



Oregon's Carbon Dioxide Standard for New Energy Facilities

David Stewart-Smith

**Innovative Approaches to Climate Change:
A State-Federal Workshop**

Washington, D.C.

February 8, 2005



Oregon's Energy Facility Siting Process

The 1975 Oregon Legislature crafted the basic framework of the siting regulation Oregon has today.

- ◆ **Ensure that new energy facilities are safe and environmentally acceptable.**
- ◆ **Energy Facility Siting Council is a 7-member citizens' board, which is appointed by the Governor and confirmed by the Senate.**
- ◆ **Council assesses the compliance of energy facilities with its standards and other laws.**
- ◆ **Unified decision-making process.**

Oregon's CO₂ Emissions Standard

In 1997, Oregon passed the law to limit carbon dioxide emissions from new energy facilities.

- ◆ **The current standard is 0.306 kilograms/kWh for base-load gas plants, all peaking facilities, and an equivalent level for non-generating facilities.**
- ◆ **The Council must adopt a standard for other types of facilities if there are applications.**
- ◆ **Meeting the standard requires offsets.**

CO₂ Emissions Standard

Three key criteria for offsets:

- ◆ **Offsets are defined in statute in future tense.**
- ◆ **Offsets must result in direct reduction, avoidance, or sequestration of CO₂.**
- ◆ **The Council holds the offsets in trust. They cannot be sold.**

CO₂ Emissions Standard

New facilities can meet the standard in three ways in addition to building an efficient plant:

- ◆ **Provide cogeneration that offsets fossil fuels at a manufacturing plant.**
- ◆ **Invest directly in projects that offset CO₂ emissions, if projects meet Council approval.**
- ◆ **Pay a “qualified organization” 94 cents per metric ton of excess CO₂—the “monetary path.”**

CO₂ Emissions Standard

Monetary Path:

- ◆ **Establish letter of credit for the full amount of the offset fund before beginning construction.**
- ◆ **Pay total selection and contracting funds prior to beginning construction.**
- ◆ **Payment relieves developer from any further obligation or liability for offsets.**
- ◆ **For a 550 to 650 MW combined-cycle natural gas-fired power plant, including duct-firing, payments range from \$ 8 to \$9 million.**

CO₂ Emissions Standard

The standard has not driven development out of the state. Since the Legislature adopted the standard:

- ◆ **Four plants have been constructed.**
- ◆ **Four other plants have site certificates; one of those is under construction and one was terminated before construction began.**
- ◆ **Four plants are in the permitting process.**
- ◆ **About 4,800 MW of generation have been sited under the standard.**

Qualified Organization

Independent, non-profit organization that may receive funds from developers via the monetary path.

- ◆ **7-member board:**
 - **3 Siting Council appointees**
 - **3 environmental organization appointees**
 - **1 energy facility developer appointee**

- ◆ **At least 80% of funds must go to direct CO₂ offsets.**

- ◆ **“Best efforts” in purchasing offsets, but no direct link to the tons required of the developer.**

The Climate Trust

The Trust is the only qualified organization. It purchases CO₂ offsets and retires them.



- ◆ **The Trust has contracts for \$4 million in offset projects.**
- ◆ **The Trust has a current RFP for \$2.2 million for offsets from truck stop electrification.**
- ◆ **The Trust is beginning process for purchasing \$4.3 million in offsets.**

Observations

- ◆ **Adopting the CO₂ standard was the result of policies that laid a foundation of strong citizen support for state and local actions to address climate change.**
- ◆ **Eight generating facilities have met the CO₂ standard and four more are in the site review process.**
- ◆ **Industry has not opposed reasonable strengthening of the standard according to the statute.**

Observations: Continued

- ◆ **Based on Oregon's experience, we have shown that states can limit greenhouse gas emissions without harming our economy.**
- ◆ **We believe that using an organization like the Climate Trust works well.**
- ◆ **The details of projects to acquire offsets are complex, but very important.**

For More Information:

Dave Stewart-Smith
Assistant Director for Energy Resources
503.378.6469
david.stewart-smith@state.or.us

Sam Sadler
Senior Analyst 503.373.1034
samuel.r.sadler@state.or.us

Oregon Department of Energy
625 Marion Street NE
Salem, OR 97301-3737
503.373.7806 *fax*

www.oregon.gov/ENERGY/SITING/index.shtml