Central Appalachia Prosperity Project

Phase I

Objective 3: Identify federal, state, and local funds, programs, and policies that can help Appalachia transition toward a green economy

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Photo credits: Vivian Stockman (mountain-top removal site) and Evan Hansen (wind turbines and river).
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Note: Many portions of this document were cut and pasted directly from government documents, Web pages, and other sources. Due to the length of this report, direct quotations have not been placed within quotation marks. However, sources are clearly noted.
1. INTRODUCTION

The Central Appalachia Prosperity Project (CAPP) is a one-year privately funded initiative to create a plan for the region’s transition to a clean energy economy built on green jobs and industries, healthy communities, protection of natural resources, and restoration of assets that have been depleted or damaged by past activities. Modeled loosely on the Presidential Climate Action Plan, the CAPP plan will contain detailed recommendations for changes in federal, state, regional, and local policies and programs to help the region accomplish this transition.

This report contains partial results for Phase I, the gathering of data and information and the identification of additional research needs. Phase I has six objectives:

1. Collect existing research and information instructive for Appalachia;
2. Identify and engage with key stakeholder groups;
3. Identify federal, state, and local funds, programs, and policies that can help Appalachia transition toward a green economy;
4. Identify and characterize local, state and regional agencies with influence over economic development and energy policy;
5. Identify potential investors and project developers; and
6. Identify data gaps and frame research questions.

This report includes results for Phase I, Objective 3.

Future CAPP phases will perform new research and analysis, draft policy recommendations, generate outreach materials and information, and implement the recommendations.
2. STATE AND LOCAL ECONOMIC DEVELOPMENT PROGRAMS

Workforce Investment Act (WIA)

Type: Workforce training

Government Level: Federal

Government Agency: US Department of Labor, Employment and Training Administration


Contact: General WIA, (202) 693-3045

CAPP State: All

Recipient type/information: Primarily low-income, public assistance recipients, and veterans. Dislocated workers.

Description: Workforce Investment Act, implemented and directed through the United States Department of Labor, serves the purpose of improving the quality of the workforce and enhancing the productivity and competitiveness of the nation's economy by providing workforce investment activities that increase the employment, retention, and earnings of participants, and increase occupational skill attainment by the participants. People seeking funding for training – even though they may meet the program entrance requirements – are not considered for training until they complete certain requirements, which may include job search, assessment, development of individual employment plans and other criteria.

Appalachian Regional Commission (ARC), Area Development Program

Type: Economic development

Government Level: Federal

Government Agency: Appalachian Regional Commission

Info/website: [http://www.arc.gov/index.do?nodeId=8](http://www.arc.gov/index.do?nodeId=8)

Contact: Ray Daffner, Entrepreneurship Initiative Manager, phone: 202-884-7777; email: rdaffner@arc.gov

CAPP State: All

Recipient type/information: Half of the funding directed to projects that benefit counties and areas in the ARC region designated as economically distressed.

Description: "ARC's Area Development Program seeks to augment the Highway Program and bring more of Appalachia's people into America's economic mainstream. At least half of ARC's area development grant funding is directed to projects that benefit counties and areas in the Appalachian Region designated by ARC as economically distressed."
Appalachian Regional Commission, Area Development Program: Asset-Based Development Initiative

**Type:** Economic development  
**Government Level:** Federal  
**Government Agency:** Appalachian Regional Commission  
**Info/website:** [http://www.arc.gov/index.do?nodeId=8](http://www.arc.gov/index.do?nodeId=8)  
**Contact:** Ray Daffner, Entrepreneurship Initiative Manager, phone: 202-884-7777; email: rdaffner@arc.gov  
**CAPP State:** All  
**Recipient type/information:** Communities lying within the general ARC coverage area  
**Description:** "Appalachia's natural, cultural, structural, and leadership resources can play an important role in building a strong and sustainable economy in the Region. ARC's Asset-Based Development Initiative seeks to help communities identify and leverage local assets to create jobs and build prosperity while preserving the character of their community." Development Strategies include: capitalizing on traditional arts, culture and heritage; leveraging ecological assets for outdoor sports such as fishing, camping, white-water rafting, and rock climbing; Adding value to farming through specialized agricultural development, including processing specialty food items, fish farming, and organize farming; Getting the most from hardwood forests by maximizing sustainable timber harvesting and value-added processing; Encouraging the development of local leadership and civic entrepreneurs; Converting overlooked and underused facilities into industrial parks, business incubators, or educational facilities.

Appalachian Regional Commission, Area Development Program: Telecommunications Initiative

**Type:** Economic development  
**Government Level:** Federal  
**Government Agency:** Appalachian Regional Commission  
**Info/website:** [http://www.arc.gov/index.do?nodeId=8](http://www.arc.gov/index.do?nodeId=8)  
**Contact:** Ray Daffner, Entrepreneurship Initiative Manager, phone: 202-884-7777; email: rdaffner@arc.gov  
**CAPP State:** All  
**Recipient type/information:** General ARC coverage area  
**Description:** "ARC's Information Age Appalachia telecommunications and information technology program was created to promote the development of telecommunications in Appalachia, with a special focus on helping the Region's distressed counties. While much of the United States has been reaping the economic benefits of the Information Age, rural and small town areas in Appalachia have too often been left behind. For a variety of reasons, these areas substantially lack adequate access to a robust telecommunications infrastructure. This, in turn, exacerbates the Region's geographic isolation and serves as a barrier to the economic, educational, medical, and other benefits that other regions have enjoyed for years."
Appalachian Regional Commission, Area Development Program: Business Development Revolving Loan Fund Grants

**Type:** Economic development

**Government Level:** Federal

**Government Agency:** Appalachian Regional Commission

**Info/website:** [http://www.arc.gov/index.do?nodeId=8](http://www.arc.gov/index.do?nodeId=8)

**Contact:** Ray Daffner, Entrepreneurship Initiative Manager, phone: 202-884-7777; email: rdaffner@arc.gov

**CAPP State:** All

**Recipient type/information:** General ARC coverage area

**Description:** "Business development revolving loan funds are pools of money used by grantees for the purpose of making loans to create and retain jobs. As loans are repaid, money is returned to the fund and made available for additional loans. Revolving loan funds (RLFs) have long been used by ARC as an effective tool of economic development. ARC recently adopted new RLF guidelines to clarify operating policies, reduce paperwork, and improve cash management."

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Appalachian Regional Commission, Area Development Program: Distressed Counties Grants

**Type:** Economic development

**Government Level:** Federal

**Government Agency:** Appalachian Regional Commission

**Info/website:** [http://www.arc.gov/index.do?nodeId=8](http://www.arc.gov/index.do?nodeId=8)

**Contact:** Ray Daffner, Entrepreneurship Initiative Manager, phone: 202-884-7777; email: rdaffner@arc.gov

**CAPP State:** All

**Recipient type/information:** Counties within the ARC coverage area designated as economically "Distressed" based on ARC criteria

**Description:** "ARC has provided special funds for the Region’s poorest counties since 1983. Currently 81 counties qualify for distressed county status on the basis of low per capita income and high rates of poverty and unemployment. In the past, the distressed county program focused mainly on providing badly needed public facilities, especially systems to furnish clean drinking water and sanitary waste disposal, and human resource projects such as literacy training. Under pre-1983 guidelines, most of these counties were too poor to qualify for federal aid for these facilities. In October 2000, the Commission approved the creation of a new enhanced program for distressed counties. The program has two parts: a capacity-building effort and a telecommunications and information technology initiative."
Development District Association of Appalachia

Type: Economic development

Government Level: Federal/state

Government Agency: Appalachian Regional Commission, local development districts (LDDs)

Info/website: http://www.arc.gov/index.do?nodeId=990

Contact: DDAA contact: Dan Neff, phone: 202-884-7707, e-mail: ddaa@arc.gov

CAPP State: All

Recipient type/information: General ARC coverage area

Description: The Development District Association of Appalachia (DDAA) is a membership organization of local development districts (LDDs) in the Appalachian Region. The DDAA works to strengthen LDDs and their member governments and to provide leadership to support the ARC's federal-state-local partnership. Mission: "To ensure that funds are used effectively and efficiently, and to strengthen local participation, ARC works with the states to support a network of multicounty planning and development organizations, or local development districts (LDDs), throughout the Region. The 74 LDDs cover all 420 counties in the ARC program. The LDDs' most important role is to identify priority needs of local communities. Based on these needs, the LDDs work with their board members and other local citizens to develop plans for their communities' economic development, to target and meet the most pressing needs, and to build community unity and leadership."

West Virginia Governor’s Guaranteed Workforce Training Program

Type: Workforce training

Government Level: State

Government Agency: WorkForce West Virginia


Contact: Amber-Lee Hughhart, phone: (304) 558-7027, email: ahughhart@workforcewv.org

CAPP State: West Virginia

Recipient type/information: Displaced workers, local workforce training agencies

Description: The Governor’s Guaranteed Work Force (GGWF) training award program gives small businesses a competitive edge by providing access to quality workforce training and raises the skill level of West Virginia’s small business workforce. GGWF reimburses pre-approved technology, technical, and regulatory compliance training for small businesses. Most small businesses are eligible for up to $5,000. Small businesses choose the trainer, the location, and the date for training. The WVSBDC requires businesses to work with the local SBDC to make a year-long training plan to maximize the use of the training award. GGWF then reimburses businesses for these pre-approved training expenses. GGWF can fund up to 75% of actual training costs up to a maximum $5000.
West Virginia Forest Legacy Program

Type: Conservation

Government Level: State

Government Agency: West Virginia Division of Forestry

Info/website: http://www.wvforestry.com/forest_legacy_program.cfm?menucall=flp

Contact: John Rowe, phone: (304) 558-2788, email: John.P.Rowe@wv.gov

CAPP State: West Virginia

Recipient type/information: Land owners

Description: Forest Legacy provides moneys to states to acquire conservation easements that protect productive, working forestlands from being converted to non-forest uses by development. It is a voluntary program and has interested many private landowners in West Virginia since the program began in the state several years ago. Forest Legacy funding is limited to private forest landowners. The federal government may fund up to 75 percent of the land acquisition or cost of the conservation easement. The remaining 25 percent is provided by private conservation organizations, state funds, or other local sources. The mechanism of conservation is the purchase in fee of a conservation easement in the Forest Legacy Areas from willing sellers at fair market price as established by a standardized appraisal. A conservation easement is a legal agreement (deed) through which a property owner sells or donates his rights to development or other activities on his land. He retains all of the rights not sold. Consequently, the land will continue as a working forest producing products. The Forest Legacy Program is a 75:25 matching program between the government and private sources. The West Virginia Division of Forestry will hold the deed to conservation easements in the West Virginia Program.

West Virginia Economic Development Grant Committee

Type: Economic development

Government Level: State

Government Agency: West Virginia Economic Development Authority

Info/website: http://www.wveda.org/program-grantrecipient.html

Contact: Kelley Goes, phone: (304) 558-3650, email: kelley.m.goes@wv.gov

CAPP State: West Virginia

Recipient type/information: State public entities

Description: The West Virginia Economic Development Grant Committee was established to authorize bonds for qualified economic development, infrastructure and capital improvement projects in West Virginia. The committee was created by H.B. 4005 during the 2002 regular session. The committee awarded 47 grants to public entities throughout the state for economic development projects. The West Virginia Economic Development Authority administers this program.
West Virginia Venture Capital

Type: Business development

Government Level: State

Government Agency: West Virginia Economic Development Authority

Info/website: http://www.wveda.org/program-venturecapital.html

Contact: Kelley Goes, phone: (304) 558-3650, email: kelley.m.goes@wv.gov

CAPP State: West Virginia

Recipient type/information: Small business

Description: The West Virginia Economic Development Authority (the Authority”) has qualified seven (7) professionally managed venture capital funds focused upon entrepreneurship in West Virginia. Executive and legislative actions in 2002 provided $25 million, in the form of direct investment, to stimulate the facility for venture capital financing in West Virginia.

West Virginia Competitive Improvement Program

Type: Workforce training

Government Level: State

Government Agency: WorkForce West Virginia

Info/website: http://www.workforcewv.org/

Contact: Valerie Amick, phone: (304) 558-7024, email: vamick@workforcewv.org

CAPP State: West Virginia

Recipient type/information: Small business, manufacturers

Description: The Competitive Improvement Program targets small (50 or fewer employees) and medium (under 500 employees) sized manufacturers. Grants require a 50 percent cash contribution by each employer and the documentation of in-kind contributions (usually wages paid to employees while being trained) toward the project.
Workforce Development Initiative

Type: Workforce training

Government Level: State

Government Agency: WorkForce West Virginia

Info/website: http://www.workforcewv.org/

Contact: Regina Brogan, phone: (304) 558-6788, email: rbrogan@workforcewv.org

CAPP State: West Virginia

Recipient type/information: Community and technical colleges

Description: The Workforce Development Initiative Program encourages working partnerships between educational institutions and the business community. To qualify, community and technical colleges must establish their own revolving fund dedicated to work force development initiatives. The program requires a one-to-one match from the private sector.

Small Business Workforce

Type: Workforce training

Government Level: State

Government Agency: West Virginia Small Business Development Center

Info/website: http://www.sbdcwv.org/

Contact: M. Gamble, phone: (304) 558-2960, email: m gamble@wvsbdc.org

CAPP State: West Virginia

Recipient type/information: Small businesses

Description: The Small Business Work Force program gives small businesses a competitive edge by providing access to quality work force training and raising the skill level of West Virginia’s small business work force. SBWF reimburses pre-approved technology, technical and regulatory compliance training. Most small businesses are eligible for up to $5,000. SBWF is extremely user-friendly; a simplified application is all that’s needed. Small businesses choose the trainer, the location and the training date. To be eligible, companies must have 50 or fewer employees, be West Virginia-based for at least one year and be current with West Virginia taxes, workers’ compensation and unemployment insurance.
Direct Loan Program

Type: Small business development

Government Level: State

Government Agency: West Virginia Economic Development Authority

Info/website: http://www.wvdo.org/business/financing.html

Contact: Kelley Goes, phone: (304) 558-3650, email: kelley.m.goes@wv.gov

CAPP State: West Virginia

Recipient type/information: Small businesses

Description: The West Virginia Economic Development Authority can provide up to 45 percent in financing fixed assets by providing low-interest, direct loans to expanding state businesses and firms locating in West Virginia. Loan term is generally 15 years for real estate intensive projects and five to 10 years for equipment projects. Loan proceeds may be used for the acquisition of land, buildings and equipment. Working capital loans and the refinancing of existing debt are not eligible.

Indirect Loan Program

Type: Small business development

Government Level: State

Government Agency: West Virginia Economic Development Authority

Info/website: http://www.wvdo.org/business/financing.html

Contact: Kelley Goes, phone: (304) 558-3650, email: kelley.m.goes@wv.gov

CAPP State: West Virginia

Recipient type/information: Small businesses

Description: The West Virginia Economic Development Authority provides a loan insurance program through participating commercial banks to assist firms that cannot obtain conventional bank financing. This program insures up to 80 percent of a bank loan for a maximum loan term of four years. Loan proceeds may be used for any business purpose except the refinancing of existing debt.
**Industrial Revenue Bonds**

**Type:** Business development

**Government Level:** State

**Government Agency:** West Virginia Economic Development Authority

**Info/website:** [http://www.wvdo.org/business/financing.html](http://www.wvdo.org/business/financing.html)

**Contact:** Mark Julian, phone: (304) 558-3650, email: mjulian@wvdo.org

**CAPP State:** West Virginia

**Recipient type/information:** Small business, manufacturers

**Description:** This program provides for customized financing through federal tax-exempt industrial revenue bonds. Of the state’s bond allocation, $49,098,000 is reserved for small manufacturing projects, $14,028,000 for qualifying projects in Enterprise Communities and $77,154,000 for exempt facility projects.

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**West Virginia Economic Infrastructure Bond Fund**

**Type:** Infrastructure

**Government Level:** State

**Government Agency:** West Virginia Jobs and Infrastructure Development Council

**Info/website:** [http://www.wvdo.org/community/eibf.html](http://www.wvdo.org/community/eibf.html)

**Contact:** phone: (304) 558-4607, email: info@wvinfrastructure.com

**CAPP State:** West Virginia

**Recipient type/information:** Public utilities, county economic development authorities, private companies

**Description:** The Economic Infrastructure Bond Fund can be used for financial assistance to public utilities, county development authorities and private companies for infrastructure improvements to support economic development projects.
West Virginia Small Business Development Center loans

Type: Small business development

Government Level: State


Info/website: http://www.wydo.org/business/financing.html

Contact: M. Gamble, phone: (304) 558-2960, email: mgamble@wvsbdc.org

CAPP State: West Virginia

Recipient type/information: Small businesses

Description: Small business development loans provide capital to entrepreneurs for new or expanded small business with loans from $500 to $10,000. The linked deposit program provides low-interest loans to qualified small businesses for amounts up to $150,000 and for terms up to four years.

West Virginia Jobs Investment Trust

Type: Business development

Government Level: State

Government Agency: West Virginia Jobs Investment Trust Board

Info/website: http://www.wvjit.org/index.cfm

Contact: Richard Ross, phone: (304) 345-6200, email: board@wvjit.org

CAPP State: West Virginia

Recipient type/information: General businesses

Description: $10 million public venture capital fund that uses debt and equity investments to promote and expand the state’s economy by making investment funds available to eligible businesses, stimulating economic growth and providing or retaining jobs within the state.
West Virginia Economic Opportunity Tax Credit

**Type:** Business development

**Government Level:** State

**Government Agency:** West Virginia State Tax Department


**Contact:** Chris Morris, phone: (304) 558-3333, email: wvtaxaid@tax.state.wv.us

**CAPP State:** West Virginia

**Recipient type/information:** Small businesses

**Description:** This credit is available to qualified businesses that make a qualified investment in a new or expanded business in West Virginia and that, as a result of the investment, create at least 20 new jobs held by West Virginians. Qualified businesses are those engaged in the activities of manufacturing, information processing, warehousing, non-retail goods distribution, qualified research and development, the relocation of a corporate headquarters or destination-oriented recreation and tourism.

Tax Credit for Corporate Headquarters Relocation

**Type:** Business development

**Government Level:** State

**Government Agency:** West Virginia Economic Development Authority

**Info/website:** [http://www.wvdo.org/business/financing.html](http://www.wvdo.org/business/financing.html)

**Contact:** Mark Julian, phone: (304) 558-3650, email: mjulian@wvdo.org

**CAPP State:** West Virginia

**Recipient type/information:** Small businesses

**Description:** A taxpayer that moves its corporate headquarters to West Virginia from a location outside of West Virginia may be entitled to an economic opportunity tax credit if the relocation creates at least 15 new jobs. If the relocation creates at least 15 but less than 20 new jobs, then the amount of credit is equal to 10 percent of the taxpayer’s adjusted qualified investment.
Economic Opportunity Tax Credit for Small Business

Type: Small business development

Government Level: State

Government Agency: West Virginia State Tax Department


Contact: Chris Morris, phone: (304) 558-3333, email: wvtaxaid@tax.state.wv.us

CAPP State: West Virginia

Recipient type/information: General businesses

Description: A business or a controlled group of foreign and domestic affiliated businesses with annual gross sales of not more than $7,159,600 may be entitled to an economic opportunity tax credit if the qualified investment creates at least 10 new jobs within 12 months. If 10 new jobs are created, the small business may receive a credit equal to 10 percent of its qualified investment held by West Virginians.

Manufacturing Investment Tax Credit

Type: Business development

Government Level: State

Government Agency: West Virginia State Tax Department


Contact: Chris Morris, phone: (304) 558-3333, email: wvtaxaid@tax.state.wv.us

CAPP State: West Virginia

Recipient type/information: Manufacturers

Description: Manufacturers that make qualified capital investments in West Virginia in an industrial facility may be eligible for the manufacturing investment tax credit. The credit is equal to 5 percent of the taxpayer’s qualified investment prorated over a 10-year period at a rate of 10 percent per year. The calculation of qualified investment for this credit is similar to that required for the economic opportunity tax credit and the credit may be used to offset up to 50 percent of the taxpayer’s annual liability for the business franchise tax, the severance tax and the corporation net income tax.
**Business Franchise Tax Exemption for Venture Capital Company**

**Type:** Business development  
**Government Level:** State  
**Government Agency:** West Virginia State Tax Department  
**Info/website:** [http://www.state.wv.us/taxrev/taxdoc/tsd200.pdf](http://www.state.wv.us/taxrev/taxdoc/tsd200.pdf)  
**Contact:** Chris Morris, phone: (304) 558-3333, email: wvtaxaid@tax.state.wv.us  
**CAPP State:** West Virginia  
**Recipient type/information:** Venture capital  
**Description:** Certified West Virginia capital companies are exempt from the business franchise tax on that portion of their capital used in providing venture capital to West Virginia businesses.

**Manufacturing Sales Tax Exemption**

**Type:** Business development  
**Government Level:** State  
**Government Agency:** West Virginia State Tax Department  
**Info/website:** [http://www.state.wv.us/taxrev/taxdoc/tsd300.pdf](http://www.state.wv.us/taxrev/taxdoc/tsd300.pdf)  
**Contact:** Chris Morris, phone: (304) 558-3333, email: wvtaxaid@tax.state.wv.us  
**CAPP State:** West Virginia  
**Recipient type/information:** Manufacturers  
**Description:** Materials and equipment purchased for direct use in manufacturing are exempt from the 6 percent state sales and use tax.
Tourism Development Incentive

Type: Economic development

Government Level: State

Government Agency: West Virginia Development Office, Tourism Development

Info/website: http://www.state.wv.us/taxrev/taxdoc/tsd300.pdf

Contact: Dan Massey, phone: (800) 982-3386, email: dmassey@wvdo.org

CAPP State: West Virginia

Recipient type/information: Tourism companies

Description: An eligible company that invests in and operates a new or expanding tourism destination project may retain the consumer sales and service tax collected by the eligible company from its customers over a 10-year period on sales from operation of the tourism attraction or facility. The amount of the incentive is one-tenth of the allowable credit on approved development costs. The maximum amount of allowable credit is typically 25 percent of the approved company’s approved costs of development of the tourism destination project. If the tourism development site is within the permit area or an adjacent area of a surface mining operation from which all coal has been or will be extracted prior to the commencement of the project, the maximum amount of allowable credit is 50 percent of approved development costs.

Work Opportunity Tax Credit (WOTC)

Type: Economic development

Government Level: Federal

Government Agency: US Department of Labor, Employment and Training Administration

Info/website: http://www.doleta.gov/business/Incentives/opptax/

Contact: General WOTC, phone: (202) 693-3949, email: businessrelations@dol.gov

CAPP State: All

Recipient type/information: General businesses

Description: The Work Opportunity Tax Credit (WOTC) is a federal tax credit program offering significant incentives for employers who hire and retain individuals from specific target groups that have in the past experienced difficulty in securing employment, such as long-term welfare recipients and ex-felons. WOTC allows employers to claim a maximum tax credit of $2,400 on wages paid over the first year of employment and a maximum tax credit up to $9,000 for wages paid in the first two years of employment. The tax credits or any unused portion of the credits can be carried back one year or forward 20 years from the year in which the employer claims the credit. Under Public Law 110-28, the WOTC Program has been granted a 44-month extension through August 31, 2011.
Conservation Fund, Resourceful Communities Program

Type: Economic development

Government Level: Regional

Funding Organization: The Conservation Fund

Info/website: http://www.resourcefulcommunities.org/

Contact: Monica McCann, phone: (919) 967-2223, x110, email: mmccann@conservationfund.org

CAPP State: All

Recipient type/information: Community development

Description: The Conservation Fund’s Resourceful Communities Program blends innovative techniques to help North Carolina’s underserved communities create new economies that protect and restore, rather than extract, natural resources. Resourceful Communities provides a range of direct assistance to develop the leadership and organizational capacity necessary for sustainable community development. Because Resourceful Communities works closely with local partners, including nonprofit, private and public concerns, we help ensure local ownership of long-term economic, social and environmental change. Resourceful Communities engages grassroots leaders in state level policy and funding initiatives that helps grow local and state level support for alternative approaches to economic development and environmental protection. This engagement helps ensure that funding is accessible to low-wealth families, communities of color and minority-run grassroots causes.

