



**State Clean Energy-Environment Technical Forum  
Clean Energy Tax Incentives  
April 20, 2006  
Call Summary**

**Participants:** 25 participants from 18 states and several national organizations (see the participants list at <http://www.keystone.org/html/documents.html>.)

**Background Materials:** “Clean Energy Tax Incentives” and. EPA’s “Clean Energy-Environment Guide to Action” (available at <http://www.keystone.org/html/documents.html>)

**Key Issues Discussed**

- Tax incentives in the Energy Policy Act of 2005 and how states can maximize synergies
- Different approaches to state tax incentives
- Performance criteria and verification of actual installation of EE/RE
- “Double-dipping” in state and federal tax incentives

**Summary of Presentations**

*Note: All of the presentations from this call are available for download at <http://www.keystone.org/html/documents.html>. Please refer to these documents for additional detail on the presentations.*

**A. Welcome – Julie Rosenberg, U.S. Environmental Protection Agency (USEPA)**

Almost every state has some sort of tax incentive for energy efficiency or renewable energy, and EPA wants to ensure that states are aware of the variety of tax incentive programs that are available. The agency also wants to encourage states to think about the application of tax incentives in coordination with other state and federal programs.

**B. Energy Efficiency (EE) Incentives in the Energy Policy Act (EPA) of 2005 – William Prindle, American Council for an Energy Efficiency Economy (ACEEE)**

- Some elements of this the EPA) were first discussed in 1997. The final bill was enacted on August 8, 2005.
- EPA) contains a variety of tax incentives that are **intended to as short-term incentives to promote longer-term changes**. These tax incentives purposely focus on advanced technologies that are not widely available in the market.
- **Congress cut the proposed duration of these incentives** in half (from four years to two). They are currently scheduled to expire in 2007, but many people are hoping that the original 4-year period is restored.
- **EPA) provides for tax deductions (rather than credits) for new and existing energy efficient buildings** at the advice of building industry representatives who suggested that deductions are more effective incentives.

- Meeting the revised 2007 deadline for this incentive is expected to be difficult for industry. Building industry needs longer planning and implementation horizon.
- EAct allows deductions for energy efficient public buildings to be passed on to the architect or design firm on record for those buildings
- **EAct provides tax credits for:**
  - Builders of new energy efficient homes and producers of energy efficient manufactured homes. The Internal Revenue Service (IRS) is expected to issue detailed guidance on this credit shortly.
  - Energy efficient residential heating and cooling equipment.
  - Shell improvements to existing homes (insulation, windows, metal roofs, etc.). The IRS is expected to issue detailed guidance on this credit shortly.
  - Energy efficient home appliances (refrigerators, clothes washers, and dishwashers). Credits are tiered to efficiency criteria. Increased availability and more competitive pricing are expected for these appliances.
  - Hybrid or diesel passenger vehicles. Vehicle credits are based on percentage mileage improvement over a base level and on total fuel savings.
  - Hybrid heavy-duty vehicles. Credits for these vehicles are based on the weight class of the vehicle, its relative fuel economy, and its incremental cost.
  - Stationary fuel cells and microturbines. This credit is intended primarily for businesses but individuals are eligible for the fuel cell credit.
  - Photovoltaic systems, solar hot water systems, and solar hybrid lighting systems.
- Although different tax credits are expected to yield different amounts of savings, the **expected cumulative savings from these tax incentives** are 2.92 quads of energy, \$26 billion, and 51.3 million metric tons of carbon.
- The **implications of these tax credits for states are:**
  - New tax incentives are an opportunity to convince people to do make energy efficient changes now, instead of delaying them.
  - States and utilities should coordinate their programs with these federal incentives. Doing so will offer people double benefits and can create leverage for federal credits.

### C. The Oregon Department of Energy Tax Credits – Suzanne Dillard, Oregon Dept. of Energy

- Oregon has tax credits for **both the residential and business sectors**. These credits are comprehensive and flexible in scope. They date back to 1977 and have evolved over time and adjusted to changes in markets, the needs of consumers, and advancements in technology. Both programs have had positive effects on Oregon's economy.

- **The residential credit** began in 1977 with credits for solar heating, geothermal heating, and wind electric generation systems.
- It was **expanded between 1998 and 2001 to include** tax credits for energy efficient appliances, duct testing and sealing, heating and cooling systems, and hybrid vehicles. These additional credits are a motivating factor for consumers and have caused an increase in applications for the tax credit.
  - **Amount and Qualifications of Solar tax credit:** The state is expecting more solar residential projects to be built to capacity from the beginning now that **the tax credit for solar photovoltaic systems has been increased.** Prior to this change, systems were being built piecemeal so that consumers could maximize tax credits by getting some credit each year for a series of years.
  - The program gives the State **an important role in communities.**
  - **The challenges** of the residential tax credit program have been:
    - Contractor certification: installation of energy efficient technologies is complex and needs to be performed in just the right way to deliver energy savings. The State is developing a training and certification program to ensure that there are skilled contractors available in as many geographic areas as possible, so that there is equity in access across the state to these tax credits.
    - Getting information at the retail level: the State has tried a variety of approaches to getting information about the tax credits to retailers selling energy efficient technologies.
    - Keeping the contractors up to date and achieving geographic balance in distribution. There are no certified contractors in some regions.
    - Reducing confusion between the state performance standards for qualifying and the Energy Star standards. State standards tend to be higher.
    - Demand on agency staff and resources: the majority of applications come in between December and April 15 and substantially increases the demands on staff time during this period.
- Oregon's program for **business tax credits (BETC)** evolved over 26 years. The program encourages energy efficiency, recycling, use of renewables, less-polluting transportation fuels, reduced employee commuting, and sustainable building.
  - This is **an incentive program not a reward program**, so owners must apply for the credit before a project begins.

