STATE CLEAN ENERGY - ENVIRONMENT TECHNICAL FORUM
Call #20: Innovative Approaches to Clean Energy:
Supporting Localities to Advance State Goals
January 18, 2007, 2:00 - 3:30 p.m. EST
BACKGROUND

I. Introduction

States use a variety of funding mechanisms and incentives to support clean energy activities by local governments, industry, residents, and other constituents. Although many funding mechanisms have broader applicability, this session of the Technical Forum focuses on types of funding that states are using to support local government programs. In addition to directly benefiting state residents, businesses and industry, local government actions to support clean energy can play an important role in meeting state clean energy, environmental and economic goals.

Some financial incentives for clean energy programs, such as loan funds, performance-based contracting, allowance set-asides, and Supplemental Environmental Projects (SEPs) can be self-funded; others, like grants, rebates, buy-downs, and generation incentives, may require a separate source[1]. State funding sources for local government clean energy programs include:

- Public Benefit Funds (PBFs) - PBFs are typically funded by small charges on utility customer bills.
- State Budget Appropriations - Some states support energy financing and incentive programs with general state revenues appropriated through the annual budget process.
- Bonds - Some states use bonds to raise capital for lending programs. In some cases, loan repayments are applied to bond debt service.
- Environmental Enforcements and Fines - Fines and penalties collected from environmental enforcement actions can be used to support clean energy financing and incentives.
- Petroleum Violation Escrow (PVE) Funds - PVE funds come from legal settlements for 1970s-era oil pricing regulation violations.
- CO_2 Offset Programs - States may use CO_2 offset programs as a source of funding. For example, power plants may be given a choice to offset CO_2 directly or to pay into a fund which supports renewable energy and energy efficiency projects or carbon sequestration.

II. State Efforts

Most states offer support for clean energy in one form or another and much of it is accessible to local governments. The following examples illustrate various types of programs and funding and examples of how these can or have applied to efforts at the local level. For a comprehensive table showing state incentive programs, see the Database of State Incentives for Renewables and Efficiency (DSIRE): http://www.dsireusa.org/summarytables/financial.cfm?&CurrentPageID=7&EE=0&RE=1.

A. Revolving Loan Funds

Texas LoanSTAR

[1] Section 3.4 in the EPA *Clean Energy Guide to Action* focuses on funding and incentives for clean energy programs. For more information see: http://www.epa.gov/cleanenergy/stateandlocal/guidetoaction.htm.

Texas LoanSTAR is a program for energy efficiency in buildings (primarily state agencies, local governments, and school districts). The program is funded at a minimum of $95 million annually with initial capitalization from PVE funds. The program is administered by the Texas State Energy Conservation Office (SECO) through the Department of Energy (DOE) State Energy Program. http://www.seco.cpa.state.tx.us/ls.htm

Iowa Energy Bank

Iowa's *Energy Bank* program provides technical and financial assistance to public and nonprofit facilities for installing cost-effective EE/RE improvements. Loan recipients use funds for energy audits, engineering analysis, and cost-effective energy management improvements. Energy cost savings are used to repay financing for energy management improvements. Financing is provided through area lending institutions that create budget-neutral, affordable financial packages. Iowa's program targets public schools, private colleges and schools, hospitals, and local governments. http://www.iowadnr.com/energy/ebank/index.html

Montana Alternative Energy Loan Fund

Montana's *Alternative Energy Loan Fund* provides individuals and small businesses, local government agencies, universities, and nonprofit groups with low interest rate loans for renewable energy systems up to 1 MW in size. Recipients use the loans to finance wind, solar, geothermal, fuel cells, biomass, hydroelectric, and solid waste methane projects. Loan repayments are re-deposited to sustain the program and further support comes from penalties for air quality violations. http://www.deq.state.mt.us/energy/Renewable/altenergyloan.asp