North Carolina Green Business Fund

Type: Model

Government Level: State

Funding Organization: North Carolina Board of Science and Technology

Info/website: http://www.ncscitech.com/gbf/index.htm

Contact: phone: (919) 733-6500, x110, email: ncbst@nccommerce.com

CAPP State: NC

Recipient type/information: Green Development

Description: There is perhaps no better demonstration of green energy’s potential to grow North Carolina’s economy than the success of the Green Business Fund. In its inaugural year, 2008, the Fund received 85 applications from small businesses requesting nearly $7 million in funding to support expansion into green markets. The Green Business Fund was authorized in 2007 (GS 143B-437.4) and was appropriated $1 million per year for FY2008 and FY2009. Over 80% of the pre-proposals submitted in 2009 were from for-profit companies, about 11% were from government agencies and the remainder were from non-profit organizations. Of the three priority areas, nearly 47% of pre-proposals were submitted under the area of clean conscious/renewable energy, over 36% were submitted under green building, and about 16% were submitted under biofuels.
US Department of Agriculture, Rural Cooperative Development Program

Type: Economic development

Government Level: Federal

Government agency: US Department of Agriculture, Business and Cooperative Programs


Contact: State agency contacts: http://www.rurdev.usda.gov/rbs/coops/rcdg/contacts.htm

CAPP State: All

Recipient type/information: Rural cooperatives

Description: Rural Cooperative Development grants are made for establishing and operating centers for cooperative development for the primary purpose of improving the economic condition of rural areas through the development of new cooperatives and improving operations of existing cooperatives. The US Department of Agriculture desires to encourage and stimulate the development of effective cooperative organizations in rural America as a part of its total package of rural development efforts.

West Virginia Neighborhood Investment Program

Type: Economic development

Government Level: State

Government agency: West Virginia Development Office

Info/website: http://www.wvdo.org/community/nip.html

Contact: (304) 558-2001

CAPP State: West Virginia

Recipient type/information: Community-based non-profits, low-income

Description: We at the West Virginia Development Office believe that community-based organizations can be a powerful force in community economic development. The NIP encourages the private sector and your community-based organization to collaborate on local projects by providing state tax credit vouchers in amounts of up to 50% of an eligible contribution to an approved project, which must be:

1. Managed locally by a local sponsor without national, state, multi-state, or international affiliation;
2. Serving economically disadvantaged persons in highly distressed neighborhoods or communities; and
3. Collaborating with businesses, government organizations, and other community organizations.

Project types can be for neighborhood assistance, community service, crime prevention, job training and education. Projects must be community-based, serve low-income communities, serve highly distressed neighborhoods, serve as collaborative efforts, be innovative/novel/creative, maintain low administrative costs, and shows a capacity to deliver the promised services.
State of West Virginia, Annual Implementing Strategy for Achieving the Goals of the Appalachian Regional Commission

**Type:** Economic development

**Government Level:** State

**Government agency:** West Virginia Development Office


**Contact:** Bobby Lewis, (304) 558-2234, email: blewis@wvdo.org

**CAPP State:** West Virginia

**Recipient type/information:** All citizens

**Description:** See the provided document. This report outlines the ways that the West Virginia government will work to meet the stated goals of the ARC, most notably: Increase Job Opportunities and Per Capita Income in Appalachia to Reach Parity with the Nation, Strengthen the Capacity of the People of Appalachia to Compete in the Global Economy, Develop and Improve Appalachia’s Infrastructure to Make the Region Economically Competitive, and Build the Appalachian Development Highway System to Reduce Appalachia’s Isolation.
3. ENERGY EFFICIENCY AND WEATHERIZATION PROGRAMS

3.1 Energy Efficiency and Conservation Block Grants

The primary coordinator for the West Virginia EECBG program is:

Jeff Herholdt
Director, West Virginia Division of Energy
Capitol Complex, Building 6, Room 553
1900 Kanawha Blvd., E
Charleston, WV 25305-0311
Phone: (304) 558-2234
Email: jherholdt@energywv.org
Website: http://www.energywv.org/community/eep.html

Energy Efficiency and Conservation Block Grant (EECBG) funding is provided via federal Solicitation # DE-FOA-0000013. The program was established as part of the Energy Independence and Security Act of 2007, but was first funded as part of the American Recovery and Reinvestment Act of 2009, which allotted $3.2 billion to the EECBG program. Of this total, $2.8 billion is being distributed by formula, the remainder through competitive grants.

The EECBG program assists state, local, and tribal governments in implementing strategies to:
- reduce fossil fuel emissions;
- reduce total energy use; and
- improve energy efficiency in the transportation, building, and other appropriate sectors.

Additional purposes of the EECBG program are to spur economic growth and create and/or retain jobs.

Local governments receiving EECBG funds are required to develop and submit to the United States Department of Energy (USDOE) a “proposed energy and conservation strategy” within one year of receiving their initial allocation. Additionally, grantees are required to report regularly to USDOE on:
- jobs created and/or retained,
- energy savings,
- renewable energy capacity installed,
- greenhouse gas emissions reduced, and
- funds leveraged.

As described in the Energy Independence and Security Act of 2007, Title V, Subtitle E, Section 544, eligible projects include:
1. Development and implementation of an energy efficiency and conservation strategy under section 545(b);
2. Retaining technical consultant services to assist the eligible entity in the development of such a strategy, including:
   (A) Formulation of energy efficiency, energy conservation, and energy usage goals;
   (B) Identification of strategies to achieve those goals:
      (i) Through efforts to increase energy efficiency and reduce energy consumption; and
      (ii) By encouraging behavioral changes among the population served by the eligible entity;
   (C) Development of methods to measure progress in achieving the goals;
   (D) Development and publication of annual reports to the population served by the eligible entity describing:
(i) The strategies and goals; and
(ii) The progress made in achieving the strategies and goals during the preceding calendar year; and

(E) Other services to assist in the implementation of the energy efficiency and conservation strategy;

(3) Conducting residential and commercial building energy audits;

(4) Establishment of financial incentive programs for energy efficiency improvements;

(5) The provision of grants to nonprofit organizations and governmental agencies for the purpose of performing energy efficiency retrofits;

(6) Development and implementation of energy efficiency and conservation programs for buildings and facilities within the jurisdiction of the eligible entity, including—

(A) Design and operation of the programs;

(B) Identifying the most effective methods for achieving maximum participation and efficiency rates;

(C) Public education;

(D) Measurement and verification protocols; and

(E) Identification of energy efficient technologies;

(7) Development and implementation of programs to conserve energy used in transportation, including:

(A) Use of flex time by employers;

(B) Satellite work centers;

(C) Development and promotion of zoning guidelines or requirements that promotes energy efficient development;

(D) Development of infrastructure, such as bike lanes and pathways and pedestrian walkways;

(E) Synchronization of traffic signals; and

(F) Other measures that increase energy efficiency and decrease energy consumption;

(8) Development and implementation of building codes and inspection services to promote building energy efficiency;

(9) Application and implementation of energy distribution technologies that significantly increase energy efficiency, including:

(A) Distributed resources; and

(B) District heating and cooling systems;

(10) activities to increase participation and efficiency rates for material conservation programs, including source reduction, recycling, and recycled content procurement programs that lead to increases in energy efficiency;

(11) The purchase and implementation of technologies to reduce, capture, and, to the maximum extent practicable, use methane and other greenhouse gases generated by landfills or similar sources;

(12) Replacement of traffic signals and street lighting with energy efficient lighting technologies, including:

(A) Light emitting diodes; and

(B) any other technology of equal or greater energy efficiency;

(13) Development, implementation, and installation on or in any government building of the eligible entity of onsite renewable energy technology that generates electricity from renewable resources, including:

(A) Solar energy;

(B) Wind energy;

(C) Fuel cells; and

(D) Biomass; and

(14) Any other appropriate activity, as determined by the Secretary, in consultation with:

(A) The Administrator of the Environmental Protection Agency;

(B) The Secretary of Transportation; and

(C) The Secretary of Housing and Urban Development.
3.1.1 **Allocations to the ten largest cities and ten largest counties**

A portion of EECBG funds are allocated to the largest ten cities and the largest ten counties in West Virginia. These allocations, shown in Table 1, total $4,410,300.

### Table 1: EECBG allocations to the ten largest cities and counties in West Virginia

<table>
<thead>
<tr>
<th>Cities</th>
<th>Allocation</th>
<th>Coordinator</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beckley</td>
<td>$83,100</td>
<td>Emmett Pugh</td>
<td>256-1750</td>
<td><a href="mailto:hzhnr@beckley.org">hzhnr@beckley.org</a></td>
</tr>
<tr>
<td>Charleston</td>
<td>$582,300</td>
<td>David Molgaard</td>
<td>348-8014</td>
<td><a href="mailto:david.molgaard@cityofcharleston.org">david.molgaard@cityofcharleston.org</a></td>
</tr>
<tr>
<td>Clarksburg</td>
<td>$79,300</td>
<td>Martin Howe</td>
<td>624-1677</td>
<td><a href="mailto:mhowe@cityofclarksburgwv.com">mhowe@cityofclarksburgwv.com</a></td>
</tr>
<tr>
<td>Fairmont</td>
<td>$87,100</td>
<td>Jim Snider</td>
<td>366-6211</td>
<td><a href="mailto:jim@fairmontwv.gov">jim@fairmontwv.gov</a></td>
</tr>
<tr>
<td>Huntington</td>
<td>$228,900</td>
<td>Mayor Kim Wolfe</td>
<td>696-5540</td>
<td><a href="mailto:mayorwolfe@cityofhuntington.com">mayorwolfe@cityofhuntington.com</a></td>
</tr>
<tr>
<td>Martinsburg</td>
<td>$77,100</td>
<td>Mark Baldwin</td>
<td>264-2131</td>
<td><a href="mailto:Markbaldwin17@aol.com">Markbaldwin17@aol.com</a></td>
</tr>
<tr>
<td>Morgantown</td>
<td>$150,500</td>
<td>Dan Boroff</td>
<td>284-7405</td>
<td><a href="mailto:dboroff@cityofmorgantown.org">dboroff@cityofmorgantown.org</a></td>
</tr>
<tr>
<td>Parkersburg</td>
<td>$148,700</td>
<td>Ann Conageski</td>
<td>424-8519</td>
<td><a href="mailto:conagesk@netassoc.net">conagesk@netassoc.net</a></td>
</tr>
<tr>
<td>Weirton</td>
<td>$85,200</td>
<td>Gary Dufour</td>
<td>797-8503</td>
<td><a href="mailto:citymanager@cityofweirton.com">citymanager@cityofweirton.com</a></td>
</tr>
<tr>
<td>Wheeling</td>
<td>$137,800</td>
<td>Robert Herron</td>
<td>234-3617</td>
<td><a href="mailto:citymgr@swave.net">citymgr@swave.net</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Counties</th>
<th>Allocation</th>
<th>Coordinator</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berkeley</td>
<td>$329,600</td>
<td>Deborah Hammond</td>
<td>264-1923</td>
<td><a href="mailto:dhammond@berkeleycountycom.org">dhammond@berkeleycountycom.org</a></td>
</tr>
<tr>
<td>Cabell</td>
<td>$206,900</td>
<td>Stephen Zoeller</td>
<td>526-8634</td>
<td><a href="mailto:szoeller@cabellicounty.org">szoeller@cabellicounty.org</a></td>
</tr>
<tr>
<td>Harrison</td>
<td>$219,100</td>
<td>Frank Angotti</td>
<td>624-8500</td>
<td><a href="mailto:fangotti@cabellicounty.org">fangotti@cabellicounty.org</a></td>
</tr>
<tr>
<td>Jefferson</td>
<td>$207,900</td>
<td>Leslie Smith</td>
<td>728-3284</td>
<td><a href="mailto:les_smith@jeffersoncountywv.org">les_smith@jeffersoncountywv.org</a></td>
</tr>
<tr>
<td>Kanawha</td>
<td>$583,400</td>
<td>Brent Pauley</td>
<td>357-0100</td>
<td><a href="mailto:bpauley@jeffersoncountywv.org">bpauley@jeffersoncountywv.org</a></td>
</tr>
<tr>
<td>Mercer</td>
<td>$261,500</td>
<td>Vicky Reed</td>
<td>487-8310</td>
<td><a href="mailto:vreed@jeffersoncountywv.org">vreed@jeffersoncountywv.org</a></td>
</tr>
<tr>
<td>Monongalia</td>
<td>$234,300</td>
<td>Diane DeMedici</td>
<td>291-7281</td>
<td><a href="mailto:dmedici@jeffersoncountywv.org">dmedici@jeffersoncountywv.org</a></td>
</tr>
<tr>
<td>Putnam</td>
<td>$227,000</td>
<td>Brian Donat</td>
<td>586-0201</td>
<td><a href="mailto:bdonat@putnamwv.org">bdonat@putnamwv.org</a></td>
</tr>
<tr>
<td>Raleigh</td>
<td>$256,700</td>
<td>Dennis Sizemore</td>
<td>255-9146</td>
<td><a href="mailto:dsizemore@jeffersoncountywv.org">dsizemore@jeffersoncountywv.org</a></td>
</tr>
<tr>
<td>Wood</td>
<td>$223,900</td>
<td>Marty Seufer</td>
<td>424-1984</td>
<td><a href="mailto:mseyfer@woodcountywv.com">mseyfer@woodcountywv.com</a></td>
</tr>
</tbody>
</table>

**Total** $4,410,300


3.1.2 **State share**

The state share of $9,593,500 is to be spent in four programs:

- Local Government Grant Program (LGGP)
- West Virginia Industrial Assessment Center Support
- Building Energy Collaborative: Activity 1
- West Virginia Division of Energy Block Grant Coordination

These four programs are described in turn below.
Local Government Grant Program

Sub-contractor: Regional Planning and Development Councils (RPDCs)

Program area: Energy Efficiency Retrofits

Direct project funding (sub-grants): $8,298,860

Administration funding: $663,909

Total funding: $8,962,769

Project details: WVDOE will contract with the state’s eleven RPDCs to coordinate, review, and select sub-grantee candidates for energy retrofit projects to local government buildings within their jurisdictions for cities and counties throughout West Virginia. RPDCs receive core funding through the Appalachian Regional Commission and are a logical choice to assist in the delivery of block grant funding to units of local government within their jurisdiction. WVDOE will contract with RPDCs to administer the LGGP, including application development, grant awards, and all reporting and financial aspects of the approved grants for the life of the program.

Other notes: Energy efficiency improvements in county courthouses and city halls will receive funding preference, but renewable energy projects are also encouraged. Grant award amounts will be limited to $200,000 maximum per award; smaller awards could allow broader coverage. WVDOE will initiate contracts with each RPDC upon approval of the state EECBG proposal. RPDCs should, within 9 months after contract award, recommend candidates to WVDOE for the funding available to their region. The candidate listings will rank the projects. Upon notice of approval by the Governor, the RPDCs will then initiate subcontracts with the successful local government units. A Reserve and Reallocation Account (RRA) will be established within the program to ensure that all funds are awarded and expended in a timely manner. This RRA account will be initially funded at $278,328. These monies represent the funding available to Regions 2 and 4, whose funding awards were capped by WVDOE at $1 million.

Total estimated jobs created/retained: 74

Total Btus saved: 910 billion

Funds are to be channeled through the state’s RPDCs as detailed in Table 2.

Table 2: EECBG local government grant allocations to West Virginia’s Regional Planning and Development Councils

<table>
<thead>
<tr>
<th>RPDC region</th>
<th>Counties</th>
<th>Direct</th>
<th>Administration</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>McDowell, Mercer, Monroe, Raleigh, Summers, Wyoming</td>
<td>$792,624</td>
<td>$63,410</td>
<td>$856,034</td>
</tr>
<tr>
<td>II</td>
<td>Cabell, Logan, Logan, Mason, Mingo, Wayne</td>
<td>$1,244,069</td>
<td>$99,526</td>
<td>$1,343,595</td>
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<tr>
<td>III</td>
<td>Boone, Clay, Kanawha, Putnam</td>
<td>$786,953</td>
<td>$63,116</td>
<td>$852,069</td>
</tr>
<tr>
<td>IV</td>
<td>Fayette, Greenbrier, Nicholas, Pocahontas, Webster</td>
<td>$1,034,259</td>
<td>$82,741</td>
<td>$1,117,000</td>
</tr>
<tr>
<td>V</td>
<td>Calhoun, Jackson, Pleasants, Ritchie, Roane, Tyler, Wirt, Wood</td>
<td>$806,176</td>
<td>$64,494</td>
<td>$870,670</td>
</tr>
<tr>
<td>VI</td>
<td>Doddridge, Harrison, Marion, Monongalia, Preston, Taylor</td>
<td>$961,886</td>
<td>$76,951</td>
<td>$1,038,837</td>
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<tr>
<td>VII</td>
<td>Barbour, Braxton, Gilmer, Lewis, Randolph, Tucker, Upshur</td>
<td>$933,426</td>
<td>$74,674</td>
<td>$1,008,100</td>
</tr>
<tr>
<td>VIII</td>
<td>Grant, Hampshire, Hardy, Mineral, Pendleton</td>
<td>$882,431</td>
<td>$54,594</td>
<td>$737,025</td>
</tr>
<tr>
<td>IX</td>
<td>Berkeley, Jefferson, Morgan</td>
<td>$229,150</td>
<td>$18,332</td>
<td>$247,482</td>
</tr>
<tr>
<td>X</td>
<td>Marshall, Ohio, Wetzel, (Belmont , OH)</td>
<td>$536,428</td>
<td>$42,314</td>
<td>$579,342</td>
</tr>
<tr>
<td>XI</td>
<td>Brooke, Hancock</td>
<td>$289,460</td>
<td>$23,157</td>
<td>$312,617</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>$8,298,860</td>
<td>$663,909</td>
<td>$8,962,769</td>
</tr>
</tbody>
</table>

West Virginia Industrial Assessment Center Support

Sub-contractor: West Virginia University (WVU)

Program area: Building Energy Audits

Direct project funding (sub-grants): $200,000

Administration funding: $0

Total funding: $200,000

Project details: The WVU Industrial Assessment Center will assist local governments in understanding energy efficiency measures, costs, and benefits. The Center has significant experience in providing assistance to business and industry in identifying energy efficiency opportunities. Through EECBG, Center expertise will also be provided to county and city governments. The Center will conduct meetings for RPDCs on energy efficiency in buildings, the energy and cost savings for building energy efficiency measures, the sequence in which energy efficiency measures should be undertaken, and the range of materials and equipment in the marketplace sold as energy efficiency retrofits. The Center will also review utility billing and other energy costs statements to allow government entities to develop an appreciation of rate schedules, demand metering, and net metering. Renewable energy opportunities will also be addressed.

Other notes: The meetings will also allow a forum for interested parties to meet with state and county officials. The meetings will be held quarterly during the first year and on an annual basis thereafter.

Total estimated jobs created/retained: 2

Total Btus saved: 14 billion
Building Energy Collaborative: Activity 1

Sub-contractor: RPDCs

Program area: Building Codes and Standards

Direct project funding (sub-grants): $240,570

Administration funding: $0

Total funding: $240,570

Project details: WVDOE will contract the state’s 11 RPDCs to promote, select, and award cities and counties with funding to improve the efficiency of city halls and county courthouses. The Building Energy Collaborative will request that RPDCs provide annual one-day training workshops on building energy efficiency for the three-year life of the program. Funding of $7,000 for training services and meeting costs will be allocated to support each session. Training services will be competitively bid on an annual basis by WVDOE.

Other notes: The meeting services to be provided by the RPDCs include: securing regional audiences representing West Virginia’s building community; securing meeting locations and arranging for lunch; generating council and media promotion of event; and ensuring attendance of local code officials. WVDOE will entertain the option with the RPDCs of maintaining this collaborative relationship after the conclusion of the block grant initiative. It is important that West Virginia maintain a focus on energy efficiency building practices as an energy policy priority and an energy consumer service.

Total estimated jobs created/retained: 2

Total Btus saved: 17 billion
West Virginia Division of Energy Block Grant Coordination

Sub-contractor: N/A

Program area: N/A

Direct project funding (sub-grants): $0

Administration funding: $190,161

Total funding: $190,161

Project details: WVDOE will coordinate all federal programmatic and financial reporting requirements of the EECBG. In this role, it will integrate all EECBG program activities with expenditure and programmatic data on each building impacted by this funding, coordinate EECBG program measures with other WVDOE programs, and direct technical assistance to sub-grantees on programmatic issues and applicants on general EECBG guidelines.

Other notes: N/A

Total estimated jobs created/retained: 2

Total Btus saved: 13 billion

3.2 West Virginia State Energy Program

As specified on the following pages, a total of eight programs have been allocated $32,746,000 in city/county allocations.

Table 3: State Energy Program for West Virginia

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total of eight programs specified below</td>
<td>$32,424,897</td>
</tr>
<tr>
<td>Audit Clerk Direct Pay (3-yrs, 1 full, 1 part-time)</td>
<td>$237,854</td>
</tr>
<tr>
<td>Audit Clerk Benefits (3-yrs, 1 full, 1 part-time)</td>
<td>$83,249</td>
</tr>
<tr>
<td>Audit Clerks total</td>
<td>$321,103</td>
</tr>
<tr>
<td><strong>Grand Total funding Distribution</strong></td>
<td><strong>$32,746,000</strong></td>
</tr>
</tbody>
</table>

Energy Efficiency in State Buildings

**Grantee:** WVDOE

**Sub-contractor:** West Virginia Department of Administration

**Funding:** $5,002,035

**Project details:** Supports energy efficiency projects identified at state-owned office buildings, including lighting, windows, HVAC, and electrical upgrades, to reduce taxpayers’ costs for government operations.

**Other notes:** To be implemented quickly using existing contract service providers, in-house staff, or yet-to-be awarded contractors. A total of five projects will be awarded.

**Total estimated jobs created/retained:** 37

**Total Btus saved:** 24 billion

Energy Efficiency in State Buildings: K-12 Education

**Grantee:** WVDOE

**Sub-contractor:** West Virginia School Building Authority

**Funding:** $3,317,859

**Project details:** Will replace or renovate inefficient HVAC systems at four public schools. Will also support the installation of a geothermal heat pump system at Spring Mills Primary, a new 60,000 square-foot K-12 school under development.

**Other notes:** Basic building efficiency upgrades; 165 kilowatt geothermal system at new Berkeley County elementary; enhance sustainability and learning environment of West Virginia public schools; improve indoor air quality; increase teacher retention rates, standardized test scores and attendance (Counties: Marion, Morgan, Mineral, Berkeley).

**Total estimated jobs created/retained:** 30

**Total Btus saved:** 0.93 billion
Energy Efficiency in State Buildings: Higher Education

Grantee: WVDOE

Sub-contractor: West Virginia Higher Education Policy Commission

Funding: $6,993,598

Project details: Support energy efficiency projects identified at institutions of higher learning including HVAC and electrical upgrades to reduce taxpayers' costs for government operations.

Other notes: 18 competitively bid projects. Bluefield State College, Concord University, West Virginia Institute of Technology (x2), Marshall University, Shepherd University, West Virginia Northern Community College (x3), West Virginia State University (x3), WVU, Southern West Virginia Community and Technical College (x2), Glenville State University, WVU-Parkersburg, Potomac State University.

Total estimated jobs created/retained: 36

Total Btus saved: 28 billion

Energy Efficiency in State Buildings: Corrections

Grantee: WVDOE

Sub-contractor: West Virginia Division of Corrections

Funding: $7,194,880

Project details: Support energy efficiency projects identified at state correctional institutions including mechanical and electrical infrastructure upgrades, window replacements, and the construction of a new natural gas line.

Other notes: Projects will be completed at Huttonsville medium-security prison, the state’s most expensive facility. $2.1 million to complete conversion from oil to domestic natural gas, saving the facility $400,597 per year. Two other projects include Denmar Correctional Center and energy-saving infrastructure upgrades at other facilities.

Total estimated jobs created/retained: 109

Total Btus saved: 450 billion
Energy Efficiency in State Buildings: West Virginia Army National Guard

**Grantee:** WVDOE

**Sub-contractor:** West Virginia Army National Guard

**Funding:** $1,166,525

**Project details:** Support lighting system replacements at state Army National Guard armories, reducing taxpayers’ costs for government operations.

**Other notes:** 11 projects/armories: Parkersburg, Bluefield, Charleston, Clarksburg, Dunbar, Huntington, Keyser, Martinsburg, Moundsville, Pt. Pleasant, and Weston.

