

# AEC Test Facility

A Financing Case Study



# Green Politics in Oregon

- Oregon governor Ted Kulongowski has established the goal that all state buildings would be powered by renewable energy by the year 2010.
- Funding to meet this goal will be a major political talking point in the upcoming gubernatorial election in November.
- This goal will be much easier to achieve if the public sector and private enterprise work together, utilizing the available tax incentives to purchase renewable power production systems.
- Private development of PV systems on public buildings with a lease back arrangement to the public agency results in a 50% reduction of renewable energy generation costs.



# Summary of Available Tax Credits in Oregon

- Business Energy Tax Credits:

The business energy tax credit is 35 percent of the eligible project costs.

- Federal Tax Credits

Federal solar tax incentives allow business owners a tax credit of 30% for qualifying solar electric (PV) or solar water heating expenditures.

- Federal Tax Incentives for Accelerated Depreciation of Equipment

Under the Modified Accelerated Cost-Recovery System (MACRS), businesses can recover investments in solar, wind and geothermal property through depreciation deductions.

- State Tax Incentives for Accelerated Depreciation of Equipment

System depreciation, as calculated for federal accelerated depreciation, will result in a reduction in Oregon state tax. The tax rate in Oregon is 9%.

- Energy Trust of Oregon

Oregon customers of Pacific Power or Portland General Electric, are offered cash incentives of \$1 - \$1.25 /watt from the Oregon Trust of Oregon for photovoltaic systems.



## Benefits Associated with Private Financing Model

- Private financing of PV systems on public buildings will result in considerably more installed wattage for dollar expended.
- Additional system design and monitoring costs do not detract from the financial feasibility of these systems.
- This model of development could result in an increase of applied research data. Providing a ten year system warranty which includes system monitoring allows utility and tax incentives to be applied to monitoring costs.
- Private development cooperatives provide a variety of ways that people can contribute to expansion of the solar Industry.



# Financing Summary

- Comparison of Private Financing to Public Financing for a 25 kW Photovoltaic System in the Energy Trust Service Area

	Publicly Owned	Privately owned
Initial Cost	\$200,000	\$220,000
BETC	-\$56,000	-\$77,000
Federal Credit	0	-\$60,000
Energy Trust Credit	-\$25,000	-\$25,000
Finance Interest	5%	7%
Power Production	33,000 kwh	33,000 kwh
Other Federal Tax Impact	0	-\$1,759
Other State Tax Impact	0	-\$9,807
Effective ten year Energy Rate	\$.40 / kwh	\$.20 / kwh