheil@state.or.us503-378-4442



http://www.oregon.gov/ENERGY