**Total estimated jobs created/retained:** 12

**Total Btus saved:** 0.13 billion

---

Energy Efficiency in State Buildings: Health and Human Resources

**Grantee:** WVDOE

**Sub-contractor:** West Virginia Department of Health and Human Resources

**Funding:** $5,000,000

**Project details:** Support an energy service contract for projects identified at West Virginia Department of Health and Human Resources facilities, reducing taxpayers’ costs for government operations.

**Other notes:** 4 project facilities, 8 total building retrofits.

**Total estimated jobs created/retained:** 45

**Total Btus saved:** 0.55 billion
Revolving Loan Program: Energy Efficiency for Business

Grantee: WVDOE

Sub-contractor: West Virginia Economic Development Authority

Funding: $2,750,000

Project details: Business-related revolving loan fund for the implementation of energy efficiency measures by West Virginia businesses. Will support energy efficiency improvements in industrial processes, energy management, and other technologies that improves energy and environmental performance.

Other notes: 6 loans to be given. Example Projects to be included: purchase of process equipment capitalizing on combined heat and power opportunities; waste heat recovery; fuel switching; and energy efficient pumps, motors and air systems. Industrial assessments conducted through WVU’s Industrial Assessment Center.

Total estimated jobs created/retained: 25

Total Btus saved: N/A

West Virginia Green-collar Jobs Training

Grantee: WVDOE

Sub-contractor: Community and Technical College System of West Virginia

Funding: $1,000,000

Project details: Will establish and implement green-collar job training curricula and certification programs for solar and wind assessment and installation, energy assessment and retrofitting in buildings, and instruction in the most recently published building energy code.

Other notes: Through 10 Community and Technical College Systems. Will increase the number of solar and wind turbine installers and technicians, increase the number of residential energy auditors and retrofitters, familiarize West Virginia’s built community with energy code requirements, and establish state certification.

Total estimated jobs created/retained: 40

Total Btus saved: N/A
3.3 **West Virginia Weatherization Program**

Total West Virginia Recovery Act Weatherization Assistance Funding of $37,583,874 is available to families earning up to 200 percent of the federal poverty level, or about $44,000 for a family of four.

Additional FY09 Department of Energy Funding totals $4,817,624. FY08 funding was $3,196,901.

Additional information is available as follows:
- West Virginia Governor’s Office of Economic Opportunity, Weatherization Home Website: [www.wvf.state.wv.us/oeo/weatherization.htm](http://www.wvf.state.wv.us/oeo/weatherization.htm)

West Virginia Weatherization Contacts:

West Virginia Weatherization Assistance Program
Governor’s Office of Economic Opportunity
950 Kanawha Boulevard, East 3rd Floor
Charleston, WV 25301

Lyn Bartges, Weatherization Program Specialist
Governor’s Office of Economic Opportunity
950 Kanawha Boulevard East, 3rd Floor
Charleston, WV 25301
Telephone: (304) 558-8860 ext. 21
Fax: (304) 558-4210
Email: Lyn.M.Bartges@wv.gov

Lisa Kesecker, Program Specialist
Governor’s Office of Economic Opportunity
950 Kanawha Boulevard East, 3rd Floor
Charleston, WV 25301
Telephone: (304) 538-7711 ext. 26
Fax: (304) 538-7478
Email: lkesecker@oeo.state.wv.us

Local contacts are the Community Action Partnerships. List of CAPs: [www.waptac.org/si.asp?id=1374](http://www.waptac.org/si.asp?id=1374). Contact information for CAPs were provided as part of Objective 4.

**Articles:**
4. INCENTIVES FOR THE DEVELOPMENT OF RENEWABLE ENERGY

Both the federal and state governments offer various incentives to encourage the development of renewable energy projects. Incentives include grants, low-interest loans, tax exemptions, and rebates. Different incentives target different groups, including residents, small businesses, local governments, schools, and other entities. Some incentives are for any renewable energy development, while others are for specific technologies. In this chapter, incentives are divided between federal incentives, those in Central Appalachian states, and those in other states.

The report for Objective 1 includes policies and incentives for attracting renewable energy manufacturing and investments to the Central Appalachian region.

4.1 Federal incentives

Production Tax Credit

Type: Tax Credit


Initiating program: Recovery Act

RE area type: All Renewables

Recipient type: Various

Description: Companies that generate wind, solar, geothermal, and “closed-loop” bioenergy (using dedicated energy crops) are eligible for the PTC, which provides a 2.1-cent per kilowatt-hour (kWh) benefit for the first ten years of a renewable energy facility’s operation. Other technologies, such as "open-loop" biomass (using farm and forest wastes rather than dedicated energy crops), incremental hydropower, small irrigation systems, landfill gas, and municipal solid waste (MSW), receive a lesser value tax credit of 1.0 cent per kWh.

The PTC for wind, which as the largest producer of renewable energy has the greatest impact on the budget, was extended an additional two years until the end of 2012. The PTC for incremental hydro, geothermal, MSW, and bioenergy was extended until the end of 2013. The bill also extends the PTC for electricity produced by wave and tidal energy through 2013.

Amount: N/A


Info document: Production Tax Credit for Renewable Energy

File name: UCS_Production_Tax_Credit

Page: N/A

Source: www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US13F&re=1&ee=1
**Investment Tax Credit**

**Type:** Tax Credit

**Federal agency:** USDOE

**Agency website:** [http://www.energy.gov/](http://www.energy.gov/)

**Initiating program:** Recovery Act

**RE area type:** All Renewables, including Small Wind

**Recipient type:** Various

**Description:** The Federal Renewable Energy Investment Tax Credit is available for covering up to 30% of the system cost (includes installation costs), with no cap for: photovoltaic (PV), solar water heat, small wind (100 kW maximum), fuel cells, geothermal heat pumps (residential), and 10% for geothermal (commercial), microturbines, and combined heat and power (CHP). Expires December 31, 2016

**Amount:** Variable

**Other info:** Qualified small wind energy property is added as a category of qualified investment for the 30% tax credit. The 10% investment tax credit for microturbines is extended to December 31, 2016. The bill increases the cap for qualified fuel cells to $1,500 per half kilowatt of capacity. The bill also provides a new 10% investment tax credit for CHP systems, as well as geothermal heat pumps.

**Info document:** Update on Federal Tax Incentives, Brian Lips (NC Solar Center), NC State Energy Office Sustainable Energy Conference. 2009.

**File name:** NCSEO_2009_Federal_RE_Tax_Incentives

**Page:** 6

**Source:** [www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US02F&re=1&ee=1](http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US02F&re=1&ee=1)
Advanced Biofuels Producer Payments

Type: Grant/Subsidy

Federal agency: US Department of Agriculture (USDA)

Agency website: http://afsic.nal.usda.gov/

Initiating program: 2008 Farm Bill

RE area type: Biofuels

Recipient type: Development

Description: Advanced biofuels producers must enroll by August 11, 2009 to be eligible to receive payments from USDA for FY09 production under Section 9005 of the 2008 Farm Bill. Eligible producers of advanced biofuels may receive payments for advanced biofuels produced from October 1, 2008 through September 30, 2009 (FY09).

Amount: $30 million is available for distribution under this program for advanced biofuels producers in FY09. The amount of payments made to individual producers will depend on the number of program participants and the volume of advanced biofuels being produced. Payments will be made in one lump sum to eligible producers after FY09.

Other info: N/A

Info document: N/A

File name: N/A

Page: N/A

Biodiesel Education Program

Type: Grant/Subsidy

Federal agency: USDA


Initiating program: 2008 Farm Bill

RE area type: Biofuels

Recipient type: Development

Description: The Biodiesel Fuel Education Program provides $1 million annually to educate fleet owners about the benefits of biodiesel.

Amount: Up to $1 million

Other info: Title IX of the 2008 Farm Bill


File name: Farm Bill Financing Opps

Page: N/A

Source: www.rurdev.usda.gov/rbs/farmbill/
**Biodiesel Production Tax Credit**

**Type:** Tax Credit

**Federal agency:** US Department of the Treasury (USDOT)

**Agency website:** [http://www.ustreas.gov/](http://www.ustreas.gov/)

**Initiating program:** Recovery Act

**RE area type:** Biofuels

**Recipient type:** Development

**Description:** $1.00 per gallon production tax credit for biodiesel and the 10¢/gallon credit for small biodiesel producers through December 31, 2009. The bill also extends the $1.00 per gallon production tax credit for diesel fuel created from biomass. The bill eliminates the current-law disparity in credit for biodiesel and agri-biodiesel, and eliminates the requirement that renewable diesel fuel must be produced using a thermal depolymerization process.

**Amount:** N/A

**Other info:** N/A

**Info document:** N/A

**File name:** HR_1424_energy_tax_incentives

**Page:** N/A

**Source:** [www.energy.gov/media/HR_1424.pdf](http://www.energy.gov/media/HR_1424.pdf)
Bioenergy Program for Advanced Biofuels

**Type:** Grant/Subsidy

**Federal agency:** USDA


**Initiating program:** 2008 Farm Bill

**RE area type:** Biofuels

**Recipient type:** Development

**Description:** The Bioenergy Program for Advanced Biofuels provides payments to agricultural producers of feedstocks for advanced biofuels. Advanced biofuels include fuels derived from renewable biomass other than corn kernel starch, such as sugar and starch, waste material, biodiesel made from renewable biomass, biogas produced through the conversion of organic matter from renewable biomass, butanol or other alcohols produced through the conversion of organic matter from renewable biomass, and other fuels derived from cellulosic biomass. So far, $300 million has been appropriated for this program, and USDA has the ability to use an additional $25 million in annual discretionary spending until 2012.

**Amount:** Varied, $25 million total for next 3 years

**Other info:** Title IX of the 2008 Farm Bill

**Info document:** Energy Law Alert: Energy Financing Opportunities in the 2008 Farm Bill. June 1, 2009

**File name:** Farm Bill Financing Opps

**Page:** N/A

**Source:** [www.rurdev.usda.gov/rbs/farmbill/](http://www.rurdev.usda.gov/rbs/farmbill/)
Biomass Crop Assistance Program

Type: Grant/Subsidy

Federal agency: USDA

Initiating program: 2008 Farm Bill


RE area type: Biofuels

Recipient type: Various

Description: The Biomass Crop Assistance Program (BCAP) supports the production of eligible crops for the conversion to bioenergy. Under BCAP, the government will provide funding for up to 75% of the cost of establishing an eligible perennial crop within a BCAP project area. Applicants must provide a letter of commitment from a biomass conversion facility to buy the crops, evidence that the biomass conversion facility has enough equity to be built (if not in operation yet), and assurances that the facility will be operational when crops are harvested. Under this program, USDA can also provide matching payments to feedstock producers of up to $45 per ton to assist with the collection, harvest, storage, and transportation of the biomass feedstock.

Amount: up to 75% of cost of establishing a crop, and $45/ton in matching payments for assistance

Other info: Title IX of the 2008 Farm Bill


File name: Farm Bill Financing Opps

Page: N/A

Source: www.rurdev.usda.gov/rbs/farmbill/
Biomass Research and Development

Type: Grant/Subsidy

Federal agency: USDA


Initiating program: 2008 Farm Bill

RE area type: Biofuels

Recipient type: Research

Description: Funding has been allocated for biomass research and development. Research projects under this section are more likely to get funded if they have a partnering agreement with universities, national laboratories, or other research agencies. So far, $118 million has been appropriated, and USDA has an additional $35 million in annual discretionary funds until 2012.

Amount: Varied, $35 million total for next 3 years

Other info: Title IX of the 2008 Farm Bill


File name: Farm Bill Financing Opps

Page: N/A

Source: www.rurdev.usda.gov/rbs/farmbill/
Biorefinery Assistance Program

Type: Grant/Loan Guarantee

Federal agency: USDA


Initiating program: 2008 Farm Bill

RE area type: Biofuels

Recipient type: Development

Description: The Biorefinery Assistance Program provides assistance in the development, construction, and retrofitting of biorefineries. Demonstration-scale biorefineries are eligible for grants and loan guarantees, while commercial-scale biorefineries are solely eligible for loan guarantees. Federal grants can provide up to 30% of project costs, and federal guaranteed loans can provide up to 80% of project costs. So far, $320 million has been appropriated for this program, and USDA has the discretion to provide an additional $150 million annually from 2009 through 2012.

Amount: Varied, $150 million annually

Other info: Title IX of the 2008 Farm Bill


File name: Farm Bill Financing Opps

Page: N/A

**Cellulosic Biofuel Tax Incentive**

**Type:** Tax Credit

**Federal agency:** USDA


**Initiating program:** 2008 Farm Bill

**RE area type:** Biofuels

**Recipient type:** Development

**Description:** In addition to the direct grants and loans available in Title IX, the 2008 Farm Bill also created tax incentives for the production of biofuels.

**Amount:** $1.01/gallon

**Other info:** Title III of the 2008 Farm Bill

**Info document:** Energy Law Alert: Energy Financing Opportunities in the 2008 Farm Bill. June 1, 2009

**File name:** Farm Bill Financing Opps

**Page:** N/A

**Source:** [www.rurdev.usda.gov/rbs/farmbill/](http://www.rurdev.usda.gov/rbs/farmbill/)
Community Wood Energy Program

**Type:** Grant/Subsidy

**Federal agency:** USDA


**Initiating program:** 2008 Farm Bill

**RE area type:** Biofuels

**Recipient type:** Government

**Description:** The Community Wood Energy Program provides grants to state and local governments to develop community wood energy plans. Eligible recipients can receive matching grants of $50,000 to acquire wood energy systems for public facilities.

**Amount:** $50,000 matching grant

**Other info:** Title IX of the 2008 Farm Bill

**Info document:** Energy Law Alert: Energy Financing Opportunities in the 2008 Farm Bill. June 1, 2009

**File name:** Farm Bill Financing Opps

**Page:** N/A

**Source:** [www.rurdev.usda.gov/rbs/farmbill/](http://www.rurdev.usda.gov/rbs/farmbill/)
Ethanol Research

Type: Grant/Subsidy

Federal agency: USDOE

Agency website: http://www.energy.gov/recovery/

Initiating program: Recovery Act

RE area type: Biofuels

Recipient type: Research

Description: The Biomass Program is planning to use $20 million of the Recovery Act funding in a competitive solicitation to achieve the following:

- Optimize flex-fuel vehicles operating on high octane E85 fuel (85% ethanol, 15% gasoline blend),
- Evaluate the impact of higher ethanol blends in conventional vehicles, and
- Upgrade existing refueling infrastructure to be compatible with fuels up to E85.

Amount: $20 million total.

Other info:

Info document: DOE Announces Nearly $800 Million from Recovery Act for Biofuels

File name: DOE_Biomass_Funding_Opps

Page: N/A

Source: N/A
Feedstock Flexibility Program

Type: Grant/Subsidy

Federal agency: USDA


Initiating program: 2008 Farm Bill

RE area type: Biofuels

Recipient type: Development

Description: The Feedstock Flexibility Program for bioenergy producers helps promote sustainable ethanol and other biofuels. Under this program, USDA will purchase sugar that would otherwise be forfeited to the Commodity Credit Corporation and sell it as a feedstock to bioenergy producers.

Amount: Varied

Other info: Title IX of the 2008 Farm Bill


File name: Farm Bill Financing Opps

Page: N/A

Source: www.rurdev.usda.gov/rbs/farmbill/
**Forest Biomass for Energy Program**

**Type:** Grant/Subsidy

**Federal agency:** USDA


**Initiating program:** 2008 Farm Bill

**RE area type:** Biofuels

**Recipient type:** Research

**Description:** The Forest Biomass for Energy Program provides grants to encourage the use of forest biomass for energy. The program provides $15 million in annual funding through 2012 to research projects that are intended to develop technology to use low-value forest biomass, integrate production of energy from forest biomass into biorefineries, create new transportation fuels from forest biomass, and improve the growth and yield of trees intended for renewable energy production.

**Amount:** Varied, $15 million total annually

**Other info:** Title IX of the 2008 Farm Bill

**Info document:** Energy Law Alert: Energy Financing Opportunities in the 2008 Farm Bill. June 1, 2009

**File name:** Farm Bill Financing Opps

**Page:** N/A

**Source:** [www.rurdev.usda.gov/rbs/farmbill/](http://www.rurdev.usda.gov/rbs/farmbill/)
**Fundamental Sustainability Research**

**Type:** Grant/Subsidy

**Federal agency:** USDOE

**Agency website:** [http://www.energy.gov/recovery/](http://www.energy.gov/recovery/)

**Initiating program:** Recovery Act

**RE area type:** Biofuels

**Recipient type:** Research

**Description:** The Biomass Program plans to use $110 million to support fundamental research in key program areas, distributed in the following manner:

- Expand the resources available for sustainability research through the Office of Science Bioenergy Research Centers and establish a user-facility/small-scale integrated pilot plant ($25 million).
- Create an advanced research consortium to develop technologies and facilitate subsequent demonstration of infrastructure-compatible biofuels through a competitive solicitation ($35 million).
- Create an algal biofuels consortium to accelerate demonstration of algal biofuels through a competitive solicitation ($50 million).

**Amount:** Varied depending on program area, $25-50 million. $110 million total.

**Other info:** N/A

**Info document:** DOE Announces Nearly $800 Million from Recovery Act for Biofuels

**File name:** DOE_Biomass_Funding_Opps

**Page:** N/A

**Source:** N/A
Integrated Pilot- and Demonstration-Scale Biorefineries

**Type:** Grant/Subsidy

**Federal agency:** USDOE

**Agency website:** [http://www.energy.gov/recovery/](http://www.energy.gov/recovery/)

**Initiating program:** Recovery Act

**RE area type:** Biofuels

**Recipient type:** Development

**Description:** Projects selected will work to validate integrated biorefinery technologies that produce advanced biofuels, bioproducts, and heat and power in an integrated system, thus enabling private financing of commercial-scale replications. USDOE anticipates making 10 to 20 awards for refineries at various scales and designs, all to be operational in the next three years. The USDOE funding ceiling is $25 million for pilot-scale projects and $50 million for demonstration scale projects. These integrated biorefineries will reduce dependence on petroleum-based transportation fuels and chemicals. They will also facilitate the development of an "advanced biofuels" industry to meet the federal Renewable Fuel Standards.

**Amount:** 10-20 awards, $25 million maximum for pilot-scale projects and $50 million maximum for demonstration-scale projects. $480 million total.

**Other info:** N/A

**Info document:** DOE Announces Nearly $800 Million from Recovery Act for Biofuels

**File name:** DOE_Biomass_Funding_Opps

**Page:** N/A

**Source:** N/A
Repowering Assistance

Type: Grant/Subsidy

Federal agency: USDA


Initiating program: 2008 Farm Bill

RE area type: Biofuels

Recipient type: Development

Description: Biorefineries in existence when the 2008 Farm Bill was passed are eligible for payments to reduce their dependence upon fossil fuels. USDA has $35 million available to help biorefineries move to renewable energy sources for heating and powering their facilities. USDA has $15 million in discretionary funds for each of the fiscal years from 2009 through 2012.

Amount: $35 million, $15 million per year through 2012

Other info: Title IX of the 2008 Farm Bill


File name: Farm Bill Financing Opps

Page: N/A

Source: www.rurdev.usda.gov/rbs/farmbill/
Rural Energy for America Program

Type: Grant/Loan Guarantee

Federal agency: USDA


Initiating program: 2008 Farm Bill

RE area type: Biofuels

Recipient type: Small Business

Description: The Rural Energy for America Program helps agricultural producers and rural small businesses reduce energy costs and consumption and helps meet the nation’s critical energy needs. The program provides funding for energy audits and energy development assistance. It can also be used to fund either rural energy efficiency projects or rural renewable energy production.

Amount: Grants may fund up to 25% of project costs (capped at $500,000), and loan guarantees may fund up to 75% of project costs (capped at $25 million).

Other info: Eligible technologies include: solar water heat, solar space heat, solar thermal electric, PV, wind, biomass, hydroelectric, renewable transportation fuels, geothermal electric, geothermal heat pumps, CHP/cogeneration, hydrogen, direct-use geothermal, anaerobic digestion, small hydroelectric, tidal energy, wave energy, ocean thermal, renewable fuels, fuel cells using renewable fuels, and microturbines.


File name: Farm Bill Financing Opps

Page: N/A

Source: [www.rurdev.usda.gov/rbs/busp/9006grant.htm](http://www.rurdev.usda.gov/rbs/busp/9006grant.htm)
**Rural Energy Self-Sufficiency Initiative**

**Type:** Grant/Subsidy

**Federal agency:** USDA


**Initiating program:** 2008 Farm Bill

**RE area type:** Biofuels

**Recipient type:** Communities

**Description:** The Rural Energy Self-Sufficiency Initiative provides grants for community-wide energy assessments. Community-wide energy assessments are audits of a community’s (rather than an individual user’s) energy use and analysis of where energy savings can be obtained. Additional grants are also available under this program to develop and install integrated renewable energy systems. From now through 2012, $5 million in annual appropriations is available.

**Amount:** Varied, $5 million total

**Other info:** Title IX of the 2008 Farm Bill

**Info document:** Energy Law Alert: Energy Financing Opportunities in the 2008 Farm Bill. June 1, 2009

**File name:** Farm Bill Financing Opps

**Page:** N/A

**Source:** [www.rurdev.usda.gov/rbs/farmbill/](http://www.rurdev.usda.gov/rbs/farmbill/)
Tax Allowance for Cellulosic Biofuels Property

**Type:** Tax Credit

**Federal agency:** USDA


**Initiating program:** Recovery Act

**RE area type:** Biofuels

**Recipient type:** Development

**Description:** Taxpayers are allowed to immediately write off 50% of the cost of facilities that produce cellulosic biofuels ethanol if such facilities are placed in service before January 1, 2013. The bill makes this benefit available for the production of other cellulosic biofuels in addition to cellulosic ethanol.

**Amount:** N/A

**Other info:** N/A

**Info document:** The Emergency Economic Stabilization Act of 2008: Energy Tax Incentives

**File name:** HR_1424_energy_tax_incentives

**Page:** N/A

**Source:** [www.energy.gov/media/HR_1424.pdf](http://www.energy.gov/media/HR_1424.pdf)
Value-Added Producer Grants

Type: Grant/Subsidy

Federal agency: USDA

Agency website: http://www.rurdev.usda.gov/rbs/

Initiating program: Rural Business-Cooperative Service

RE area type: Biofuels

Recipient type: Development

Description: A total of $18 million is available for value-added agricultural projects, including farm-based renewable energy projects, for either planning or working capital purposes. Examples of eligible projects include developing ethanol and biodiesel plants, pelletizing biomass, and installing anaerobic digesters.

Amount: The maximum grant award is $100,000 for a planning grant and $300,000 for a working capital grant. Applicants must provide matching funds of at least 100% of the grant award.

Other info: Eligible applicants include (1) independent agricultural producers, (2) eligible agricultural producer groups, (3) farmer-owned or rancher-owned cooperatives, and (4) majority controlled producer-based businesses.

Info document: N/A

File name: N/A

Page: N/A

Source: www.lawofrenewableenergy.com/2009/05/18-million-of-valueadded-producer-grants-available/
**Conventional Energy Efficient Mortgages (EEMs)**

**Type:** Low-Interest Loan

**Federal agency:** Fannie Mae/Freddie Mac


**Initiating program:** Federal

**RE area type:** Building Efficiency

**Recipient type:** Residential

**Description:** Like Energy Star mortgages, conventional mortgages are not backed by a federal agency. Private lenders sell loans to Fannie Mae and Freddie Mac, which in turn allow homebuyers to borrow up to 15% of an existing home’s appraised value for improvements documented by a HER.

Fannie Mae also lends up to 5% for Energy Star new homes. Fannie Mae EEMs are available to single-family, owner-occupied units, and Fannie Mae provides EEMs to those whose income might otherwise disqualify them from receiving the loans by allowing approved lenders to adjust borrowers’ debt-to-income ratio by 2%. The value of the improvements is immediately added to the total appraised value of the home.