B. Energy Performance Contracting

Washington

Washington requires state facilities to conduct energy audits and to use energy performance contracting (EPC) as their first option for achieving energy savings. (Washington HB 2247 2001). The state's *Energy Performance Contracting Program* provides free preliminary audits and consulting services and helps state agencies, colleges and universities, cities and towns, counties, school districts, ports, libraries, hospitals, and health districts qualify for the low-interest state treasury financing. http://www.leg.wa.gov/pub/billinfo/2005-06/Pdf/Bills/Session%20Law%202005/5101-S.SL.pdf

Colorado

The Colorado *Governor's Office of Energy Management and Conservation (OEMC)* coordinates energy performance contracting and financing mechanisms for local governments. Through the OEMC *Rebuild Colorado program* building owners identify and assess energy-saving projects in buildings and can use energy performance contracting to pay for projects even when capital is scarce. Recipients, including school districts, state agencies, state colleges and universities, public housing authorities, cities, counties, special districts, and nonprofits, may use the program for sustainable design in new buildings, commissioning in new and existing buildings, energy management, and leveraging bond dollars with energy savings. http://www.colorado.gov/rebuildco/

C. Tax Incentives

Oregon

The Oregon DOE funds *Business Energy Tax Credits* (BETCs) and *Residential Energy Tax Credits* (RETCs) for Oregon businesses and residents that invest in qualifying energy-efficient appliances and equipment, recycling, renewable energy resources, sustainable buildings, and transportation (e.g., alternative fuels and hybrid vehicles). BETC eligible businesses, nonprofit organizations, tribes, or public entities may take advantage of the *Pass-through Option*, which allows a project owner to transfer the 35% tax credit project eligibility to a pass-through partner for a lump-sum cash payment. http://egov.oregon.gov/Energy/CONS/BUS/BETC.shtml

D. Grants, Buy-Downs, and Generation Incentives

California

California operates a rebate program and a generation incentive program that, together with its PBF-funded *Emerging Renewables Program*, covers a broad range of renewable energy technologies. Funds are collected through an electricity distribution charge that is separate from the state's public goods charge and administered by the state's four investor-owned utilities.
Since 2002, the *California Public Utility Commission* has approved 57 renewable contracts. These contracts, along with pending contracts, may enable utilities to reach 17 percent renewable in 2010.
http://www.cpuc.ca.gov/static/energy/environmatters.htm

Massachusetts

The *Office for Commonwealth Development's Commonwealth Capital Program* helps align $500 million in grants and loans with local government smart growth efforts that integrate energy, environmental, housing and transportation policies, programs, and regulations. The Office creates a scorecard that prioritizes state investments in municipal policies such as: zoning and policies that promote compact mixed-use development, placement of housing to reduce transportation needs, and use of renewable energy and energy efficiency. http://www.mass.gov/ocd

The *Massachusetts Technology Collaborative* administers $25 million in renewable energy grants and rebates for grid connected IOU customers. Programs include: the Small Renewable Energy Rebate Program (grants for PV, wind and micro-hydro systems), the Green Building and Infrastructure program (grants for clean energy installations in buildings such as schools), the Clean Energy Choice Program (tax incentives for green power and grants for consumers, communities, and low income residents), and the Industry Support Program (direct investment in new products).
http://www.masstech.org/renewableenergy/index.htm

New York

The *New York State Energy Research and Development Authority* (NYSERDA)'s New Construction Program offers funding to schools, universities, municipal buildings, and others to offset the additional costs associated with the purchase and installation of approved energy efficient equipment. http://www.nyserda.org/programs/New_Construction/default.asp NYSERDA also offers cash incentives for the installation of small on site wind power that are available to local governments. http://www.powernaturally.com/Programs/Wind/incentives.asp?i=8

NYSERDA administers the *Alternative-Fuel Vehicle Program*, which provides financial assistance and technical information to encourage fleets to purchase alternative-fuel vehicles (e.g., natural gas, propane, and electricity, including certain hybrid-electric vehicles) and to install fueling facilities or

charging stations. Funds covering the incremental costs of alternative-fuel buses and cars are available on a competitive basis. http://www.nyserda.org/programs/transportation/afv/default.asp