- Since 2001, the program has a **pass-through option** which allows entities without a tax liability (public schools, nonprofit organizations, etc.) to partner with a business that has a tax liability and pass along the tax credit to that partner.
- The program is a **valuable tool in economic development**. It has been used to attract new business to Oregon and to keep companies in Oregon.
- **The challenges are:**
  - Ensuring that these credits are used to motivate people to try new technologies instead of supporting activities that are already standard practice.
  - Ensuring that projects are done well. The State is not able to verify the energy savings of all projects, but it is inspecting installation of technologies and products to verify that it is done correctly.
  - Managing the growth in the program is also a challenge. OR is contracting for a process evaluation to determine the appropriate role
- **ECO-NW Study** – ECO-NW evaluated the economic development impacts of the residential and business tax credits as \$8.4 million in savings. The impact on wages and jobs also positive. (Report can be downloaded at: [http://www.oregon.gov/ENERGY/CONS/docs/EcoNW\\_Study.pdf](http://www.oregon.gov/ENERGY/CONS/docs/EcoNW_Study.pdf))

**D. New York: Green Building Tax Credit – Craig Kneeland, New York State Energy Research and Development Authority (NYSERDA)**

- New York’s green building tax credit was initiated in 1995 by a diverse group of people including the real estate industry, environmentalists, architects, engineers, and business people, who pushed for the legislation.
- **Credits are available for the following kinds of buildings:** multiple dwellings, business, mercantile, assembly, and institutional. A tax credit for residences has been discussed but has not yet materialized.
- Tax credits apply to **fuel cells, photovoltaics, refrigerants, and the base building/tenant space**. Additional credits are available for buildings in economic development zones.
- **The basic criteria to qualify** as a green building are overall energy efficiency, indoor air quality, efficient materials, efficient appliances, water conservation, and commissioning (a systematic process to verify that what was included in the building design was installed and is working correctly). These criteria are more stringent than the LEED (Leadership in Energy and Environmental Design) criteria, because LEED criteria do not ensure that a building has energy benefits. The New York approach is basically an “all or nothing” system.
- The regulations were drafted 6 months after the bill was passed by an **advisory committee** with diverse members who met once a month in open meetings. The

committee met with interested parties throughout the state to get their input, but consensus was not required.

- The tax credit program had several **ancillary impacts**, including use of the legislative language by other states, Executive Order 111 on green buildings and vehicles, and lessons to apply to the redevelopment of the World Trade Center.
- Some of **the challenges** this program faced include:
  - 6-month requirement to complete the regulations,
  - Needing new models for energy efficiency in buildings,
  - Finding a green refrigerant,
  - Establishing consistent standards,
  - Lawsuit on behalf of the resistant floor covering industry.
  - Changes to the tax credit require legislative action, which limits the flexibility of the program.
- The advisory committee has identified several **opportunities for improvement** to this program, including
  - increasing the available funding,
  - eliminating the need for regular indoor air quality testing,
  - broadening eligibility,
  - eliminating the incentive for green refrigerants,
  - providing more detail and training for certification, and
  - monitoring long-term performance of buildings.

### Questions and Discussion

#### *What is the status of Washington's proposed renewable production tax credit?*

- In 2005 Washington passed legislation enabling utilities to offer production tax incentives for renewable energy feeding power to the system from small businesses, residents, and local governments.
- Utilities offer the incentive to electricity customers and are reimbursed through a state gross receipts tax credit. The state does not have income tax on businesses just gross receipts tax.
- Tax production incentive for solar or wind systems is 15 cents per kWh with additional incentives if you use equipment manufactured in WA. (e.g. 2.3 times the incentive if you use inverter produced in WA)
- Originally designed to attract renewable manufacturing to rural areas.
- Concerned that it would be challenged as a violation of the interstate commerce clause, but attorneys have cleared it.
- Implementation requires uniform interconnection standards be in place (80% of load must have uniform interconnect standards that are 90% the same.) Next week expect to pass threshold and implementation can begin retroactively.

*In 2005, New York passed cash incentives for businesses. How does that relate to the green building program?*

- Those incentives were intended to attract manufacturing facilities to rural areas. They do not relate directly to the green building incentives.

*Are there instances in which a state tax incentive might reduce participation in federal incentive programs and preclude “double-dipping”?*

- New York allows double-dipping on green building tax incentives.
- Oregon believes that applicants should be able to qualify for both state and federal tax credits, but it is exploring this issue with its attorney general to get clarity.
- Washington does not consider federal tax incentives income and therefore does not preclude double-dipping.
- North Carolina has not seen a lot of use of their tax credits for renewable energy. They are hoping that more people will take advantage of state credits as they learn about the federal credits in EPAct.

#### **Summary of Key Points**

Steve Dunn (USEPA) summarized some of the interesting considerations discussed including funding levels, performance requirements for equipment, training and certification, and eligibility. He advised participants that they can find additional resources on this topic:

- The background paper on tax incentives and the “Clean Energy-Environment Guide to Action” are both available at <http://www.keystone.org/html/documents.html>.
- The Energy Star website ([www.energystar.gov](http://www.energystar.gov)) has information the tax incentives in EPAct and fact-sheets targeted at consumers, homeowners, and commercial businesses.
- The CHP website ([www.epa.gov/chp](http://www.epa.gov/chp)) has information on tax incentives for biomass and combined heat and power projects.
- Steve would be happy to send these documents to anyone who requests them by email at [dunn.stevev@epa.gov](mailto:dunn.stevev@epa.gov).

**NEXT TECHNICAL FORUM CALL:** May 16<sup>th</sup> from 2 p.m. to 3:30 p.m. EDT  
**TOPIC:** Energy Efficiency Portfolio Standards