**Amount:** Can borrow up to 15% of a home’s appraised value.

**Other info:**

**Info document:** Conventional Energy Efficient Mortgages

**File name:** N/A

**Page:** N/A

**Source:** [www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US36F&re=1&ee=1](http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US36F&re=1&ee=1)
Energy Efficient Appliance Tax Credit for Manufacturers

Type: Tax Credit

Federal agency: US Department of the Treasury

Agency website: http://www.ustreas.gov/

Initiating program: Recovery Act

RE area type: Building Efficiency

Recipient type: Industry

Description: The Energy Policy Act of 2005 established tax credits for manufacturers of high-efficiency residential clothes washers, refrigerators, and dishwashers produced in calendar years 2006 and 2007. The Energy Improvement and Extension Act of 2008 (H.R. 1424, Division B) extended the credits for additional years depending on the efficiency rating of the manufactured appliance. Manufacturers only receive these credits for the increase in production of qualifying appliances over a two-year rolling baseline, and only appliances produced in the United States are eligible.

Amount: Dishwashers: $45 or $75 per unit, varies by energy and water efficiency. Clothes washers: $75 - $250 per unit, varies by type and energy and water efficiency. Refrigerators: $50 - $200, depending on energy efficiency rating.

Other info: N/A

Info document: Energy Efficient Appliance Tax Credit for Manufacturers

File name: N/A

Page: N/A

Source: www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US42F&re=1&ee=1
Energy Efficient Commercial Buildings Tax Deduction

Type: Tax Credit

Federal agency: US Department of the Treasury

Agency website: http://www.ustreas.gov/

Initiating program: Federal

RE area type: Building Efficiency

Recipient type: Various

Description: The federal Energy Policy Act of 2005 established a tax deduction for energy-efficient commercial buildings applicable to qualifying systems and buildings placed in service from January 1, 2006 through December 31, 2007. This deduction was subsequently extended through 2008, and then again through 2013 by Section 303 of the federal Energy Improvement and Extension Act of 2008 (H.R. 1424, Division B), enacted in October 2008.

A tax deduction of $1.80 per square foot is available to owners of new or existing buildings who install (1) interior lighting; (2) building envelope; or (3) heating, cooling, ventilation, or hot water systems that reduce the building’s total energy and power cost by 50% or more in comparison to a building meeting minimum requirements set by ASHRAE Standard 90.1-2001. Energy savings must be calculated using qualified computer software approved by the Internal Revenue Service (IRS).

Deductions of $0.60 per square foot are available to owners of buildings in which individual lighting, building envelope, or heating and cooling systems meet target levels that would reasonably contribute to an overall building savings of 50% if additional systems were installed.

Amount: $0.30-$1.80 per square foot, depending on technology and amount of energy reduction

Other info: Equipment insulation, water heaters, lighting, lighting controls/sensors, chillers, furnaces, boilers, heat pumps, air conditioners, caulking/weather-stripping, duct/air sealing, building insulation, windows, doors, siding, roofs, comprehensive measures/whole building.

Info document: N/A

File name: Energy Efficient Commercial Buildings Tax Deduction

Page: N/A

Source: www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US40F&re=1&ee=1
Energy-Efficient New Homes Tax Credit for Home Builders

**Type:** Tax Credit

**Federal agency:** US Department of the Treasury

**Agency website:** [http://www.ustreas.gov/](http://www.ustreas.gov/)

**Initiating program:** Recovery Act

**RE area type:** Building Efficiency

**Recipient type:** Residential

**Description:** The federal Energy Policy Act of 2005 established tax credits of up to $2,000 for builders of all new energy-efficient homes, including manufactured homes constructed in accordance with the Federal Manufactured Homes Construction and Safety Standards. Initially scheduled to expire at the end of 2007, the tax credit was extended through 2008 by Section 205 of the Tax Relief and Health Care Act of 2006 (H.R. 6111), and then extended again through December 31, 2009 by Section 304 of The Energy Improvement and Extension Act of 2008 (H.R. 1424). The home qualifies for the credit if it is located in the United States; its construction is substantially completed after August 8, 2005; it meets the energy saving requirements outlined in the statute; and it is acquired from the eligible contractor after December 31, 2005, and before January 1, 2010, for use as a residence.

**Amount:** Site-built homes qualify for a $2,000 credit if they are certified to reduce heating and cooling energy consumption by 50% relative to the International Energy Conservation Code standard and meet minimum efficiency standards established by USDOE. Manufactured homes qualify for a $2,000 credit if they conform to Federal Manufactured Home Construction and Safety Standards and meet the energy savings requirements of site-built homes described above. Manufactured homes qualify for a $1,000 credit if they conform to Federal Manufactured Home Construction and Safety Standards and reduce energy consumption by 30% relative to the International Energy Conservation Code standard.

**Other info:** N/A

**Info document:** Energy-Efficient New Homes Tax Credit for Home Builders

**File name:** N/A

**Page:** N/A

**Source:** [www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US41F&re=1&ee=1](http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US41F&re=1&ee=1)
FHA Energy-Efficient Mortgages

Type: Low-Interest Loan

Federal agency: Federal Housing Administration (FHA)


Initiating program: Federal

RE area type: Building Efficiency

Recipient type: Residential

Description: FHA allows lenders to add up to 100% of energy efficiency improvements to an existing mortgage loan by insuring a loan of up to 5% of a home’s appraised value with certain restrictions. Mortgage limits vary by county, state, and the number of units in a dwelling. See www.fha.com/lending_limits.cfm for more details.

Loan amounts may not exceed the projected savings of the energy efficiency improvements. Presently, up to $200 of the cost of the HER may be included in the mortgage, and borrowers may include closing costs and the up-front mortgage insurance premium in the total cost of the loan. The loan is available to anyone who meets the income requirements for FHA’s Section 203 (b), provided the applicant can meet the monthly mortgage payments.

Amount: Limits vary, but allows lenders to add up to 100% of energy efficiency improvements to an existing mortgage loan by insuring a loan of up to 5% of a home’s appraised value with certain restrictions.

Other info: N/A

Info document: FHA Energy-Efficient Mortgages

File name: N/A

Page: N/A

Source: www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US36F&re=1&ee=1
Residential Energy Efficiency Tax Credit

Type: Tax Credit

Federal agency: US Department of the Treasury

Agency website: http://www.ustreas.gov/

Initiating program: Recovery Act

RE area type: Building Efficiency

Recipient type: Residential

Description: The federal tax credit for energy-efficient home improvements was established by the Energy Policy Act of 2005. After expiring December 31, 2007, the credit was extended and expanded by The Energy Improvement and Extension Act of 2008 (H.R. 1424: Div. B, Sec. 302) and The American Recovery and Reinvestment Act of 2009 (H.R. 1: Div. B, Sec. 1121). The credit now applies to eligible equipment purchased between January 1, 2009, and December 31, 2010. In addition to extending the credit, H.R. 1424 and H.R. 1 strengthened the efficiency requirements for most equipment, extended the credit to stoves that use biomass fuel and asphalt roofs with appropriate cooling granules; raised the cap for the credit; and redesigned the way the credit is calculated.

The credit applies to energy efficiency improvements in the building envelope of existing homes and for the purchase of high-efficiency heating, cooling, and water-heating equipment. Efficiency improvements or equipment must serve a dwelling in the United States that is owned and used by the taxpayer as a primary residence. The maximum amount of homeowner credit for all improvements combined is $1,500 for equipment purchased during the two-year period of 2009 and 2010.

Amount: The Energy Policy Act of 2005 established the tax credit for energy improvements to existing homes. The credit was originally limited to purchases made in 2006 and 2007, with an aggregate cap of $500 for all qualifying purchases made in these two years combined. There were also separate individual caps for the different equipment types. H.R. 1424 of 2008 reinstated the credit for 2009 purchases and made other minor adjustments. H.R. 1 further extended the credit to include purchases made in 2010 and replaced the $500 aggregate cap with a $1,500 aggregate cap for installations made in 2009 and 2010. Tax credits for installations made in 2006 and 2007 are still limited to $500. Any purchase made in 2008 is not eligible for this tax credit.

Geothermal heat pumps were originally eligible for this credit, with a $300 cap. However, geothermal heat pumps are now eligible for the residential renewable energy tax credit, with no cap.

Other info: Eligible efficiency technologies: water heaters, furnaces, boilers, heat pumps, air conditioners, building insulation, windows, doors, roofs, circulating fans used in a qualifying furnace. Eligible renewable/other technologies: biomass, stoves that use qualified biomass fuel.

Info document: Residential Energy Efficiency Tax Credit

File name: N/A

Page: N/A

Source: www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US43F&re=1&ee=1
Veterans Energy Efficient Mortgages

Type: Low-Interest Loan

Federal agency: Department of Veterans Affairs (VA)

Agency website: http://www.homeloans.va.gov/

Initiating program: Federal

RE area type: Building Efficiency

Recipient type: Residential

Description: The VA insures EEMs to be used in conjunction with VA loans either for the purchase of existing homes or for refinancing loans secured by the dwelling. Homebuyers may borrow up to $3,000 if only documentation of improvement costs or contractor bids is submitted, or up to $6,000 if the projected energy savings are greater than the increase in mortgage payments. Loans may exceed this amount at the discretion of the VA. Applicants may not include the cost of their own labor in the total amount. No additional home appraisal is needed, but applicants must submit a HER, contractor bids, and certain other documentation. The VA insures 50% of the loan if taken by itself, but it may insure less if the total value of the mortgage exceeds a certain amount. This mortgage is available to qualified military personnel, reservists, and veterans.

Amount: Up to $3,000 to $6,000, depending on conditions.

Other info: N/A

Info document: VA Energy Efficient Mortgages

File name: N/A

Page: N/A

Source: www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US36F&re=1&ee=1

Type: Grant/Subsidy

Federal agency: USDOE

Agency website: http://www.energy.gov/recovery/

Initiating program: Recovery Act

RE area type: Energy Recycling

Recipient type: Various

Description: The objective of the funding opportunity announcement (FOA) is to solicit applications for cost-shared projects that will deploy sustainable energy infrastructure projects and energy efficient industrial technologies. Specifically, this FOA seeks projects to deploy efficient technologies in the following four areas of interest: 1) CHP; 2) District Energy Systems; 3) Industrial Waste Energy Recovery; 4) Efficient Industrial Equipment. The result will be deployment of technologies that will increase our national energy security, provide construction and manufacturing jobs, and build markets for skilled green construction.

Amount: $156 million total

Other info: CHP, district energy, and waste energy recovery deployment and demonstration projects under the Recovery Act represent proven and effective near-term energy options to help the United States enhance energy efficiency, ensure environmental quality, promote economic growth, and foster a robust energy infrastructure. These technologies can be deployed in industrial and residential settings to improve efficiency, control costs, and limit greenhouse gas emissions making United States industry more productive and more competitive. CHP and district energy systems can achieve efficiencies of 80% or better compared to roughly 45% for conventional heat and power production; waste recovery systems have the potential to save 17 gigawatts of energy nationwide annually.

Info document: Recovery Act (ARRA) - Industrial Energy Efficiency

File name: N/A

Page: N/A

Source: www.grants.gov/search/search.do?mode=VIEW&oppld=47763
Alternative Fueled Vehicle Pilot Program

Type: Grant/Subsidy

Federal agency: USDOE

Agency website: http://www1.eere.energy.gov/cleancities/

Initiating program: Clean Cities Program

RE area type: Fuel Efficiency

Recipient type: Various

Description: This four-year program includes two years of data collection and two years in which projects must be completed. Up to 30 awards will be awarded in FY09 and FY10 ranging from $5 million to $15 million each, but there is a 50 percent matching requirement. Examples of eligible projects are those that will further the domestic manufacture and use of energy efficient advanced transportation vehicles (ATVs), alternative fuel vehicles (AFVs) and alternative fuels (AFs). Eligible entities are limited to state or local governments, a metropolitan transportation authority, or any combination of these, as long as they are in partnership with a designated Clean Cities Coalition.

Amount: USDOE’s Clean Cities Program received $300 million from the stimulus plan to help grant recipients acquire motor vehicles with a higher fuel economy, including hybrid vehicles, electric vehicles, commercially available plug-in hybrid vehicles, and the necessary infrastructure. A total of 30 grants, based on geography, will be awarded on a competitive basis. Eligible recipients include states, local governments, metropolitan transportation authorities, air pollution control districts, and private or nonprofit enterprises. It should be noted the $300 million is only available until September 30, 2011.

Other info: N/A

Info document: N/A

File name: N/A

Page: N/A

US Green Bank

**Type:** Funding Program

**Federal agency:** US Treasury Department

**Agency website:** [http://www.ustreas.gov/](http://www.ustreas.gov/)

**Initiating program:** Green Energy Bank Act

**RE area type:** Green Financing

**Recipient type:** Various

**Description:** The Green Bank’s mission should be to marshal a variety of well-established financial tools to work flexibly with the private sector. Its purpose is to rapidly and affordably develop and deploy clean energy and energy-efficiency technologies that allow Americans to live, work, and produce using less energy and cleaner energy, creating new jobs and spurring economic growth while holding United States consumers harmless. The Green Bank should prioritize projects that provide the fastest, cheapest, cleanest reduction in greenhouse gases and oil use—projects that today face market barriers in accessing debt financing or credit enhancement. The Green Bank should ideally be structured as an independent, tax-exempt corporation, wholly owned by the US government—similar to the Overseas Private Investment Corporation or the Export-Import Bank—and governed by a board of directors of relevant Cabinet members and additional members with relevant industry and finance experience appointed by the president with staggered terms. This will give it both the flexibility and accountability it needs.

**Amount:** Funding for the Green Bank should be on the order of an initial $10 billion, with additional capital provided of up to $50 billion over five years. This capital could be leveraged at a conservative 10-to-1 ratio to provide loans, guarantees, and credit enhancement to support up to $500 billion in private-sector investment in clean-energy and energy efficiency projects.

**Other info:** “The creation of a new Green Bank could lead to the steady and reliable creation of clean-energy jobs and would be a crucial element of the transition to a clean-energy economy. Working in partnership with the private sector, a well constructed, public Green Bank would open credit markets and motivate businesses to invest again. It would enable clean-energy technologies—in such areas as wind, solar, geothermal, advanced biomass, and energy efficiency—to be deployed on a large scale and become commercially viable at current electricity costs.”

**Info document:** Center for American Progress: The Green Bank—Financing the transition to a low-carbon economy requires targeted financing to encourage private-sector participation

**File name:** CAP_Green_Bank_memo

**Page:** N/A

**Source:** [www.americanprogress.org/issues/2009/05/pdf/green_bank_memo.pdf](http://www.americanprogress.org/issues/2009/05/pdf/green_bank_memo.pdf)
US Green Bank, Description II

Type: Funding Program

Federal agency: US Treasury Department

Agency website: http://www.ustreas.gov/

Initiating program: Green Bank Act of 2009

RE area type: Green Financing

Recipient type: Various

Description: The Green Bank Act of 2009 would:
- Provide the Green Bank with an initial capitalization of $10 billion through the issuance of Green Bonds by USDOT, with a maximum authorized limit of $50 billion in Green Bonds outstanding at any one time.
- Help the country transition to a clean energy economy and create jobs through the construction and operation of clean energy and energy efficiency projects.
- Help the country address other national objectives such as abating climate change, promoting energy independence and fostering long-term domestic manufacturing capacity in clean energy and energy efficiency technologies.
- Include robust spending safeguards and public disclosure requirements for operational efficacy, accountability and transparency.

Amount: Initial capitalization of $10 billion through the issuance of Green Bonds by USDOT, with a maximum authorized limit of $50 billion in Green Bonds outstanding at any one time.

Other info: N/A


File name: US Green Bank

Page: N/A

Source: www.greenbiz.com/print/33038
Commercial Energy Efficiency Training

Type: Grant/Subsidy

Federal agency: USDOE


Initiating program: Recovery Act

RE area type: Green Workforce Training

Recipient type: Education/Training

Description: USDOE released a FOA to deploy $7.5 million in Recovery Act funds to further its goals of reducing energy consumption and achieving net zero-energy buildings (defined as buildings that produce as much energy as they consume). In order to reach these goals, USDOE recognizes that a workforce must be created to help existing buildings reach, and new buildings keep, their full energy efficiency potential.

Amount: This specific FOA provides ten to thirty individual awards from $250,000, to $750,000 to develop training programs for three specific sets of commercial building specialists:

1. equipment technicians,
2. operators, and
3. energy commissioning agents/auditors.

Other info: Entities involved with energy efficiency, professional development associations, trade training/development associations, universities, community colleges, technical trade schools, and apprenticeship programs are encouraged to apply.

Info document: N/A

File name: N/A

Page: N/A

Energy Training Partnership Grants

Type: Grant/Subsidy

Federal agency: US Department of Labor (USDOL)

Agency website: http://www.dol.gov/Recovery/

Initiating program: Recovery Act

RE area type: Green Workforce Training

Recipient type: Non-Profit

Description: Projects will provide training and placement services in the energy efficiency and renewable energy industries for workers affected by policy, individuals in need of updated training, and unemployed workers. National, nonprofit, labor management organizations and statewide or local nonprofit entities are eligible to apply.

Amount: $100 million total

Other info: N/A

Info document: Departments of Energy and Labor Offer Green Jobs Funding

File name: DOL_Green_Jobs_Training_Funds

Page: N/A

Green Capacity Building Grants

Type: Grant/Subsidy

Federal agency: USDOL

Agency website: http://www.dol.gov/Recovery/

Initiating program: Recovery Act

RE area type: Green Workforce Training

Recipient type: Active USDOL-funded grantees

Description: Grants will be awarded for projects that build the capacity of USDOL-funded training programs. Only active USDOL-funded grantees are eligible to apply.

Amount: USDOL expects to award between 50 and 100 grants under this competition, ranging from $50,000 to $100,000. $5 million total.

Other info: N/A

Info document: Recovery Act - Green Capacity Building Grants

File name: N/A

Page: N/A

Source: www.grants.gov/search/search.do?oppId=48076&flag2006=false&mode=VIEW
Local-Level Solar Installer Training

Type: Grant/Subsidy

Federal agency: USDOE

Agency website: http://www.energy.gov/recovery/

Initiating program: Recovery Act

RE area type: Green Workforce Training

Recipient type: Education/Training

Description: USDOE has allocated a total of $27 million for expand solar PV and solar heating and cooling (SHC) system installer training. The funding opportunity is open to all domestic institutions and entities. Funding will be provided to expand training and professional development to instructors who are creating or improving existing training courses for their local PV or SHC installation workforce. Funding will also be provided to administer the National Consortium for Solar Installer Instructor Training, which will regularly convene stakeholders from industry, education, government, and other organizations to meet USDOE’s objectives to expand instructor capacity in the PV and SHC installer fields.

Amount: Varied, $27 million total

Other info: N/A

Info document: DOE Announces Funding for Local-Level Solar Installer Training

File name: DOE_Solar_training_funding

Page: N/A

Source: www.icleiusa.org/news-events/doe-announces-funding-for-local-level-solar-installer-training
Pathways Out of Poverty

Type: Grant/Subsidy

Federal agency: USDOL

Agency website: http://www.dol.gov/Recovery/

Initiating program: Recovery Act

RE area type: Green Workforce Training

Recipient type: Local and National Organizations

Description: Grant funds are available for projects that integrate training and supportive services into cohesive programs to prepare individuals seeking pathways out of poverty for careers in the energy efficiency and renewable energy industries.

Amount: USDOL expects to provide awards ranging from $3 million to $8 million to national organizations and $2 million to $4 million to local entities. $150 million total.

Other info: N/A

Info document: Departments of Energy and Labor Offer Green Jobs Funding

File name: DOL_Green_Jobs_Training_Funds

Page: N/A

Renewable Energy and Energy Efficiency Training and Certification Programs

Type: Grant/Subsidy

Federal agency: Appalachian Regional Commission (ARC)

Agency website: [http://www.arc.gov/images/energy/rfpsummary08.html](http://www.arc.gov/images/energy/rfpsummary08.html)

Initiating program: Renewable Energy and Energy Efficiency

RE area type: Green Workforce Training

Recipient type: Education/Training

Description: ARC expects to provide seven to ten awards of up to $40,000 each, for a total of $250,000, to help implement energy efficiency and renewable energy training and certification programs for adults within the Appalachian Region. These training programs can be administered by postsecondary institutions, such as vocational and technical schools, community colleges, and four-year colleges and universities, as well as by non-profit trade associations, non-profit organizations, and government entities. The programs will provide trained employees for supply chain jobs in the renewable energy and energy efficiency fields, certification for installers of renewable energy and energy efficiency technologies, and support for implementing energy efficiency education and training curricula.

Amount: $40,000 per award

Other info: N/A

Info document: Requests for Proposals

File name: ARC_RenEn_grants

Page: N/A

Source: ARC Request for Proposal (expired, but annual), [www.arc.gov/index.do?nodeId=2926](http://www.arc.gov/index.do?nodeId=2926)
Solar America Cities - Technical Outreach

Type: Grant/Subsidy

Federal agency: USDOE

Agency website: http://www1.eere.energy.gov/solar/

Initiating program: Solar Energy Technologies Program

RE area type: Green Workforce Training

Recipient type: Local Government

Description: USDOE has announced a funding opportunity for up to $10.5 million to increase the ability of local governments to accelerate solar energy adoption and workforce development. Funding for the five-year awards is subject to annual appropriations. Through this new funding opportunity, USDOE will provide local governments across the United States with useful, timely information on increasing solar energy use. Through the Solar America Cities program, a partnership effort with 25 large US cities, USDOE has developed guides, case studies, and tool kits to help local governments promote solar energy. Under this new effort, USDOE will partner with outreach organizations to get these tools into the hands of local government officials and stakeholders.

Amount: $10.5 million maximum over 50 year period, implemented in 2 phases.

Other info: USDOE intends to select one or more partner organizations to provide a maximum number of local governments with actionable information that will enable them to accelerate solar energy deployment. The selected recipient(s) will proactively address the solar-related information needs of significant local markets, as well as provide a mechanism by which individual local governments can receive and share timely information on solar energy. The goal is to reach multiple levels of local government stakeholders through this activity, such as mayors and city council members, county officials, sustainability and environmental staff, and planners. Other relevant audiences may include local businesses, utilities, schools, and relevant non-profit organizations. USDOE intends to be substantially involved in the activities conducted through this FOA, and will work closely with the awardee(s) to promote the best possible outcomes.

Info document: N/A

File name: N/A

Page: N/A

State Energy Sector Partnership and Training Grants

Type: Grant/Subsidy

Federal agency: USDOL

Agency website: http://www.dol.gov/Recovery/

Initiating program: Recovery Act

RE area type: Green Workforce Training

Recipient type: Workforce Investment Boards

Description: Under this grant, State Workforce Investment Boards are encouraged to engage in a strategic planning process that aligns the governor's overall workforce vision, state energy policies, and local and regional training activities that lead to employment in the energy efficiency and renewable energy industry sectors. This strategic planning process is an opportunity to develop a statewide energy sector strategy through a comprehensive partnership and development of a sector plan. If an energy sector strategy is currently in place, that strategy should be reviewed and evaluated to address the requirements of this funding opportunity. The eligible applicants for this grant are State Workforce Investment Boards in partnership with their State Workforce Agency, local Workforce Investment Boards or regional consortia of Boards, and One Stop Career Center delivery systems.

Amount: Grants are expected to range from approximately $2 to $6 million each. $190 million total.

Other info: N/A

Info document: Departments of Energy and Labor Offer Green Jobs Funding

File name: DOL_Green_Jobs_Training_Funds

Page: N/A

State Labor Market Information Improvement

Type: Grant/Subsidy

Federal agency: USDOL

Agency website: http://www.dol.gov/Recovery/

Initiating program: Recovery Act

RE area type: Green Workforce Training

Recipient type: State Workforce Agencies

Description: Grants will be awarded to state workforce agencies that will collect, analyze, and disseminate labor market information and develop labor exchange infrastructure to direct individuals to careers in green industries.

Amount: DOL expects to provide awards ranging from $3 million to $8 million to national organizations and $2 million to $4 million to local entities. $50 million total.

Other info: N/A

Info document: Departments of Energy and Labor Offer Green Jobs Funding

File name: DOL_Green_Jobs_Training_Funds

Page: N/A

Renewable Energy and Energy Efficiency for K-12 Schools

**Type:** Grant/Subsidy

**Federal agency:** ARC

**Agency website:** [http://www.arc.gov/images/energy/rfpsummary08.html](http://www.arc.gov/images/energy/rfpsummary08.html)

**Initiating program:** Renewable Energy and Energy Efficiency

**RE area type:** Renewable Energy Education

**Recipient type:** Education/Training

**Description:** ARC expects to provide six to ten awards of up to $45,000 each, for a total of $250,000 in awards, to help implement energy efficiency and renewable energy programs in K-12 schools within the Appalachian Region. This grants program will underwrite costs of installing renewable energy and energy efficiency equipment and provide support for the implementation of associated science, environment, and business curricula in the classroom. Renewable energy equipment eligible will include: wind, solar including solar thermal or PV, fuel cells, biofuels, and geothermal systems. A range of energy efficiency technologies are also eligible for this grants program.