Washington

Washington offers a production incentive for individuals, businesses, or local governments generating electricity from solar power, wind power or anaerobic digesters. Publicly and privately owned utilities in Washington pay the incentives and earn a tax credit equal to the cost of the payments. *Senate Bill 5101* (S.B.5101), signed in May 2005, established a base production incentive of $0.15/kWh which is multiplied by a specific economic multipliers for the various generation methods (higher multipliers favor Washington-based generation and Washington-manufactured equipment). The *Washington Department of Revenue* measures the impacts of the legislation, including any change in the number of solar energy system manufacturing companies in Washington and the effects on job creation.
http://www.leg.wa.gov/pub/billinfo/2005-06/Pdf/Bills/Session%20Law%202005/5101-S.SL.pdf

E. NO_x Set-Asides

Massachusetts

Massachusetts has a 5% set-aside program for energy efficiency and renewable energy in its NOx budget rule. Allowances are allocated to applicants, which includes smaller projects that are aggregated into one application, and can then be sold to generate revenue or retired to preserve the emission reductions associated with the project.
http://www.eere.energy.gov/windandhydro/windpoweringamerica/pdfs/workshops/2006_clean_air/clean_air_ma_dep.pdf

F. Supplemental Environmental Projects

Maryland

In Maryland, a utility agreed to spend $75,000 to install small photovoltaic systems on three public buildings in the same county as the facility, including two schools and an environmental center (in a 2002 revised settlement for violations of visible emission standards).
http://www.epa.gov/cleanenergy/pdf/sep_toolkit.pdf

III. Resources for Further Information

EPA Clean Energy-Environment Guide to Action
EPA's guide to clean energy programs and policies, including funding and incentives.
http://www.epa.gov/cleanenergy/stateandlocal/guidetoaction.htm

The Database of State Incentives for Renewable Energy (DSIRE). This database contains information on federal, state, and local incentives that promote renewable energy and energy efficiency. It provides information for all 50 states and is updated regularly.
http://www.dsireusa.org

This EPA Guidebook provides an overview of environmental finance tools, many of which are useful for local government clean energy efforts.
www.epa.gov/efinpage/guidbkpdf.htm

The Local Government Environmental Assistance Network
The Local Government Environmental Assistance Network provides several environmental tools including funding information for local governments. The Network is a partnership between the International City/County Management Association (ICMA), EPA, and several other national groups.
www.lgean.org

Innovation, Energy, and Investment: Case Studies Leading Clean Funds. This Lawrence Berkeley National Laboratory (LBNL) Website contains case studies of various state clean energy funds.
http://eetd.lbl.gov/ea/EMS/reports/51493.pdf

Case Studies on the Effectiveness of State Financial Incentives for Renewable Energy. This NREL report presents state case studies on financial incentives for renewable energy. NREL/SR620-32819. Gouchoe, S., V. Everette, and R. Haynes. 2002. NREL, DOE. September (vi).
http://www.nrel.gov/docs/fy02osti/32819.pdf

Performance Contracting Legislation by State. This Oak Ridge National Laboratory Website contains information on performance contracting legislation by state.
http://www.ornl.gov/info/esco/legislation/

Environmental Resource Center Issue: Efficiency Incentives. This site includes a variety of examples of tax incentives and legislation that have been introduced by different states to decrease energy use.
http://www.serconline.org/energytaxincentives.html

Designing Financial Incentives, Mandates, Government Programs Promoting Renewable Energy. This paper discusses major financial incentives used by federal and state governments and their effectiveness in promoting renewable energy.
http://www.eia.doe.gov/cneaf/solar.renewables/rea_issues/incent.html

Guidance on Establishing an Energy Efficiency and Renewable Energy (EE/RE) Set-Aside in the Budget Trading Program.
http://www.epa.gov/cleanenergy/stateandlocal/guidance.htm

A Toolkit for States: Using Supplemental Environmental Projects (SEPs) to Promote Energy Efficiency and Renewable Energy. This EPA toolkit is intended to help state and local governments pursue energy efficiency or renewable energy projects through SEPs.
http://www.epa.gov/cleanenergy/pdf/sep_toolkit.pdf