**Amount:** $45,000 per award

**Other info:** N/A

**Info document:** Requests for Proposals

**File name:** ARC_RenEn_grants

**Page:** N/A

**Source:** ARC Request for Proposal (expired, but annual), [www.arc.gov/index.do?nodeId=2926](http://www.arc.gov/index.do?nodeId=2926)
Clean Renewable Energy Bonds (CREBs)

Type: Tax Credit

Federal agency: US Dept. of the Treasury


Initiating program: Internal Revenue Service

RE area type: Renewables and Efficiency

Recipient type: Various

Description: CREBs are designed to be interest free; the federal government extends a tax credit to investors in lieu of interest payments from the issuer. In reality, local governments that use CREBs often must pay an interest coupon to investors or sell the bond at a discount to par, but this interest rate can be significantly lower than the interest paid on traditional tax-exempt municipal bonds.

The Energy Improvement and Extension Act of 2008 extended the CREB program and changed some program rules. The American Recovery and Reinvestment Act of 2009 expanded funding to $2.4 billion of new allocations. Of this amount, $800 million is available for state, local, and tribal governments; $800 million for public power providers; and $800 million for electric cooperatives (co-ops).

Amount: Varies, $2.4 billion total.

Other info: Eligible renewable/other technologies: solar thermal electric, PV, landfill gas, wind, biomass, hydroelectric, geothermal electric, municipal solid waste, hydrokinetic power, anaerobic digestion, tidal energy, wave energy, ocean thermal. Applicable sectors: local government, state government, tribal government, municipal utility, rural electric cooperative.


File name: USDOE_article_Clean_Renewable_Energy_Bonds

Page: N/A

Source: http://apps1.eere.energy.gov/state_energy_program/update/feature_detail.cfm/fid=89?print
Community Services Block Grant (CSBG)

Type: Grant/Subsidy

Federal agency: US Department of Health and Human Services

Agency website: http://www.acf.hhs.gov/programs/ocs/csbg/

Initiating program: Administration for Children and Families

RE area type: Renewables and Efficiency

Recipient type: Communities

Description: The Recovery Act provides for $1 billion in additional funds to the Community Services Block Grant (CSBG) program for FY09. As with regularly appropriated CBSG funds, Recovery Act funds may be used for the reduction of poverty, the revitalization of low-income communities, and the empowerment of low-income families and individuals in rural and urban areas to become fully self-sufficient.

Amount: N/A

Other info: N/A

Info document: N/A

File name: N/A

Page: N/A

Source: www.hhs.gov/recovery/programs/acf/csbg.html
Energy and Green Retrofit Investments in Elderly, Disabled, and Section 8 Assisted Housing

**Type:** Grant/Subsidy

**Federal agency:** US Department of Housing and Urban Development


**Initiating program:** Recovery Act

**RE area type:** Renewables and Efficiency

**Recipient type:** Residential

**Description:** Competitive grants or loans to owners of project-based assisted housing: 1) Section 202 Housing for the Elderly, 2) Section 811 Housing for Persons with Disabilities, 3) Section 8 Project-Based Voucher Program. Payments are made to owners for 12-month periods. Owners receiving funding must spend it within two years. Uses are for energy retrofit and green investments in project-based assisted housing. Secretary may provide incentives to owners to undertake energy or green retrofits, including fees to cover investment oversight and implementation, or to encourage job creation for low-income or very low-income individuals.

**Amount:** $250 million total. The Recovery Act also provides $2 billion to assist owners of properties receiving project-based assistance (“Assisted Housing Stability”).

**Other info:** N/A

**Info document:** Bringing Home the Green Recovery: A User’s Guide to the 2009 American Recovery and Reinvestment Act

**File name:** BringingHometheGreenRecovery

**Page:** 36

**Source:** [www.greenforall.org/resources/recoveryusersguide](http://www.greenforall.org/resources/recoveryusersguide)
Home Energy Efficiency Improvement Tax Credits

Type: Tax Credit

Federal agency: USDOE

Agency website: http://www.energy.gov/recovery/

Initiating program: Recovery Act

RE area type: Renewables and Efficiency

Recipient type: Residential

Description: Consumers who purchase and install specific products, such as energy-efficient windows, insulation, doors, roofs, and heating and cooling equipment in existing homes can receive a tax credit for 30% of the cost, up to $1,500, for improvements placed in service between January 1, 2009 and December 31, 2010.

Amount: Eligible appliances: windows and doors, insulation, roofs (metal and asphalt), HVAC, water heaters (non-solar), biomass stoves.

Other info: N/A

Info document: N/A

File name: N/A

Page: N/A

Source: www.energystar.gov/index.cfm?c=tax_credits.tx_index
Low-Income Community Energy Efficiency Pilot Program

**Type:** Grant/Subsidy

**Federal agency:** USDOE

**Agency website:** [http://www.energy.gov/](http://www.energy.gov/)

**Initiating program:** Unknown

**RE area type:** Renewables and Efficiency

**Recipient type:** Various Local

**Description:** The Secretary is authorized to make grants to units of local government; private, non-profit community development organizations; and Indian tribe economic development entities to improve energy efficiency. Grants can also identify and develop alternative, renewable, and distributed energy supplies and increase energy conservation in low income rural and urban communities.

**Amount:** N/A

**Other info:** The Secretary may make grants on a competitive basis for:

- investments that develop alternative, renewable, and distributed energy supplies;
- energy efficiency projects and energy conservation programs;
- studies and other activities that improve energy efficiency in low income rural and urban communities;
- planning and development assistance for increasing the energy efficiency of buildings and facilities; and
- technical and financial assistance to local government and private entities on developing new renewable and distributed sources of power or CHP generation.

**Info document:** N/A

**File name:** N/A

**Page:** N/A

**Source:** [http://www4.law.cornell.edu/uscode/uscode42/usc_sec_42_00015823----000-.html](http://www4.law.cornell.edu/uscode/uscode42/usc_sec_42_00015823----000-.html)
Low-Income Heating and Energy Efficiency

**Type:** Grant/Subsidy

**Federal agency:** US Department of Health and Human Services


**Initiating program:** Low-Income Energy Assistance Program

**RE area type:** Renewables and Efficiency

**Recipient type:** Residential

**Description:** The Low Income Energy Assistance Program (LIEAP) assists eligible households with the cost of home heating through direct cash payments or payments to utility companies on their behalf. A crisis component is available for households without resources facing the loss of a heating source. Eligibility for both program components is based on a combination of factors, including income, type of heating payment, and total heating costs.

LIEAP is funded entirely by a federal block grant. The program's duration and the amount of the payment is dependent on the amount of the grant. A portion of the grant is transferred to the Office of Economic Opportunity for the Weatherization Program. Applicants for LIEAP may be referred to Weatherization for additional assistance.

**Amount:** N/A

**Other info:** N/A

**Info document:** N/A

**File name:** N/A

**Page:** N/A

**Source:** [www.wvdhhr.org/bcf/family_assistance/utility.asp](http://www.wvdhhr.org/bcf/family_assistance/utility.asp)
**Modified Accelerated Cost-Recovery System (MACRS) + Bonus Depreciation**

**Type:** Corporate Depreciation

**Federal agency:** US Dept. of the Treasury

**Agency website:** [http://www.treas.gov/recovery/](http://www.treas.gov/recovery/)

**RE area type:** Renewables and Efficiency

**Recipient type:** Development

**Description:** Under the federal Modified Accelerated Cost-Recovery System (MACRS), businesses may recover investments in certain property through depreciation deductions. The MACRS establishes a set of class lives for various types of property, ranging from three to 50 years, over which the property may be depreciated. A number of renewable energy technologies are classified as five-year property (26 USC § 168(e)(3)(B)(vi)) under the MACRS, which refers to 26 USC § 48(a)(3)(A), often known as the energy investment tax credit to define eligible property.

The federal Economic Stimulus Act of 2008, enacted in February 2008, included a 50% bonus depreciation (26 USC § 168(k)) provision for eligible renewable-energy systems acquired and placed in service in 2008. This provision was extended (retroactively to the entire 2009 tax year) under the same terms by The American Recovery and Reinvestment Act of 2009, enacted in February 2009. To qualify for bonus depreciation, a project must satisfy various criteria.

**Amount:** Various depreciation schedules, depending on renewable property type and cost-recovery schedule.

**Other info:** Solar water heat, solar space heat, solar thermal electric, solar thermal process heat, PV, landfill gas, wind, biomass, renewable transportation fuels, geothermal electric, fuel cells, geothermal heat pumps, municipal solid waste, CHP/cogeneration, solar hybrid lighting, direct use geothermal, anaerobic digestion, microturbines.

**Info document:** Modified Accelerated Cost-Recovery System (MACRS) + Bonus Depreciation (2008-2009)

**File name:** N/A

**Page:** N/A

**Source:** [www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US06F&re=1&ee=1](http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US06F&re=1&ee=1)
Payments for Specified Energy Property in Lieu of Tax Credits

Type: Grant/Subsidy

Federal agency: US Dept. of the Treasury

Agency website: http://www.treas.gov/recovery/

RE area type: Renewables and Efficiency

Recipient type: Various

Description: Section 1603 of the Act’s tax title, the American Recovery and Reinvestment Tax Act, appropriates funds for payments to persons who place in service specified energy property during 2009 or 2010 or after 2010 if construction began on the property during 2009 or 2010 and the property is placed in service by a certain date known as the credit termination date.

Amount: USDOT will make Section 1603 payments to qualified applicants in an amount generally equal to 10% or 30% of the basis of the property, depending on the type of property.

Other info: Applicants who receive payments for property under Section 1603 are not eligible for the production or investment tax credit under sections 45 and 48 of the internal revenue code with respect to the same property for the taxable year of the payment or subsequent years.

Info document: N/A

File name: N/A

Page: N/A

Source: www.treas.gov/recovery/docs/guidance.pdf
Renewable Energy and Energy Efficiency Grants

Type: Grant/Subsidy

Federal agency: ARC

Agency website: http://www.arc.gov/images/energy/rfpsummary08.html

Initiating program: Asset-Based Development Initiative

RE area type: Renewables and Efficiency

Recipient type: Various

Description: Projects must focus on implementing renewable energy and energy efficiency projects. Proposed activities should result in the creation of new jobs or businesses in the target communities. Outcomes could include:

- Production and use of renewable energy products, such as biofuels, biomass, solar, or wind energy, including siting of these facilities and net metering applications.
- Distribution of renewable energy products, including customer purchasing commitments for these products.
- Expansion or start-up of “clean energy” businesses, including support for business incubation programs and targeted business financing programs.
- New construction or facilities renovations that follow green building and Leadership in Energy and Environmental Design (LEED)—certified guidelines.
- Installation of energy efficiency equipment in public or non-profit facilities that is 2005 Energy Policy Act Tax Credit–eligible, directly results in cost savings, and leads to increased delivery of services to local communities.

Amount: Grants of up to $75,000 will be provided to assist communities in building strong and sustainable “asset-based” economies. It is expected that ARC will award eight to ten grants, for up to $500,000 in total awards. Grantees will be required to provide matching funds at a ratio of $2 of support for each grant dollar. Activities supported by these grants are expected to be completed within 18 months of the award date. Funded activities will be promoted by ARC to a range of development partners, and may receive exposure in local, regional, or national media.

Other info: N/A

Info document: Appalachian Regional Commission, Renewable Energy and Energy Efficiency Grants Competition, FY08

File name: ARC_EnergyEff_Renewables_Grants

Page: N/A

**Renewable Energy Production Incentive**

**Type:** Grant/Subsidy

**Federal agency:** US Dept. of the Treasury

**Agency website:** [http://www.treas.gov/recovery/](http://www.treas.gov/recovery/)

**RE area type:** Renewables and Efficiency

**Recipient type:** Various

**Description:** The Renewable Energy Production Incentive (REPI) provides payments to state and local governments, nonprofit electricity distribution cooperatives, Indian tribes, and US overseas territories that produce renewable energy. The program depends on yearly allocations from Congress, which are currently about $4.9 million. Because $20 million worth of REPI credits were requested in 2006, the program was able to pay only 25% of the amount requested. The average allocation for each of the 25 solar projects that received REPI funds in 2007 was $898. Because of the uncertainty with REPI, financiers do not consider the incentive "bankable" and ignore it when considering project economics.

**Amount:** Variable

**Other info:** [www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US33F&re=1&ee=1](http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US33F&re=1&ee=1)

**Info document:** States Explore Financing Options for Solar Photovoltaics

**File name:** State_Financing_Solar_PV_EERE

**Page:** N/A

**Source:** [http://apps1.eere.energy.gov/state_energy_program/update/feature_detail.cfm(fid=82)](http://apps1.eere.energy.gov/state_energy_program/update/feature_detail.cfm(fid=82)}
Residential Energy Assistance Challenge Program

Type: Grant/Subsidy

Federal agency: US Department of Health and Human Services

Agency website: http://www.acf.hhs.gov/programs/ocs/liheap/guidance/action_transmittals/at09-03.html

Initiating program: Low-Income Energy Assistance Program

RE area type: Renewables and Efficiency

Recipient type: Residential

Description: The purpose of the program is to:
   1. minimize health and safety risks that result from high energy burdens on low-income Americans,
   2. prevent homelessness as a result of inability to pay energy bills,
   3. increase the efficiency of energy usage by low-income families, and
   4. target energy assistance to individuals who are most in need.

Amount: For each fiscal year, the Secretary may allocate not more than 25 percent of the amount made available pursuant to section 8621 (d) of this title for such fiscal year to fund the purpose of making incentive grants to States that submit qualifying plans that are approved by the Secretary. States may use such grants for the costs of planning, implementing, and evaluating the initiative.

Other info: N/A

Info document: N/A

File name: N/A

Page: N/A

Source: http://www4.law.cornell.edu/uscode/42/usc_sec_42_00008626---b000-.html
Residential Renewable Energy Tax Credit

Type: Tax Credit

Federal agency: US Dept. of the Treasury

Agency website: http://www.treas.gov/recovery/

RE area type: Renewables and Efficiency

Recipient type: N/A

Description:
Established by the federal Energy Policy Act of 2005, the federal tax credit for residential energy property initially applied to solar-electric systems, solar water heating systems, and fuel cells. The Energy Improvement and Extension Act of 2008 (H.R. 1424) extended the tax credit to small wind-energy systems and geothermal heat pumps, effective January 1, 2008. Other key revisions included an eight-year extension of the credit to December 31, 2016, the ability to take the credit against the alternative minimum tax, and the removal of the $2,000 credit limit for solar-electric systems beginning in 2009. The American Recovery and Reinvestment Act of 2009 (H.R. 1: Div. B, Sec. 1122, p. 46) removed the maximum credit amount for all eligible technologies (except fuel cells) placed in service after 2008. This Act does not allow taxpayers eligible for the residential renewable energy tax credit to receive a USDOT grant instead of taking this credit.

Amount: Amount: 30%, with maximum Incentives as follows:
- Solar-electric systems placed in service before 2009: $2,000
- Solar-electric systems placed in service after 2008: no maximum
- Solar water heaters placed in service before 2009: $2,000
- Solar water heaters placed in service after 2008: no maximum
- Wind turbines placed in service in 2008: $4,000
- Wind turbines placed in service after 2008: no maximum
- Geothermal heat pumps placed in service in 2008: $2,000
- Geothermal heat pumps placed in service after 2008: no maximum
- Fuel cells: $500 per 0.5 kW

Other info: Solar water heat, PV, wind, fuel cells, geothermal heat pumps, other solar electric technologies

Info document: Residential Renewable Energy Tax Credit

File name: N/A

Page: N/A

Source: N/A
Rural Electrification Act Renewable Energy Loans

Type: Loan

Federal agency: USDA

Agency website: http://www.usda.gov/rus/electric/

Initiating program: 2008 Farm Bill

RE area type: Renewables and Efficiency

Recipient type: Various

Description: The 2008 Farm Bill has also provided new funding opportunities for electrification and energy efficiency under the Rural Electrification Act of 1936. Title III of the Rural Electrification Act has been amended to allow loans to be made to support renewable energy generation for resale to rural and non-rural residents. Eligible renewable energy resources under this program include solar, wind, hydropower, biomass, and geothermal energy conversion systems. USDA now has the ability to guarantee up to $1 billion in loans under the Rural Electrification Act.

Amount: Varied, $1 billion total

Other info: Title IX of the 2008 Farm Bill


File name: Farm Bill Financing Opps

Page: N/A

Source: www.rurdev.usda.gov/rbs/farmbill/
**USDOT - Renewable Energy Grants**

**Type:** Grant/Subsidy

**Federal agency:** US Dept. of the Treasury

**Agency website:** [http://www.treas.gov/recovery/](http://www.treas.gov/recovery/)

**RE area type:** Renewables and Efficiency

**Recipient type:** Various

**Description:** The American Recovery and Reinvestment Act of 2009 (H.R. 1), enacted in February 2009, created a renewable energy grant program that will be administered by the USDOT. This cash grant may be taken in lieu of the federal business energy investment tax credit. Grants are available to eligible property placed in service in 2009 or 2010, or placed in service by the specified credit termination date if construction began in 2009 or 2010. Only tax-paying entities are eligible for this grant. Federal, state and local government bodies, non-profits, qualified energy tax credit bond lenders, and cooperative electric companies are not eligible to receive this grant.

**Amount:** Amount: 30% of property that is part of a qualified facility, qualified fuel cell property, solar property, or qualified small wind property, and 10% of all other property. Maximum Limit: $1,500 per 0.5 kW for qualified fuel cell property, $200 per kW for qualified microturbine property, 50 MW for CHP property, with limitations for large systems. Grant applications must be submitted by 10/1/2011. Payment of grant will be made within 60 days of the grant application date or the date property is placed in service, whichever is later.

**Other info:** Solar water heat, solar space heat, solar thermal electric, solar thermal process heat, PV, landfill gas, wind, biomass, hydroelectric, geothermal electric, fuel cells, geothermal heat pumps, municipal solid waste, CHP/cogeneration, solar hybrid lighting, hydrokinetic, anaerobic digestion, tidal energy, wave energy, ocean thermal, microturbines

**Info document:** US Department of Treasury - Renewable Energy Grants

**File name:** N/A

**Page:** N/A

**Source:** [www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US53F&re=1&ee=1](http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US53F&re=1&ee=1)
Residential Energy Conservation Subsidy Exclusion (Corporate)

Type: Tax Exemption

Federal agency: US Dept. of the Treasury

Agency website: http://www.treas.gov/recovery/

RE area type: Renewables and Efficiency

Recipient type: Industry

Description: According to Section 136 of the IRS Code, energy conservation subsidies provided by public utilities, either directly or indirectly, are nontaxable: "Gross income shall not include the value of any subsidy provided (directly or indirectly) by a public utility to a customer for the purchase or installation of any energy conservation measure."

The term "energy conservation measure" includes installations or modifications primarily designed to reduce consumption of electricity or natural gas, or improve the management of energy demand. Eligible dwelling units include houses, apartments, condominiums, mobile homes, boats, and similar properties. If a building or structure contains both dwelling and other units, any subsidy must be properly allocated.

Amount: Varies.

Other info: N/A

Info document: Residential Energy Conservation Subsidy Exclusion (Corporate)

File name: N/A

Page: N/A

Source: www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US31F&re=1&ee=1
Residential Energy Conservation Subsidy Exclusion (Personal)

Type: Tax Exemption

Federal agency: US Dept. of the Treasury

Agency website: http://www.treas.gov/recovery/

RE area type: Renewables and Efficiency

Recipient type: Residential

Description: According to Section 136 of the IRS Code, energy conservation subsidies provided by public utilities, either directly or indirectly, are nontaxable: "Gross income shall not include the value of any subsidy provided (directly or indirectly) by a public utility to a customer for the purchase or installation of any energy conservation measure."

The term "energy conservation measure" includes installations or modifications primarily designed to reduce consumption of electricity or natural gas, or improve the management of energy demand. Eligible dwelling units include houses, apartments, condominiums, mobile homes, boats, and similar properties. If a building or structure contains both dwelling and other units, any subsidy must be properly allocated.

Amount: Varies.

Other info:

Info document: Residential Energy Conservation Subsidy Exclusion (Personal)

File name: N/A

Page: N/A

Source: www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US03F&re=1&ee=1
Community Renewable Energy Development Grant

**Type:** Grant/Subsidy

**Federal agency:** USDOE

**Agency website:** [http://www.energy.gov/recovery/](http://www.energy.gov/recovery/)

**Initiating program:** Recovery Act

**RE area type:** Research

**Recipient type:** Government

**Description:** The USDOE Office of Energy Efficiency and Renewable Energy will provide technical assistance to selected recipients, including concepts, best practices, planning, financial approaches, policy guidance, and recognition to help communities rapidly plan and deploy utility-scale renewable energy systems that provide clean, reliable, and affordable energy supplies for their communities, while creating jobs and new economic development opportunities. The projects will demonstrate how multiple renewable energy technologies, including solar, wind, biomass, and geothermal systems, can be deployed at scale to supply clean energy to communities.

USDOE anticipates each project will leverage significant investment, including public and private sector investment in renewable energy systems. The projects funded under this FOA are expected to create jobs and avoid 50,000 tons of carbon dioxide annually.

**Amount:** Up to $22 million in USDOE funding is available for these awards in FY10. USDOE anticipates making up to four awards totaling up to $21.45 million, and expects matching funds from public and private investment of $22 million or more.

**Other info:** Successful applicants will be awarded financial assistance to support the implementation of an integrated renewable energy deployment plan for a community, and the construction of renewable energy systems. Completed applications are due September 3, 2009. USDOE will select awardees by the end of November 2009.

**Info document:**
http://www07.grants.gov/search/search.do;jsessionid=GJy2KfCGJg9SF6JBrqGcjTp3654NZ1Xp2NByw62DLjQnTBzKC
Bny!-723925807?oppId=48485&mode=VIEW

**File name:** N/A

**Page:** N/A

Energy Efficiency and Renewable Technology Research Program

Type: Grant/Subsidy

Federal agency: USDOE

Agency website: http://www.eere.energy.gov/

Initiating program: Energy Efficiency and Renewable Energy

RE area type: Research

Recipient type: Various

Description: To conduct balanced research and development efforts in the following energy technologies: solar, biomass, hydrogen, fuel cells and infrastructure, wind and hydropower, hydrogen, and geothermal. Grants will be offered to develop and transfer to the nonfederal sector various renewable energy technologies on a competitive basis.

Amount: Varied

Other info: Profit organizations, private nonprofit institutions/organizations, intrastate, interstate, and local agencies and universities may apply. Profit organizations, private nonprofit institutions/organizations, intrastate, interstate, State and local agencies and universities will benefit.


File name: DOE_EnergyEff_Renewable_Tech_Research_funding

Page: N/A

Source: www.eere.doe.gov
Qualified Energy Conservation Bonds

Type: Tax Credit

Federal agency: US Dept. of the Treasury

Agency website: http://www.treas.gov/recovery/

Initiating program: Recovery Act

RE area type: Research

Recipient type: Various

Description: Qualified Energy Conservation Bonds (QECBs) may be used by state, local, and tribal governments to finance certain types of energy projects. QECBs are qualified tax credit bonds, and in this respect are similar to new CREBs. The October 2008 enabling legislation set a limit of $800 million on the volume of energy conservation tax credit bonds that may be issued by state and local governments. However, The American Recovery and Reinvestment Act of 2009, enacted in February 2009, expanded the allowable bond volume to $3.2 billion. In April 2009 the IRS issued Notice 2009-29 providing interim guidance on how the program will operate and how the bond volume will be allocated.

Amount: The advantage of these bonds is that they are issued—theoretically—with a 0% interest rate. The borrower pays back only the principal of the bond, and the bondholder receives federal tax credits in lieu of the traditional bond interest. In contrast to CREBs, QECBs are not subject to a USDOT application and approval process. Bond volume is instead allocated to each state based on the state's percentage of the US population as of July 1, 2008. Each state is then required to allocate a portion of its allocation to "large local governments" within the state based on the local government’s percentage of the state’s population. Large local governments are defined as municipalities and counties with populations of 100,000 or more.

Other info: The definition of "qualified energy conservation projects" is fairly broad and contains elements relating to energy efficiency capital expenditures in public buildings, renewable energy production, various research and development applications, mass commuting facilities that reduce energy consumption, several types of energy related demonstration projects, and public energy efficiency education campaigns (see H.R. 1424 for additional details). Renewable energy facilities that are eligible for CREBs are also eligible for QECBs.

Info document: N/A

File name: N/A

Page: N/A

Source: www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US51F&re=1&ee=1
**Advanced Energy Manufacturing Credit**

**Type:** Tax Credit

**Federal agency:** US Dept. of the Treasury

**Agency website:** [http://www.treas.gov/recovery/](http://www.treas.gov/recovery/)

**Initiating program:** Recovery Act

**RE area type:** Smart Grid

**Recipient type:** Development

**Description:** The American Recovery and Reinvestment Act of 2009 established a new investment tax credit to encourage the development of a US-based renewable energy manufacturing sector. In any taxable year, the investment tax credit is equal to 30% of the qualified investment required for an advanced energy project that establishes, re-equip, or expands a manufacturing facility that produces any of the following:

- Equipment and/or technologies used to produce energy from the sun, wind, geothermal or "other" renewable resources
- Fuel cells, microturbines, or energy-storage systems for use with electric or hybrid-electric motor vehicles
- Equipment used to refine or blend renewable fuels
- Equipment and/or technologies to produce energy-conservation technologies (including energy-conserving lighting technologies and smart grid technologies)

**Amount:** USDOT will issue certifications for qualified investments eligible for credits to qualifying advanced energy project sponsors. In total, $2.3 billion worth of credits may be allocated under the program.

**Other info:** After certification is granted, the taxpayer has one year to provide additional evidence that the requirements of the certification have been met and three years to put the project in service.

**Info document:** N/A

**File name:** N/A

**Page:** N/A

**Source:** [www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US52F&re=1&ee=1](http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US52F&re=1&ee=1)
Smart Grid Investment Program

Type: Grants/Subsidies

Federal agency: USDOE


Initiating program: Recovery Act

RE area type: Smart Grid

Recipient type: Development

Description: The program will apply a competitive, merit-based approach for providing funds to organizations for qualifying smart grid investment projects to advance smart grid functions. In addition to providing funds for smart grid projects, USDOE will allocate a portion of the funds for projects that deploy Phasor Measurement Unit technology within the transmission system infrastructure. USDOE desires to evaluate the cost-effectiveness and other benefits of deployed smart grid technology. Therefore, applicants will be required to collect data that will enable quantitative evaluation of the benefits of the technology.

Amount: USDOE will provide funding covering up to 50% of qualified investments requested by grant applicants. USDOE anticipates providing funds in the range of $500,000 to $20,000,000 for smart grid technology deployment grants and $100,000 to $5,000,000 for Phasor Measurement Unit deployment grants.

Other info: N/A

Info document: N/A

File name: N/A

Page: N/A

Source: [http://itecsinsider.com/?p=7916](http://itecsinsider.com/?p=7916)
Weatherization Assistance Program (WAP)

Type: Grant/Subsidy

Federal agency: USDOE, Weatherization Assistance Program


Initiating program: Weatherization Assistance Program

RE area type: Weatherization

Recipient type: Various

Description: This program reduces energy costs for low-income households by increasing the energy efficiency of their homes, while ensuring their health and safety. It provides energy-efficiency services to more than 100,000 homes every year, reducing average annual energy costs by $413 or more per household. USDOE works in partnerships with state and local-level agencies to implement the program. The USDOE Project Management Center awards grants to state-level agencies, which then contract with local agencies.

Amount: N/A

Other info: Weatherization helps revitalize communities by spurring economic growth and reducing environmental impacts. For every $1 invested, the program returns $2.72 in energy and non-energy related benefits. By reducing energy consumption in low-income homes, it returns $1.65 in energy-related benefits for every $1 invested. Every $1 invested by USDOE leverages $1.54 in other federal, state, utility, and private resources. Agencies use leveraged resources to weatherize more low-income homes and to deliver more services while in the home.

Info document: US Department of Energy Weatherization Assistance Program Overview

File name: USDOE_Weatherization_Assitance_Summary

Page: N/A

Source: [http://apps1.eere.energy.gov/weatherization/](http://apps1.eere.energy.gov/weatherization/)
4.2 Existing incentives in Central Appalachian states

Tax Modernization Plan

Type: Tax Credit

Government level: State

CAPP state: Kentucky

RE area type: Biodiesel

Recipient type: Development

Description: The Kentucky Governor’s 2005 tax modernization plan includes a $1.5 million tax credit to biodiesel producers and blenders.


Page: 35

Source: www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf
Special Property Tax Assessment for Wind Energy Systems

Type: Tax Rate Reduction

Government level: State

CAPP state: West Virginia

RE area type: Wind Power

Recipient type: Development

Description: For the purposes of property tax assessment, utility-owned wind projects are considered to have a value equal to their salvage value, with certain limitations. This incentive effectively lowers the property tax base on utility-owned wind turbines from 100% of fair market value to as little as 24.95% of fair market value. This results in an effective property tax rate on wind turbines that is 24.95% of the effective tax rate on most other types of newly constructed electricity-generating units.

Info document I: West Virginia Special Assessment for Wind Energy Systems

Page: N/A

Source: www.dsireusa.org/incentives/index.cfm?re=1&ee=1&spv=0&st=0&srp=1&state=WV
Business and Operation (B&O) Tax Exemption for Wind Energy Generation

Type: Tax Rate Reduction

Government level: State

CAPP state: West Virginia

RE area type: Wind Power

Recipient type: Development

Description: In March 2007, West Virginia enacted legislation (SB 441) amending its tax law concerning the B&O tax for wind turbines. Although SB 441 increased the taxable value of wind turbine generating capacity from 5% to 12%, the taxation level is still significantly lower than that of most other types of electricity generation. After reducing the B&O tax for wind energy systems from 60% of the generating capacity to 5% of the generating capacity nearly a decade ago, the state legislature raised that percentage to 12% of generating capacity in 2007. As the law stands, the developer/owner of a wind farm pays $22.78 per kW of generating capacity. For a 100 MW wind farm, for example, the developer/owner would pay taxes on 12 MW or 12,000 kW, and would pay $22.78 per kW for a total of $273,360 in annual B&O taxes.

Info document I: West Virginia Tax Exemption for Wind Energy Generation

Page: N/A

Source: www.dsireusa.org/incentives/index.cfm?re=1&ee=1&spv=0&st=0&srp=1&state=WV
Energy Efficiency Education Grant

Type: Grant/Subsidy

Government level: State

CAPP state: Kentucky

RE area type: Energy Efficiency

Recipient type: Education

Description: The Energy Efficiency Education Grant provided to the University of Kentucky gave $95,176 to promote energy efficiency education throughout the commonwealth.


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Source: www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf
Energy Efficiency for Schools Program

Type: Grant/Subsidy

Government level: State

CAPP state: Kentucky

RE area type: Energy Efficiency

Recipient type: Education

Description: The Kentucky Energy Efficiency Program for Schools Program provided a $77,000 grant for the University of Louisville, which is aimed at managing the energy costs of schools in Kentucky. The program offers a complete package, including tools, curriculum, training, coaching, and expertise to guide participating schools on how to reduce their energy costs and achieve energy efficiency.


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Source: www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf
**Local Government Energy Loan Program**

**Type:** Low-interest Loan

**Government level:** State

**CAPP state:** Tennessee

**RE area type:** Energy Efficiency

**Recipient type:** Local Government

**Description:** The Local Government Energy Loan Program in Tennessee gives low interest loans to municipal and county governments for energy efficiency-related projects in courthouse, administration buildings, schools, maintenance facilities, and any other building owned by the city or county. Eligible projects can borrow up to $500,000 at an approximate 3% interest rate for up to 7 years.

**Info document I:** Appalachian Regional Commission, Marshall University, "Energy Efficiency and Renewable Energy in Appalachia: Policy and Potential"

**Page:** 34

**Source:** [www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf](http://www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf)
Local Option Property Tax Exemption for Solar

Type: Tax Exemption

Government level: State

CAPP state: Virginia

RE area type: Solar Power

Recipient type: Local Government

Description: Virginia allows a Local Option Property Tax Exemption for Solar, in which any county, city, or town may exempt or partially exempt solar energy equipment or recycling equipment—installed in residential, commercial or industrial property—from local property taxes.


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Source: www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf
**Small Wind Incentives Program**

**Type:** Grant/Subsidy

**Government level:** State

**CAPP state:** Virginia

**RE area type:** Wind Power - Small

**Recipient type:** Residential

**Description:** The Small Wind Incentives Program offers funds to Virginia landowners for the purchase and installation of small wind energy systems. The maximum award will be the lower of $10,000 or 33% of installed costs.

**Info document I:** Appalachian Regional Commission, Marshall University, "Energy Efficiency and Renewable Energy in Appalachia: Policy and Potential"

**Page:** 32

**Source:** [www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf](http://www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf)
Solar Water Heater Loan Program

**Type:** Low-interest Loan

**Government level:** State

**CAPP state:** Kentucky

**RE area type:** Solar

**Recipient type:** Residential

**Description:** Under the Solar Water Heater Loan Program, participating Eastern Kentucky counties are offering customers a 6-year payback term loan with 5% down payment and an interest rate of 3% to cover the total cost of a solar water heater for residential and commercial applications.

**Info document I:** Appalachian Regional Commission, Marshall University, "Energy Efficiency and Renewable Energy in Appalachia: Policy and Potential"

**Page:** 33

**Source:** [www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf](http://www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf)
Solar Water Heater Rebate Program

Type: Rebate

Government level: State

CAPP state: Kentucky

RE area type: Solar Heating/Cooling

Recipient type: Residential

Description: The Kentucky Solar Partnership is offering a $500 rebate for solar water heaters installed in residences. The budget is available for 25 installations total.


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Source: www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf
Sales Tax Exemption for Energy Efficient Products

**Type:** Tax Exemption

**Government level:** State

**CAPP state:** West Virginia

**RE area type:** Energy Efficiency

**Recipient type:** Residential

**Description:** West Virginia's annual sales "holiday" on Energy Star® products provides a sales tax exemption for qualified products of $5,000 or less, purchased for home or personal use, throughout the months of September through November in 2009 and 2010. The introductory year of the sales tax exemption (2008) offered slightly different terms: the Energy Star® products of $2,500 or less per product, purchased for non-commercial home or personal use during September 1-7, 2008, were exempt from sales tax.

**Info document I:** West Virginia Sales Tax Exemption for Energy-Efficient Products

**Page:** N/A

**Source:** [www.dsireusa.org/incentives/index.cfm?re=1&ee=1&spv=0&st=0&srp=1&state=WV](http://www.dsireusa.org/incentives/index.cfm?re=1&ee=1&spv=0&st=0&srp=1&state=WV)
Small Business Energy Loan Program

Type: Low-interest Loan

Government level: State

CAPP state: Tennessee

RE area type: Renewables and Efficiency

Recipient type: Small Business

Description: The Small Business Energy Loan Program creates low interest loans for renewable energy and energy efficiency projects. Qualified loans are up to $100,000 for a maximum of 7 years payback time and are offered to businesses with fewer than 300 employees or less than $3.5 million in annual gross sales or receipts.


Page: 34

Source: www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf
**Wind Energy Systems Exemption**

**Type:** Tax Exemption

**Government level:** State

**CAPP state:** Tennessee

**RE area type:** Wind Power

**Recipient type:** Various

**Description:** This tax exemption in Tennessee was enacted in 2003, and provides that wind energy systems operated by public utilities, businesses, or industrial facilities shall not be taxed at more than one-third of their total installed cost.

**Info document I:** Appalachian Regional Commission, Marshall University, "Energy Efficiency and Renewable Energy in Appalachia: Policy and Potential"

**Page:** 37

**Source:** [www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf](http://www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf)
Green Power Partners Program

**Type:** Funding program

**Government level:** Regional

**CAPP state:** Regional Grid

**RE area type:** All Renewables

**Recipient type:** Various

**Description:** The Tennessee Valley Authority has established a Green Power Partners Program in its service territory. Green power consists of electricity generated from renewable sources. Green Power is sold in 150 kWh blocks which is about 12 percent of an average households use. The cost is $4 for each block. The green power used is from the Authority’s 18 wind turbines, 16 solar facilities and one methane plant. No expansion is currently planned as there is a 30 percent surplus of unsold green power available.

**Info document I:** Appalachian Regional Commission, Marshall University, "Energy Efficiency and Renewable Energy in Appalachia: Policy and Potential"

**Page:** 38

**Source:** [www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf](http://www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf)
Appalachian Power and Wheeling Power Companies' 'Green Pricing' Program

Type: Funding program

Government level: Regional

CAPP state: Regional Grid

RE area type: All Renewables

Recipient type: Various

Description: These utilities—subsidiaries of American Electric Power—define "green power" as electricity generated by using renewable resources such as wind, hydro, solar and biomass. Residential customers can support the generation of renewable energy, which usually costs more than coal-fired power, by voluntarily participating in the green pricing option. They do so by purchasing blocks of green energy. Each block is equivalent to 100 kWh of renewable energy. The cost is $1.50 per block. The minimum purchase is two blocks and the maximum is 50 blocks. The cost is in addition to a customer’s regular monthly electric bill and is reflected as a separate line item on the bill. The typical residential customer uses an average of 1,000 kWh of electricity a month, so purchasing 10 blocks of green energy would match that usage.


Page: 1

Source: www.saturdaygazettemail.com/News/GeorgeHohmann/200901170292?page=2&build=cache
West Virginia Solar Tax Credit

**Type:** Tax Credit

**Government level:** State

**CAPP state:** West Virginia

**RE area type:** Solar Power

**Recipient type:** Various

**Description:** Installations of solar energy systems in West Virginia will be eligible for a 30% tax credit as of July 1, 2009, with a $2,000 cap. The tax credit covers solar electric, solar heating and cooling, and solar hot water systems.

**Info document I:** West Virginia Residential Solar Energy Tax Credit

**Page:** N/A

**Source:**
[www.legis.state.wv.us/Bill_Status/bills_text.cfm?billdoc=HB2535%20ENR%20SUB%202.htm&yr=2009&sesstype=rs&i=2535](http://www.legis.state.wv.us/Bill_Status/bills_text.cfm?billdoc=HB2535%20ENR%20SUB%202.htm&yr=2009&sesstype=rs&i=2535)
4.3 Model incentives for Central Appalachia available in other states

Capacity-based Incentives

Type: Development Incentive

Government level: State

Example state: California

RE area type: Renewables and Efficiency

Description: These state-level programs (often known as “buydown” or “rebate” programs) offer primarily up-front, capacity-based incentives (CBIs), which provide a certain dollar amount per installed Watt (W) of PV upon proof of installation. The incentive level is often expressed on a $/W basis, and is sometimes accompanied by a percentage cap that limits the size of the incentive to no more than 50% (for example) of total installed costs.

Other info: N/A

Info document: Financing Non-Residential Photovoltaic Projects: Options and Implications

Page: PDF page 25

Expected Performance-based Buy-down

Type: Development Incentive

Government level: State

Example state: California

RE area type: Renewables and Efficiency

Description: Systems less than 50 kW (with the threshold dropping to 30 kW starting in 2010) can elect to receive either a performance-based incentive, or an expected performance-based buy-down (EPBB). By paying the incentive up-front on a $/W basis (like a CBI), but adjusting the capacity-based payment level based on a variety of factors (such as azimuth, tilt, and shading) that will impact expected performance, an EPBB represents an intermediate approach between CBIs and performance-based incentives (PBIs). In recognition of their inability to benefit from tax incentives, systems owned by non-taxable entities receive higher PBIs and EPBB incentive levels than those owned by taxable entities (some other states also provide differentially higher incentive levels to non-taxable entities for this reason).

Other info: N/A

Info document: Financing Non-Residential Photovoltaic Projects: Options and Implications

Page: PDF page 25

**Performance-based Incentives**

**Type:** Development Incentive

**Government level:** State

**Example state:** California

**RE area type:** Renewables and Efficiency

**Description:** PBIs do not provide up-front cash on a $/W basis; rather, they provide ongoing cash payments on a $/kWh basis over a predetermined period such as five years. Although the PBI structure encourages better system performance, it does so by imposing performance risk on the recipient. A PBI also leaves the system owner shouldering more of PV's high up-front cost than it would under a CBI.

**Other info:** N/A

**Info document:** Financing Non-Residential Photovoltaic Projects: Options and Implications

**Page:** PDF page 25

**Source:** [http://eetd.lbl.gov/ea/ems/reports/lbnl-1410e.pdf](http://eetd.lbl.gov/ea/ems/reports/lbnl-1410e.pdf)
Photovoltaic Incentive Program

Type: Development Incentive

Government level: State

Example state: New York

RE area type: Solar Power

Description: Provides incentives of $4 to $4.5 per Watt, based on direct-current module rating, to eligible installers for the installation of approved, grid-connected PV systems that have a maximum of 50 kW capacity. The total budget available for this program has been raised to 12 million in 2005.

Other info: N/A


Page: 38

Source: www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINALREPORT.pdf
State Investment Tax Credit

**Type:** Development Incentive

**Government level:** State

**Example state:** Oregon

**RE area type:** Renewables and Efficiency

**Description:** On the federal level, the Renewable Energy Investment Tax Credit is available for covering up to 30% of the system cost (includes installation costs), with no cap for: PV, solar water heat, small wind (100 kW maximum), fuel cells, geothermal heat pumps (residential), and 10% for geothermal commercial, microturbines, and CHP. On the state level, similar tax credits are being used to support customer-sited PV and wind energy systems, offering owners of renewable energy systems investment tax credits of up to 50% (taken over 5 years, as in Oregon) or up to 35% of qualifying installed costs (as in Hawaii).

**Other info:** N/A

**Info document:** Financing Non-Residential Photovoltaic Projects: Options and Implications

**Page:** PDF page 26

**Source:** [http://eetd.lbl.gov/ea/ems/reports/lbnl-1410e.pdf](http://eetd.lbl.gov/ea/ems/reports/lbnl-1410e.pdf)
Information Source: State Financing Options for Solar Photovoltaics

Type: Financing Structure

Government level: State

Example state: N/A

RE area type: Solar Power

Description: This article describes how states are beginning to look at PV financing options in terms of cost structure, incentives and revenues. It concludes by saying that third-party financing is the best option for public sector PV installations.

Other info: Includes an overview of costs and benefits of PV systems and state and federal incentives for PV

Info document: States Explore Financing Options for Solar Photovoltaics

Page: N/A

Source: http://apps1.eere.energy.gov/state_energy_program/update/feature_detail.cfm/fid=82
Power Purchasing Agreements (PPAs)

Type: Financing Structure

Government level: Local

Example state: Colorado

RE area type: Renewables and Efficiency

Description: Boulder County, Colorado’s sustainability plan includes a description of their PPA policy on the county level. This document shows how Boulder County serves as a model for counties to follow in order to achieve Net Zero Energy and Waste, and thus true sustainability.

Other info: PPA Financial (model):
- Fixed cost per kWh for 7 years
- About 2 cents less per kWh than current rate
- Conservative estimate of $822 thousand in savings
- Set aside reserve funds

Info document: Boulder County: Power Purchase Agreements

Page: 15

Source: http://apps1.eere.energy.gov/wip/pdfs/tap_webcast_20090527_livingston.pdf
Third Party Financing and Power Purchase Agreements for Public Sector PV Projects

**Type:** Financing Structure

**Government level:** Local

**Example state:** Colorado

**RE area type:** Solar Power

**Description:** A presentation detailing third-party financing and PPAs for financing renewable energy systems. This slideshow related to a 2009 National Renewable Energy Laboratory Technical Assistance Project Webcast provides a model for publicly financing renewable energy installations and simulating the development of such systems.

**Other info:** Some key elements of a PPA: Price per kWh of electricity, annual escalation factor (2-5%), length of the agreement (20-25 years), purchase options (starting in year 7), termination options, and many legal issues

**Info document:** Third-Party Financing and Power Purchase Agreements for Public Sector PV Projects

**Page:** N/A

**Source:** [http://apps1.eere.energy.gov/wip/pdfs/tap_webcast_20090527_coughlin.pdf](http://apps1.eere.energy.gov/wip/pdfs/tap_webcast_20090527_coughlin.pdf)
Advanced Renewable Tariffs

Type: Funding program

Government level: State

Example state: Minnesota

RE area type: Renewables and Efficiency

Description: An Advanced Renewable Tariff is a type of feed-in tariff differentiated by technology, size, application, and sometimes resource intensity. There is one price or tariff paid for wind energy, another price for solar, and so on. Tariffs within each technology are also differentiated by project size or, in the case of wind energy, by the productivity of the resource.

According to this document, renewable tariffs are the world’s most successful policy mechanism for stimulating the rapid development of renewable energy. They are also transparent, comprehensible, and equitable: the door is open to everyone from farmers to homeowners, small to large businesses, and independent power producers to cooperatives.

Other info: In Advanced Renewable Tariffs, individual tariffs are determined by the cost of generating the electricity plus a reasonable profit for the producer. The market then functions to determine how much, where, and by whom renewables will be developed.

Info document: Advanced Renewable Tariffs: What Are They?

Page: N/A

Source: www.wind-works.org/FeedLaws/PrimersonFeed-inTariffsandAdvancedRenewableTariffs.html
Community-Based Energy Development Tariffs

**Type:** Funding program

**Government level:** State

**Example state:** Minnesota

**RE area type:** Renewables and Efficiency

**Description:** The Community-Based Energy Development Tariff is a public policy adopted by the Minnesota Legislature in 2005 to promote more locally owned and dispersed wind energy facilities within the state. The tariff is a new concept that creates a standardized framework for community wind projects to negotiate with utilities. This law only applies only to wind energy, but it could be expanded in the future to other forms of renewable energy.

**Other info:** The law does not specify a price for wind energy. It sets a top price that utilities are allowed to pay. This ceiling is 2.7 cents net present value rate per kWh. The rate is calculated using a financial tool.

**Info document:** Community Based Energy Development Tariff

**Page:** N/A

**Source:** [www.c-bed.org/key_elements.html](http://www.c-bed.org/key_elements.html)
Low-Income Renewable Energy Programs

Type: Funding program

Government level: State

Example state: Pennsylvania

RE area type: Renewables and Efficiency

Description: Pennsylvania provides funding programs to promote the use of renewable energy technologies in low-income residential buildings or communities. Only programs specifically targeting low-income applications are covered.

Other info:

Info document: Low-Income Renewable Energy Programs, A Survey of State Clean Energy Funds

Page: N/A

**North Carolina Green Power Program**

**Type:** Funding program

**Government level:** State

**Example state:** North Carolina

**RE area type:** Renewables and Efficiency

**Description:** This statewide program is designed to improve the quality of the environment by encouraging the development of renewable energy resources through consumers' voluntary funding of green power purchases by electric utilities in North Carolina. The program revenues will help provide financial incentives for generators of electricity from renewable sources.

**Other info:** Summary Chart: [http://ncgreenpower.org/about/program_overview_7.html](http://ncgreenpower.org/about/program_overview_7.html)

**Info document:** NC GreenPower Program Plan

**Page:** N/A

**Source:** [www.ncgreenpower.org/elements/pdfs/NCGreenPowerProgramPlan.pdf](http://www.ncgreenpower.org/elements/pdfs/NCGreenPowerProgramPlan.pdf)
New Jobs Training Program

Type: Funding program

Government level: State

Example state: Iowa

RE area type: Green Workforce Training

Description: This program provides funding to support the cost of training new employees in new business startups or the expansion of existing firms, using a unique financing mechanism. The program authorizes Iowa’s 15 community colleges to issue bonds for up to 10 years on behalf of a business that is creating jobs. The proceeds of the bond sale support the training required for the new jobs and related program administrative expenses. The bonds are paid off by diverting to the college 1.5 or 3 percent of the increased payroll tax revenues resulting from the creation of jobs. Local property tax receipts resulting from new capital investment made to support the new jobs can also be encumbered for up to 10 years through the use of tax increment financing, although this mechanism is seldom used anymore.

Other info: N/A

Info document: Greener Pathways

Page: 41

Source: www.greenforall.org/resources/greener-pathways-jobs-and-workforce-development-in
New York Systems Benefits Charge

Type: Funding program

Government level: State

Example state: New York

RE area type: Energy Efficiency

Description: The purpose of New York’s Systems Benefit Charge is to collect a surcharge on the customers of the private utilities to support energy research, encourage energy efficiency, and provide energy assistance to low-income households. The charge may also be used to determine how to reduce the negative impacts of energy production and to increase competition in energy markets.

Other info: Public benefit funds go by different names in ARC states which have them. These are additional small charges to customers attached to their electric bills.


Page: 31

Source: www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINALL REPORT.pdf
Public Benefits Funds

**Type:** Funding program

**Government level:** State

**Example state:** Various

**RE area type:** All Renewables

**Description:** Similar to the Sustainable Energy Fund. Public Benefits Funds preserve the public benefits of renewable energy by creating a direct funding mechanism for renewables in the restructuring process. Public benefits funding can be provided from fees placed on electricity companies or customers. Such fees are sometimes referred to as “system benefit charges” and are analogous to funding mechanisms created during both long-distance telephone and airline deregulation.

**Other info:** N/A

**Info document:** Renewable Energy Policies - 7 Ways to Switch

**Page:** 5

**Source:** [www.ucsusa.org/assets/documents/clean_energy/ps5.pdf](http://www.ucsusa.org/assets/documents/clean_energy/ps5.pdf)
Renewable Energy Trust

Type: Funding program

Government level: State

Example state: Massachusetts

RE area type: Renewables and Efficiency

Description: The Renewable Energy Trust seeks to maximize environmental and economic benefits for the Commonwealth’s citizens by pioneering and promoting clean energy technologies and fostering the emergence of sustainable markets for electricity generated from renewable sources. The Trust provides financial assistance to individuals and businesses for solar panels and wind turbines at their homes and facilities, works with communities to incorporate green design into schools, and helps emerging clean energy businesses flourish in the Commonwealth.

Other info: This document and the related Web site provide a number of good model financing opportunities for renewable energy development of various scales.

Info document: Renewable Energy Trust

Page: N/A

Source: www.masstech.org/renewableenergy/index.html
Sustainable Energy Funds

Type: Funding program

Government level: State

Example state: Pennsylvania

RE area type: All Renewables

Description: The five major private utilities in Pennsylvania have created Sustainable Energy Funds that operate in their service areas.

Other info: http://thesef.org/kb/?View=entry&EntryID=23


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Source: www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf
Sustainable Energy Funds II

Type: Funding program

Government level: State

Example state: Various

RE area type: All Renewables

Description: The Sustainable Energy Fund is a private, non-profit organization that promotes energy efficiency, renewable energy, and education initiatives in Pennsylvania. The Fund may also finance certain projects in the eastern PJM grid territory, which includes New Jersey, Delaware, and Maryland. By offering financial incentives that promote sound energy strategies, the Fund can help municipalities, school districts, non-profits, farmers, manufacturing facilities, warehouses, transportation companies, and other businesses save energy and reduce costs.

Other info: N/A

Info document: N/A

Page: N/A

Source: www.sustainableenergyfund.org
Assisted Home Performance Grant

Type: Grant/Subsidy

Government level: State

Example state: New York

RE area type: Energy Efficiency

Description: New York offers grants to low-income residences for energy efficient improvement. Grants can be up to $5,000 for single-home owners and $10,000 per building for 2-4 family units.

Other info: N/A


Page: 32

Source: www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf
Clean Energy Manufacturing Fund

Type: Grant/Subsidy

Government level: State

Example state: New Jersey

RE area type: Renewables and Efficiency

Description: New Jersey serves as a model for financial assistance from the state Economic Development Authority (as administrator of the Clean Energy Manufacturing Fund), for supporting renewable energy or energy efficiency companies. The Clean Energy Manufacturing Fund provides up to $3.3 million in financial assistance in the form of zero interest loans and grants to support Class I renewable energy or energy efficiency companies entering or expanding within the manufacturing stage of commercial development.

Other info: N/A

Info document: Edison Innovation Clean Energy Manufacturing Fund

Page: 1

Source:
Commercial Grant Program

Type: Grant/Subsidy

Government level: State

Example state: Pennsylvania

RE area type: All Renewables

Description: West Penn Power SEF Commercial Grant Program provides funds to nonprofit companies and community-based organizations for the development and the use of renewable energy and clean energy. Grant amounts vary by proposal.

Other info: Available for non-profits


Page: 32

Source: www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf
Dispersed Energy and Renewable Energy Grants

Type: Grant/Subsidy

Government level: State

Example state: Ohio

RE area type: All Renewables

Description: Grants area available to commercial, institutional, and industrial projects with a maximum capacity of 25 MW for up to $100,000 per grant. The program also provides grants to residential renewable energy projects for up to $25,000 per grant and to nonresidential projects for up to $150,000 per grant. A certain percentage of cost sharing is required for all grants.

Other info: N/A


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Source: www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf
**Energy Loan Fund Grant for Energy Efficiency**

**Type:** Grant/Subsidy

**Government level:** State

**Example state:** Ohio

**RE area type:** Energy Efficiency

**Description:** The Energy Loan Fund Grant for Energy Efficiency provides funds to cover up to 25% of the total costs of projects that can improve energy efficiency by at least 15%. The maximum amount that will be awarded is $50,000.

**Other info:** N/A

**Info document:** Appalachian Regional Commission, "Energy Efficiency and Renewable Energy in Appalachia: Policy and Potential"

**Page:** 32

**Source:** [www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf](http://www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf)
Fuel Cell Research Grant Program

Type: Grant/Subsidy

Government level: State

Example state: Ohio

RE area type: Transportation

Description: Ohio offers a Fuel Cell Grant Program that would use the $100 million budget to support fuel cells related research, project demonstration, and job creation.

Other info: N/A


Page: 32

Source: www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf
ConserFund Loan Program

Type: Loan

Government level: State

Example state: South Carolina

RE area type: Energy Efficiency

Description: The ConserFund Loan Program in South Carolina offers loans to fund energy efficiency improvements in state agencies, local governments, public colleges and universities, school districts, and non-profit organizations. The loans can help organizations cover up to 100% of eligible projects costs, from $25,000 to $500,000.

Other info: Available for Non-Profits


Page: 34

Source: www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf
**Electrical Grid Company Loan**

**Type:** Loan

**Government level:** State

**Example state:** Pennsylvania

**RE area type:** Renewables and Efficiency

**Description:** Pennsylvania utility FirstEnergy has set up four types of loan programs available for residential, commercial, and industrial customers. These programs are aimed at developing renewable energy, energy efficiency, and environmental improvement projects.

**Other info:** N/A

**Info document:** Appalachian Regional Commission, "Energy Efficiency and Renewable Energy in Appalachia: Policy and Potential"

**Page:** 34

**Source:** [www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf](http://www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf)
Green Building Improvement Loan

Type: Loan

Government level: State

Example state: New York

RE area type: Building Efficiency

Description: All facilities can apply for the Green Building Improvement Loan, up to $500,000, if the facility has been registered for the LEED certification with the United States Green Building Council. The maximum loans for residential is $20,000; for multifamily and all other non-residential is $1 million plus $500,000 for green building improvement; and for existing multifamily is $2.5 million. An additional maximum of $2,500,000 is available for projects that include advanced meters.

Other info: N/A


Page: 33

Source: [www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf](http://www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf)
Community Energy Loan Program

Type: Low-interest Loan

Government level: State

Example state: Maryland

RE area type: Energy Efficiency

Description: Community Energy Loan Program in Maryland offers loans to eligible local governments and nonprofit organizations, including hospitals and schools, to finance energy saving projects. On average, about $600,000 is available per loan and the current interest rate is approximately 3.5%. Organizations have up to seven years to pay off the loan. By September 2005, 49 organizations had utilized this program, generating an annual saving of 2.4 million in the state.

Other info: Available for non-profits


Page: 33

Source: [www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf](http://www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf)
Energy Investment Loan Program

Type: Low-interest Loan

Government level: State

Example state: Mississippi

RE area type: Renewables and Efficiency

Description: The Energy Investment Loan Program in Mississippi provides loans ranging from $15,000 to $300,000 at an interest rate 3% below the prime rate, with a maximum loan term of seven years, for renewable energy and energy efficiency projects.

Other info: N/A


Page: 33

Source: www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf
Energy Loan Fund

Type: Low-interest Loan

Government level: State

Example state: Ohio

RE area type: Energy Efficiency

Description: Ohio’s Energy Loan Fund is financed by a surcharge collected from the state’s four public utilities to provide low-interest loans and loan guarantees for energy efficient upgrades at residential, governmental, educational, small commercial/industrial, and agriculture facilities.

Other info: N/A


Page: 31

Source: www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf
Home Performance with Energy Star Loan Program

Type: Low-interest Loan

Government level: State

Example state: New York

RE area type: Renewables and Efficiency

Description: The Home Performance with Energy Star Loan Program offers up to $20,000 unsecured loans with a 5.99% rate to residential customers for the installation and development of energy efficient and renewable resources measures. However, measures must to meet Energy Star qualifications to be eligible and equipment must be installed by approved by Building Performance Institute–certified contractors.

Other info: N/A


Page: 33

Source: www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf
Renewable Fuels Program

**Type:** Low-interest Loan

**Government level:** State

**Example state:** Alabama

**RE area type:** Biomass

**Description:** Alabama’s Renewable Fuels Program assists business in the installation of biomass energy system. This program offers participants technical assistance and subsidies up to $75,000 to cover the interest payment on loans to install approved biomass projects. Interest rates should be no greater than 2% above the prime rate.

**Other info:** N/A

**Info document:** Appalachian Regional Commission, "Energy Efficiency and Renewable Energy in Appalachia: Policy and Potential"

**Page:** 31

**Source:** [www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf](http://www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf)
State Agency Loan Program

Type: Low-interest Loan

Government level: State

Example state: Maryland

RE area type: Energy Efficiency

Description: The State Agency Loan Program provides loans with 0% interest and a 1% administration fee for state agencies to fund energy efficiency improvements in state facilities. This program offers about $1 million in new loans each year. A total of $1.5 million was awarded to state agencies in 2005, estimated to generate savings of about $267,114 annually.

Other info: N/A


Page: 33

Source: www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf
Greenhouse Gas Offsets

Type: Market Value

Government level: Various

Example state: Regional

RE area type: All Renewables

Description: By voluntarily reducing greenhouse gas (GHG) emissions and/or producing renewable electricity, renewable energy developers/installers can generate greenhouse gas offsets that can then be sold. Markets related to GHG emissions are evolving, and some already exist. Offsets may come from a variety of different types of projects, including reforestation projects, renewable energy development, or energy-efficiency initiatives. In general, offsets are sold to third parties that pay to reduce GHG emissions such as landfill methane. Companies that are required or that have committed to reduce their GHG emissions may find it more cost-effective to pay for offsets than to cut their own emissions. Because climate change is affected by the global release of GHGs, the location of these offset projects usually does not matter.

Other info: N/A


Page: 2

Source: Not the same report, but the same information is included in this report: http://downstreamstrategies.com/Documents/reports_publication/Prospects_for_landfill_gas-to-energy_WV_May2006.pdf
Renewable Energy Credits (RECs)

**Type:** Market Value

**Government level:** Various

**Example state:** Regional

**RE area type:** All Renewables

**Description:** RECs, also known as renewable energy certificates, tradable renewable certificates, or green tags, can be thought of as the environmental attributes of electricity, and can be sold separately from the actual electricity that is produced at a given generation facility. When electricity is produced and fed onto a regional grid, distribution companies cannot control where individual electrons flow. Instead, the electrons closest to an end-user are the ones that are received over the transmission lines. In this sense, when someone buys “green” electricity, they are really only buying the attributes of production for a corresponding amount of electrons.

**Other info:** N/A

**Info document:** Greenhouse Gas Offsets and Renewable Energy Credits for Landfill Gas-To-Energy Projects in West Virginia

**Page:** 7

**Source:** Not the same report, but the same information is included in this report: [http://downstreamstrategies.com/Documents/reports_publication/Prospects_for_landfill_gas-to-energy_WV_May2006.pdf](http://downstreamstrategies.com/Documents/reports_publication/Prospects_for_landfill_gas-to-energy_WV_May2006.pdf)
Biomass Energy Interest Subsidy Program

Type: Rebate

Government level: State

Example state: Alabama

RE area type: Biomass

Description: This program provides reimbursement of interest to property owners on loans for installing biomass energy systems.

Other info: N/A


Page: 37

Source: www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf
Energy Smart New Construction Program

Type: Rebate

Government level: State

Example state: New York

RE area type: Building Efficiency

Description: This program promotes the incorporation of energy efficiency and renewable energy resources in the design, construction, and operation of commercial, industrial, institutional, and multifamily buildings. The program’s $10 million budget is used to provide incentives up to $375,000 per project for whole building design projects and up to $120,000 for most other projects.

Other info: N/A


Page: 37

Source: www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf
LIPA Solar Pioneer Program

Type: Rebate

Government level: State

Example state: New York

RE area type: Solar Power

Description: This program offers rebates for approximately 50% of the costs of PV systems. As the overall price of PV systems has been decreasing, the program has adjusted its rebates.

Other info: N/A


Page: 38

Source: www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf
Residential Solar Initiative for EarthCraft Homes

**Type:** Rebate

**Government level:** State

**Example state:** South Carolina

**RE area type:** Solar Power

**Description:** Offers homebuilders a rebate for every home built with a solar hot water heating system. A maximum of $20,000 in total rebates has been allocated for this program, so a total of 20 rebates of $1,000 each will be awarded to builders for approved new installations.

**Other info:** N/A

**Info document:** Appalachian Regional Commission, "Energy Efficiency and Renewable Energy in Appalachia: Policy and Potential"

**Page:** 38

**Source:** [www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf](http://www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf)
Small Commercial Lighting Incentives Program

Type: Rebate

Government level: State

Example state: New York

RE area type: Energy Efficiency

Description: Offers incentives, up to $30,000, for businesses to install effective and energy-efficient lighting in small commercial spaces. Under this program, lighting contractors, distributors, manufacturers, and designers are also eligible for various incentives associated with bringing energy-efficient lighting to small commercial spaces.

Other info: N/A


Page: 37

Source: www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf
Smart Equipment Choices Program

**Type:** Rebate

**Government level:** State

**Example state:** New York

**RE area type:** Energy Efficiency

**Description:** Applicants are eligible for rebates up to $10,000 for installation and replacement of electric efficiency equipment and up to $25,000 for gas efficiency equipment in non-residential structures.

**Other info:** N/A

**Info document:** Appalachian Regional Commission, "Energy Efficiency and Renewable Energy in Appalachia: Policy and Potential"

**Page:** 37

**Source:** [www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf](http://www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf)
Solar Energy Grant Program

Type: Rebate

Government level: State

Example state: Maryland

RE area type: Solar All

Description: Provides funding for homeowners, businesses, local governments, and non-profit organizations to install solar water-heating and PV systems. The reimbursement is 20% of the equipment cost (up to $3,000 for residential property, $5,000 for commercial property and $2,000 for solar water-heating equipment). Systems have to meet the minimum size requirement set by USDOE to be eligible.

Other info: Available for Non-Profits


Page: 38

Source: www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf
Sustainable Development Fund Solar PV Grant Program

**Type:** Rebate

**Government level:** Regional

**Example state:** Grid

**RE area type:** Solar Power

**Description:** Issues rebates to PECO customers for purchase of PV systems. The grant is paid based on system performance and customer type. For example, $4 per Watt up to $20,000 is the buy-down incentive for the PV system owner; $1 per kWh in the first year up to $5,000 is the performance incentive for the PV system owner; and $0.1 per kWh in the first year up to $250 is the performance incentive for the participating contractor.

**Other info:** N/A

**Info document:** Appalachian Regional Commission, "Energy Efficiency and Renewable Energy in Appalachia: Policy and Potential"

**Page:** 38

**Source:** [www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_EfficiencyFINAL_REPORT.pdf](http://www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINALREPORT.pdf)
Wind Incentive Program

Type: Rebate

Government level: State

Example state: New York

RE area type: Wind Power

Description: Develops a network of eligible installers who will install end-use wind energy turbines for facilities in all sectors. The incentive program offers up to $100,000 per installation to eligible installers. The incentives are paid based on a percentage of the installation cost (50% of costs for systems of 500 W to 10 kW; 15% for systems larger than 80 kW, and 70% for commercial customers).

Other info: N/A


Page: 37

Source: www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf
Business and Institutional Loan

Type: Reduced-interest Loan

Government level: State

Example state: Ohio

RE area type: Energy Efficiency

Description: Business and Institutional Loans are offered to businesses and institutions in Ohio. The loans will buy down the interest rate for energy efficiency projects, up to a maximum of $250,000 at a 50% reduced interest rate. Qualifying projects must reduce energy cost by at least 15%, have an energy payback of 5 years or less, and have an expected project life longer than the energy payback time.

Other info: N/A


Page: 34

Source: www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf
Double Saving Loan

Type: Reduced-interest Loan

Government level: State

Example state: Ohio

RE area type: Energy Efficiency

Description: Double Saving Loan provides loans up to $10,000, with interest-rate reduced by up to 50% through a linked deposit, to qualified residential borrowers with projects that improve energy efficiency in one- to three-unit residential buildings.

Other info: N/A


Page: 33

Source: www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf
Energy Smart Loan Fund

**Type:** Reduced-interest Loan

**Government level:** State

**Example state:** New York

**RE area type:** Renewables and Efficiency

**Description:** This loan fund provides reduced-interest rate loans (4.0% below the lender rate for ten years; 6.5% below the lender rate for 19 borrowers in the Liberty Zone) for lenders to fund projects to improve a facility’s energy efficiency or utilize renewable energy systems.

**Other info:** N/A

**Info document:** Appalachian Regional Commission, "Energy Efficiency and Renewable Energy in Appalachia: Policy and Potential"

**Page:** 33

**Source:** [www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf](http://www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf)
**Renewable Energy Loan**

**Type:** Reduced-interest Loan

**Government level:** State

**Example state:** Ohio

**RE area type:** Renewables and Efficiency

**Description:** Loans to Ohio residents range from $500 to $25,000. Loans to businesses range from $5,000 to $500,000. Loans are used to implement energy-efficiency or renewable-energy projects. Also, this program will help applicants reduce interest rate by approximately half on standard bank loans.

**Other info:** N/A

**Info document:** Appalachian Regional Commission, "Energy Efficiency and Renewable Energy in Appalachia: Policy and Potential"

**Page:** 33

**Source:** [www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf](http://www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf)
Corporate Property Tax Credit

Type: Tax Credit

Government level: State

Example state: Maryland

RE area type: All Renewables

Description: A Corporate Property Tax Credit allows counties in Maryland to provide tax credits to corporate or property tax when solar, geothermal, and other qualifying alternate energy systems are used for heating or cooling. The tax credit amount and the length of the credit vary, because counties have the autonomy to decide on the amount of credit and length of time up to a maximum of 3 years. In addition the state permits solar heating and cooling systems to be assessed at no more than the value of a conventional system for property tax purpose and a full property tax exemption for solar energy equipment.

Other info: N/A


Page: 36

Source: www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf
Green Building Tax Credit Program

**Type:** Tax Credit

**Government level:** State

**Example state:** New York

**RE area type:** Energy Efficiency

**Description:** Provides owners and tenants of eligible buildings and tenant spaces, which meet certain “green” standards, with tax credits of up to $2 million per building. The credit can be used against corporate taxes, personal income taxes, insurance corporation taxes, or banking corporation taxes.

**Other info:** N/A

**Info document:** Appalachian Regional Commission, "Energy Efficiency and Renewable Energy in Appalachia: Policy and Potential"

**Page:** 35

**Source:** [www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf](http://www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf)
Income Tax Credit for Green Buildings

Type: Tax Credit

Government level: State

Example state: Maryland

RE area type: Renewables and Efficiency

Description: Applies to only non-residential and residential multifamily buildings of at least 20,000 square feet. The credit encourages the use of alternate energy systems such as PV, wind turbines, and fuel cells. The tax credit amount differs depend on building type and renewable energy systems: 6-8% of the costs of construction or rehabilitation for green building, 20-25% for PV and wind systems, and 30% for fuel cells systems. To be eligible, the buildings must meet specific environmental and energy requirements, but the renewable-energy system size is not specified.

Other info: N/A


Page: 35

Source: www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf
Renewable Energy Tax Credit

Type: Tax Credit

Government level: State

Example state: North Carolina

RE area type: All Renewables

Description: Offers a 35% tax credit for the cost of renewable energy property in North Carolina. The ceilings for the credit vary depending on the sector and the type of renewable-energy system. The maximum for different technologies used in residential facilities is between $3,500 and $10,500, and in commercial and industrial facilities is $2.5 million.

Other info: N/A


Page: 35

Source: www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf
Solar and Fuel Cell Tax Credit

Type: Tax Credit

Government level: State

Example state: New York

RE area type: Solar

Description: New York offers a personal income tax credit for expenditures on solar-electric, solar-thermal, and fuel cell equipment used on residential property, excluding the solar-energy systems used for pool heating or other recreational applications. The credit will equal 25% of the total costs of solar-electric and solar thermal systems (up to $3,750) and 20% for fuel cell systems (up to $1,500). To qualify for the credit, the systems are limited to a maximum capacity of 25 kW for fuel cells and 10 kW for the solar-electric. The fuel cell systems must also utilize the proton exchange membrane technology.

Other info: N/A


Page: 35

Source: www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf
**Wood-Burning Hearing System Deduction**

**Type:** Tax Credit

**Government level:** State

**Example state:** Alabama

**RE area type:** Biomass

**Description:** Alabama allows individual taxpayers to take the total costs of the installation of a wood-burning heating system or the conversion from gas or electricity heating system to wood as a deduction on their taxes.

**Other info:** N/A

**Info document:** Appalachian Regional Commission, "Energy Efficiency and Renewable Energy in Appalachia: Policy and Potential"

**Page:** 35

**Source:** [www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf](http://www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf)
Active Solar Heating and Cooling Systems Property Tax Exemption

Type: Tax Exemption

Government level: State

Example state: North Carolina

RE area type: Solar Heating/Cooling

Description: This program exempts active solar heating and cooling systems placed on residential, commercial and industrial property from being assessed at more than the value of a conventional system for property tax purposes.

Other info: N/A


Page: 37

Source: www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf
**Conversion Facilities Tax Exemption**

**Type:** Tax Exemption

**Government level:** State

**Example state:** Ohio

**RE area type:** Renewables and Efficiency

**Description:** A Conversion Facilities Tax Exemption in Ohio exempts certain equipment used in energy conversion such as thermal efficiency improvements and the conversion of solid waste to energy. Exemptions are provided from property tax, the state’s sales and use tax, and the state’s franchise tax where applicable.

**Other info:** N/A

**Info document:** Appalachian Regional Commission, "Energy Efficiency and Renewable Energy in Appalachia: Policy and Potential"

**Page:** 36

**Source:** [www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf](http://www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf)
Local Option Property Tax Exemption for Solar

Type: Tax Exemption

Government level: State

Example state: Virginia

RE area type: Solar Power

Description: Virginia allows a Local Option Property Tax Exemption for Solar, through which counties, cities, or towns may exempt or partially exempt from local property taxes any solar energy equipment or recycling equipment installed in residential, commercial, or industrial properties.

Other info: N/A


Page: 22

Source: www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINALREPORT.pdf
Solar Sales Tax Exemption

**Type:** Tax Exemption

**Government level:** State

**Example state:** New York

**RE area type:** Solar Heating/Cooling

**Description:** The Solar Sales Tax Exemption exempts the sales and installation of residential solar-energy systems that utilize solar energy to provide heating, cooling, hot water, and/or electricity from New York’s sales and use taxes.

**Other info:** N/A

**Info document:** Appalachian Regional Commission, "Energy Efficiency and Renewable Energy in Appalachia: Policy and Potential"

**Page:** 36

**Source:** [www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf](http://www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf)
Solar, Wind and Biomass Energy System Property Tax Exemption

**Type:** Tax Exemption

**Government level:** State

**Example state:** New York

**RE area type:** All Renewables

**Description:** Solar, wind energy, and farm-waste energy systems (limited to a maximum capacity of 400 kW) constructed in New York State prior to July 1, 1988 or between January 1, 1991 and January 1, 2006, were eligible for a 15-year real property tax exemption. The amount of the exemption equals the increase in assessed value attributable to the renewable energy system.

**Other info:** N/A

**Info document:** Appalachian Regional Commission, "Energy Efficiency and Renewable Energy in Appalachia: Policy and Potential"

**Page:** 36

**Source:** [www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf](http://www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf)
**Wood Heating Fuel Exemption**

**Type:** Tax Exemption

**Government level:** State

**Example state:** Maryland

**RE area type:** Biomass

**Description:** This program provides a sales tax exemption on all purchases of wood or “refuse-derived” fuel used for heating in residential buildings.

**Other info:** N/A

**Info document:** Appalachian Regional Commission, "Energy Efficiency and Renewable Energy in Appalachia: Policy and Potential"

**Page:** 36

**Source:** [www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf](http://www.marshall.edu/cber/research/Marshall_U_ARC_Renewables_and_Efficiency_FINAL_REPORT.pdf)
Information Source: Solar Photovoltaic Financing: Deployment on Public Property by State and Local Governments

Type: Various

Government level: Various

Example state: Various

RE area type: Solar Power

Description: This document, prepared by the National Renewable Energy Laboratory, is perhaps the most comprehensive description of solar PV financing options and structures available.

Other info: N/A

Info document: Solar Photovoltaic Financing: Deployment on Public Property by State and Local Governments

Page: N/A

### 5. STIMULUS FUNDING

<table>
<thead>
<tr>
<th>Programs</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transportation (minus airports)</strong></td>
<td></td>
</tr>
<tr>
<td>Highways &amp; Bridges</td>
<td>$210,852,000</td>
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<tr>
<td>Public Transit Formula</td>
<td>$18,675,000</td>
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<tr>
<td>Rail Modernization (Fixed Guideway)</td>
<td>$309,000</td>
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<tr>
<td><strong>Total</strong></td>
<td>$229,836,000</td>
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<tr>
<td><strong>Environment</strong></td>
<td></td>
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<tr>
<td>Rural Development Water &amp; Environment Program</td>
<td>$65,003,000</td>
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<tr>
<td>Clean Water SRF</td>
<td>$61,709,200</td>
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<tr>
<td>Watershed - Flood &amp; Prevention Operations</td>
<td>$5,125,000</td>
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<tr>
<td>Division of Air Quality</td>
<td>$1,730,000</td>
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<tr>
<td>Watershed Rehabilitation</td>
<td>$0</td>
</tr>
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<td><strong>Total</strong></td>
<td>$133,567,200</td>
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<tr>
<td><strong>Adult education (non-stabilization)</strong></td>
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</tr>
<tr>
<td>Title I: Grants to Local Education Authorities</td>
<td>$60,981,000</td>
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<tr>
<td>WIA Youth</td>
<td>$5,397,000</td>
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<td>Voc Rehab</td>
<td>$4,313,000</td>
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<td>Ed Tech</td>
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<td>Dislocated Workers</td>
<td>$3,620,000</td>
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<tr>
<td>Employment Service</td>
<td>$3,173,000</td>
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<tr>
<td>UI State Administration</td>
<td>$2,370,000</td>
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<tr>
<td>WIA Adult</td>
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<td>Work Study</td>
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<tr>
<td>McKinney-Vento Ed for Homeless</td>
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<td><strong>Total</strong></td>
<td>$87,762,000</td>
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<td><strong>Energy/Efficiency</strong></td>
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<tr>
<td>Weatherization</td>
<td>$37,584,000</td>
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<tr>
<td>State Energy Program</td>
<td>$32,746,000</td>
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<tr>
<td>Energy Efficiency Block Grant: State</td>
<td>$9,584,000</td>
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<tr>
<td>Energy Efficiency Block Grant: Local</td>
<td>$4,410,000</td>
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<td><strong>Total</strong></td>
<td>$84,334,000</td>
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<tr>
<td><strong>Community development</strong></td>
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<tr>
<td>Drinking Water SRF</td>
<td>$19,500,000</td>
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<tr>
<td>Community Services Block Grant (CSBG)</td>
<td>$11,193,000</td>
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<tr>
<td>Community Development Block Grant (CDBG): Non-Entitlement</td>
<td>$4,515,000</td>
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<tr>
<td>Community Development Block Grant (CDBG): Entitlement</td>
<td>$2,149,000</td>
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<td><strong>Total</strong></td>
<td>$37,357,000</td>
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<tr>
<td><strong>Other</strong></td>
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<tr>
<td>Fiscal Stabilization Education</td>
<td>$217,971,000</td>
</tr>
<tr>
<td>Medicaid FMAP 2010</td>
<td>$198,441,000</td>
</tr>
<tr>
<td>Medicaid FMAP 2009</td>
<td>$157,485,000</td>
</tr>
<tr>
<td>Special Education (IDEA): Part B</td>
<td>$75,952,000</td>
</tr>
<tr>
<td>Fiscal Stabilization General Purpose</td>
<td>$48,497,000</td>
</tr>
<tr>
<td>Title I: School Improvement</td>
<td>$18,598,000</td>
</tr>
<tr>
<td>Assistance Program (HOME)</td>
<td>$16,542,000</td>
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<tr>
<td>Public Housing Capital Fund</td>
<td>$13,206,000</td>
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<tr>
<td>Child Care Development Block Grants</td>
<td>$13,206,000</td>
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<tr>
<td>Project Based Rental Assistance</td>
<td>$12,258,000</td>
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<tr>
<td>Homelessness Prevention</td>
<td>$10,199,000</td>
</tr>
<tr>
<td>Byrne/JAG (State Only)</td>
<td>$8,193,000</td>
</tr>
<tr>
<td>Foster Care/ Adoption</td>
<td>$7,720,000</td>
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<tr>
<td>Health Centers Increased Demand for Services</td>
<td>$6,672,000</td>
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<tr>
<td>Head Start</td>
<td>$5,428,000</td>
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<tr>
<td>Special Education(IDEA): Part B- Preschool</td>
<td>$3,615,000</td>
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<tr>
<td>Medicaid Disproportionate Share of Hospitals</td>
<td>$3,347,000</td>
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<tr>
<td>SNAP (Food Stamp) Administration</td>
<td>$2,500,000</td>
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<tr>
<td>Special Education (IDEA): Part C</td>
<td>$2,140,000</td>
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</tbody>
</table>

172
<table>
<thead>
<tr>
<th>Programs</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage Tanks (LUST)</td>
<td>$1,643,000</td>
</tr>
<tr>
<td>Violence Against Women</td>
<td>$1,233,000</td>
</tr>
<tr>
<td>Health Centers New Access Point</td>
<td>$1,151,000</td>
</tr>
<tr>
<td>Immunization</td>
<td>$1,082,000</td>
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<td>School Lunch Equipment</td>
<td>$650,000</td>
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<tr>
<td>Emergency Food (TEFAP): Commodities</td>
<td>$642,000</td>
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<tr>
<td>Crime Victims Assistance</td>
<td>$620,000</td>
</tr>
<tr>
<td>Internet Crimes Against Children</td>
<td>$485,000</td>
</tr>
<tr>
<td>Elderly Nutrition: Congregate</td>
<td>$456,000</td>
</tr>
<tr>
<td>Emergency Food &amp; Shelter</td>
<td>$401,000</td>
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<tr>
<td>Crime Victims Compensation</td>
<td>$348,000</td>
</tr>
<tr>
<td>Emergency Food (TEFAP): Administration</td>
<td>$322,000</td>
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<tr>
<td>Endowment for the Arts</td>
<td>$296,000</td>
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<tr>
<td>Centers for Independent Living</td>
<td>$272,000</td>
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<tr>
<td>Service for Older Americans</td>
<td>$267,000</td>
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<tr>
<td>Older Individuals Who are Blind</td>
<td>$253,000</td>
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<tr>
<td>Living State Grants</td>
<td>$243,000</td>
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<tr>
<td>Elderly Nutrition: Home-Delivered</td>
<td>$224,000</td>
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<tr>
<td>Housing Block Grant</td>
<td>$0</td>
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<tr>
<td>Impact Aid</td>
<td>$0</td>
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<tr>
<td>Legal Hazard Reduction</td>
<td>$0</td>
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<tr>
<td>VA: State Extended Care Facilities</td>
<td>$0</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>$832,399,000</strong></td>
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</table>

**Grand total: $1,405,255,200**


Table 5 and Table 6 show programs from Table 4 that address state budget shortfalls and close the budget gap.

**Table 5: ARRA funds being used to address state budget shortfalls**

<table>
<thead>
<tr>
<th>Program</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiscal Stabilization Education</td>
<td>$217,971,000</td>
</tr>
<tr>
<td>Fiscal Stabilization General Purpose</td>
<td>$48,497,000</td>
</tr>
<tr>
<td>Medicaid FMAP 2009</td>
<td>$157,485,000</td>
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<td>Medicaid FMAP 2010</td>
<td>$198,441,000</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>$622,394,000</strong></td>
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</table>


**Table 6: ARRA funds that close budget gaps in certain circumstances**

<table>
<thead>
<tr>
<th>Program</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Byrne/JAG (State Only)</td>
<td>$8,193,000</td>
</tr>
<tr>
<td>TANF Emergency Fund (Maximum Allowed)</td>
<td>$55,088,000</td>
</tr>
<tr>
<td>Child Support Enforcement</td>
<td>$15,425,000</td>
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<tr>
<td>Child Care Development Block Grants</td>
<td>$13,047,000</td>
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<tr>
<td>Special Education (IDEA): Part B</td>
<td>$76,952,000</td>
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<tr>
<td>Special Education(IDEA): Part B- Preschool</td>
<td>$3,615,000</td>
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<tr>
<td>Special Education (IDEA): Part C</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>$173,460,000</strong></td>
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</table>


**Table 7: Other funds**

<table>
<thead>
<tr>
<th>Program</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Stamp Benefits (SNAP)</td>
<td>$187,000,000</td>
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<tr>
<td>Child Support Enforcement</td>
<td>$15,425,000</td>
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<tr>
<td>Pell Grants</td>
<td>$184,000,000</td>
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<tr>
<td>SNAP (Food Stamp) Administration 2009 Only</td>
<td>$1,223,000</td>
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<tr>
<td>Veterans Affairs: Medical Facilities</td>
<td>$20,185,000</td>
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<tr>
<td>Veterans Affairs: National Cemetery Administration</td>
<td>$72,000</td>
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<tr>
<td>DSH 2009 Only</td>
<td>$1,653,000</td>
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<tr>
<td>TANF Emergency Fund (Maximum Allowed)</td>
<td>$55,088,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$464,646,000</strong></td>
</tr>
</tbody>
</table>

6. ACTIVE AND ABANDONED MINE LAND RECLAMATION PROGRAMS

The 1977 Surface Mining Control and Reclamation Act (SMCRA) requires that active coal mines reclaim their land, and that mines not cause water pollution discharges for an indefinite period of time. Therefore, this chapter focuses on old unreclaimed coal mines that still pollute streams across Appalachia.

Many of these mines pre-date SMCRA; these mines are typically called “abandoned mine lands” (AMLs). Title IV of SMCRA addresses the reclamation of pre-1977 AMLs (OSM, 2009a).

Coal mines abandoned since 1977 are typically called “bond forfeiture sites” (BFSs) because SMCRA requires operators to post bonds. On these post-1977 sites, operators sometimes choose to forfeit their bonds rather than spending the money required for reclamation. Bonds are released in three phases, and forfeiture can occur before any of these phases:

- Phase I: Land contour has been returned to its approximate original contour or a variation thereof.
- Phase II: Vegetative cover or other erosion control measures have adequately stabilized the surface from erosion and the soil resources are adequate to support that cover. In addition, the site is not contributing suspended solids to streamflow or runoff outside the permit area.
- Phase III: Mine site is fully reclaimed and the approved post-mining land use has been achieved. Complete restoration of land and water resources affected by mining is demonstrated by this release. (OSM, 2008)

This distinction between AMLs and BFSs is important because separate funding mechanisms are available to reclaim AMLs and BFS.

6.1 Reclaiming abandoned mine lands

Contact:
Eric Coberly
Chief, Office of Abandoned Mine Lands and Reclamation
Division of Land Restoration
West Virginia Department of Environmental Protection
601 57th St, SE
Charleston, WV 25304
Phone: (304) 926-0499, ext. 1472
Email: Eric.J.Coberly@wv.gov
Website: http://www.wvdep.org/item.cfm?ssid=12&ss1id=209

A total of 4,332 AMLs have been inventoried across West Virginia. Of these, 39% have been completed, 59% are unfunded, and 2% are funded (OSM, 2008). It should be noted, however, that projects considered to have been completed by WVDEP and OSM have not necessarily addressed water quality discharges to the extent that surface water quality standards are met downstream.

6.1.1 The Abandoned Mine Reclamation Fund
The Abandoned Mine Reclamation Fund (“Fund”) is the most significant source of funding to remediate AMLs. This funding is generated by a federal per-ton tax on every ton of mined coal. These funds then get allocated back to state environmental agencies, which spend the money on reclamation projects. Until recently, the federal government was not fully appropriating these funds to the states. This unappropriated balance totaled $2.2 billion at the end of FY08 (OSM, 2009c).
From 1977 through 2007, fees were set at 35 cents per ton for surface mined coal and 15 cents per ton on deep mined coal. When the Fund was reauthorized in 2006, these fees were lowered. In FY08-12, fees will be 31.5 and 13.5 cents per ton. In FY13-21, the fees will decrease again to 28 and 12 cents per ton.

Complex formulas are used to divide the funds among the states. Distributions changed with the 2006 reauthorization, dramatically raising the amount of money sent back to states like West Virginia that have a continuing legacy of unreclaimed AMLs. The full unappropriated balance is to be sent back to states, and the entire program is to be shut down in 2022.

In FY09, $298 million is being distributed to states. Distributions to CAPP states are shown in the following table. The total distributions provided to states through the end of the program cannot be calculated with precision yet; however, estimates are now available. Hypothetical total distributions to CAPP states are also shown in Table 8. West Virginia is slated to receive the largest distributions of all CAPP states: $875 million. Only Wyoming and Pennsylvania are projected to receive more than West Virginia.

<table>
<thead>
<tr>
<th>State</th>
<th>2009 distribution</th>
<th>Hypothetical total distribution through 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>West Virginia</td>
<td>$40</td>
<td>$875</td>
</tr>
<tr>
<td>Kentucky</td>
<td>$31</td>
<td>$494</td>
</tr>
<tr>
<td>Tennessee</td>
<td>$2</td>
<td>$18</td>
</tr>
<tr>
<td>Virginia</td>
<td>$7</td>
<td>$141</td>
</tr>
</tbody>
</table>


President Obama’s FY10 budget proposal includes a change that would stop sending Fund distributions to states that have already cleaned up all of their AMLs (Office of Management and Budget, 2009). West Virginia would likely benefit greatly from such a change, due to the large number of unreclaimed AMLs remaining across the state. Wyoming, which has no remaining AMLs but is projected to receive the largest share of future distributions, would likely suffer the most.

States inventory their AMLs and enter these sites into a federal database called the Abandoned Mine Land Inventory System (AMLIS) (OSM, 2009b). States do not use exactly the same protocols for inventorying their sites; therefore, it is hard to know for sure how many unreclaimed sites remain or to make valid comparisons among states. New AMLs are still being discovered: In FY08, West Virginia added 73 new AMLs to AMLIS (OSM, 2008).

AMLS are classified as Priority 1, 2, or 3. Priority 1 and 2 sites address threats to human health and safety. Priority 3 sites include those that cause environmental damage, such as acid mine drainage discharges to streams.

Before the reauthorization, states were able to set aside 10% of their funds for AMD-related projects; after reauthorization, this percentage was increased to 30%. Through 2008, West Virginia set aside $16.4 million of the possible $35.2 million available for the set-aside program (OSM, 2008).

### 6.1.2 Appalachian Clean Streams Program and the Watershed Cooperative Agreement Program

The Appalachian Clean Streams Program (ACSP) provides Fund dollars to West Virginia and other Appalachian states for AMD remediation at AMLs. Between FY97 and FY07, West Virginia received $10.4 million in ACSP allocations (OSM, 2008).

One relatively new ACSP component is the Watershed Cooperative Agreement Program (WCAP). Starting in 1999, WCAP has provided grants directly to watershed associations for AML remediation projects. Grants are up to $100,000 each and typically leverage other funding such as Clean Water Act Section 319 grants (OSM, 2006).
Between FY99 and FY05, $12 million in WCAP grants were provided nationwide. These grants included $1.6 million in West Virginia, $360,000 in Virginia, and $305,000 in Tennessee. No WCAP grants were provided to Kentucky in this period. Total WCAP funds awarded to West Virginia has now surpassed $2 million (OSM, 2006).

### 6.1.3 Clean Water Act Section 319 funds

Clean Water Act Section 319 funds are provided by USEPA to state environmental agencies such as WVDEP, and can be used for reclamation of AMLs. Approved watershed-based plans are required before USEPA will approve such funding. WVDEP’s Nonpoint Source Program sets priorities and administers the state Section 319 program.

### 6.1.4 Natural Resources Conservation Service Public Law 566 funds

Although it has rarely used this program for AMD remediation, NRCS is funding AMD remediation in the Deckers Creek watershed in north-central West Virginia though a Public Law-566 watershed restoration project. This is the only such case in West Virginia. NRCS engineers have experience developing conceptual designs and detailed engineering designs for AMD remediation projects. These projects require a state sponsor to share the costs; for the Deckers Creek plan, WVDEP is the state sponsor.

### 6.1.5 Water quality credits

According to USEPA, water quality trading programs can help generate funds for AML remediation projects (USEPA, 2004). In general, water quality credits can be generated when water quality is improved over and above what is required by law. If a trading program is operational, then these credits might be sold to parties that find it cost-effective to finance improvements elsewhere, rather than on-site.

A USEPA-funded pilot project investigated whether water quality trading might help remediate AMLs in the AMD-impaired Cheat watershed in West Virginia (Hansen et al., 2004). AMD trading is complicated by the fact that AMD is composed of more than one pollutant; therefore, cross-pollutant trading may be necessary. Cross-pollutant trading would require complex rules. Until simpler single-pollutant trading is operational in West Virginia, it is unlikely that a cross-pollutant trading program can be instituted.

### 6.2 Reclaiming bond forfeiture sites

As described above, BFSs are comprised of post-1977 mines at which operators forfeited their bonds before full reclamation was achieved. These sites are also referred to as “revoked mines” because mining permits have been revoked by WVDEP.

To pay for reclamation at BFSs, West Virginia has implemented an alternative bonding system that makes use of a special reclamation tax on every ton of mined coal. In May 2002, this system was modified to increase the tax from 3 cents of clean coal mined to 14 cents, with a reduction back down to 7 cents after 39 months. These funds are placed in the Special Reclamation Fund and used to reclaim BFSs (OSM, 2008).

Progress has been made since this change was implemented in 2002. OSM expects to finish land reclamation and water treatment at all existing BFSs by September 2010 (OSM, 2008).

However, funding for long-term water treatment at BFSs remains an issue, in part because it can be expected that new BFSs will be created as existing operators forfeit their bonds. The Special Reclamation Advisory Council—which monitors whether the Special Reclamation Fund will be sufficient to meet future obligations—recommended that the legislature establish a trust fund for water treatment at future BFSs. In the 2008 session, the legislature increased the tax for one year and provided for the establishment of a water trust fund (OSM, 2008). In the 2009 session, the legislature increased the tax to 14.4 cents per ton (West Virginia Legislature, 2009).
Since about 2001, OSM has been working with WVDEP to improve the accuracy of West Virginia’s BFS inventory. A total of 331 BFSs await reclamation across West Virginia. Even more BFSs may be generated in coming years, because WVDEP continues to permit new coal mines in acid-producing seams. OSM and WVDEP have been attempting to inventory active, bonded permits requiring water treatment. Although this inventory is not complete, preliminary results indicate that there are at least 370 active, bonded permits in West Virginia with appreciable water treatment costs (OSM, 2008).

### 6.3 References


West Virginia Legislature. 2009. Enrolled Committee Substitute for Senate Bill 600. An act to amend and reenact §22-3-11 of the Code of West Virginia, 1931, as amended, relating to continuing and re-imposing a special reclamation tax on clean coal mined; and providing for legislative review of the tax every two years. Passed April 10, 2009; to take effect July 1, 2009. [www.legis.state.wv.us/Bill_Text_HTML/2009_SESSIONS/RS/BILLS/sb600%20sub1%20enr.htm](http://www.legis.state.wv.us/Bill_Text_HTML/2009_SESSIONS/RS/BILLS/sb600%20sub1%20enr.htm)
7. TRANSPORTATION AND INFRASTRUCTURE FUNDING

7.1 Transportation and infrastructure funding sources

TIGER discretionary grants (Transportation Investment Generating Economic Recovery)

Initiating program: Recovery Act

Administering agency: US Department of Transportation

Agency website: http://www.dot.gov/recovery/ost/

Details: $1,500,000,000, to remain available through September 30, 2011. To be awarded to State and local governments or transit agencies on a competitive basis for projects that will have a significant impact on the Nation, a metropolitan area, or a region, including interstate rehabilitation, improvements to the rural collector road system, the reconstruction of overpasses and interchanges, bridge replacements, seismic retrofit projects for bridges, and road realignments; public transportation projects eligible under chapter 53 of title 49, United States Code, including investments in projects participating in the New Starts or Small Starts programs that will expedite the completion of those projects and their entry into revenue service; passenger and freight rail transportation projects; and port infrastructure investments, including projects that connect ports to other modes of transportation and improve the efficiency of freight movement. Awards will be not less than $20,000,000 (unless it is a worthy project in a small city/region/state) and not greater than $300,000,000.

Other information: N/A

Target development field(s): Infrastructure

Source: http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_bills&docid=f:h1enr.pdf

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Highway infrastructure investment

**Initiating program:** Recovery Act

**Administering agency:** US Department of Transportation, Federal Highway Administration (FHA)

**Agency website:** [http://www.fhwa.dot.gov/legsregs/directives/notices/n4510705t2.htm](http://www.fhwa.dot.gov/legsregs/directives/notices/n4510705t2.htm)

**Details:** $27,500,000,000, to remain available through September 30, 2010. After making the set-asides required under this heading, 50 percent of the funds shall be apportioned to States. Funds made available under this heading shall be apportioned not later than 21 days after the date of enactment of this Act.

**Other information:** N/A

**Target development field(s):** Infrastructure

**Source:** [http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_bills&docid=f:h1enr.pdf](http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_bills&docid=f:h1enr.pdf)

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Capital assistance for high speed rail corridors and intercity passenger rail service

**Initiating program:** Recovery Act

**Administering agency:** US Department of Transportation, Federal Railroad Administration

**Agency website:** [http://www.fra.dot.gov/us/content/2166](http://www.fra.dot.gov/us/content/2166)

**Details:** This provides for an additional amount for section 501 of Public Law 110– 432 and discretionary grants to States to pay for the cost of projects described in paragraphs (2)(A) and (2)(B) of section 24401 of title 49, United States Code, subsection (b) of section 24105 of such title, $8,000,000,000, to remain available through September 30, 2012 with priority to projects that support the development of intercity high speed rail service. Within 60 days of the enactment of this Act, the Secretary shall submit to the House and Senate Committees on Appropriations a strategic plan that describes how the Secretary will use the funding provided under this heading to improve and deploy high speed passenger rail systems.

**Other information:** N/A

**Target development field(s):** Infrastructure

**Source:** [http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_bills&docid=f:h1enr.pdf](http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_bills&docid=f:h1enr.pdf)

**Page:** 94
Transit capital assistance

Initiating program: Recovery Act

Administering agency: Federal Transit Administration


Details: This provides for an additional $6,900,000,000, to remain available through September 30, 2010, for capital projects. Only for cities with fewer than 200,000 people, but with transit usage at or above average of cities with a population of between 200,000-1,000,000.

Other information: Of the funding provided under this heading, $100,000,000 shall be distributed as discretionary grants to public transit agencies for capital investments that will assist in reducing the energy consumption or greenhouse gas emissions of their public transportation systems: Provided further, That for such grants on energy-related investments, priority shall be given to projects based on the total energy savings that are projected to result from the investment, and projected energy savings as a percentage of the total energy usage of the public transit agency.

Target development field(s): Infrastructure

Source: http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_bills&docid=f:h1enr.pdf

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Fixed Guideway Infrastructure Investment

Initiating program: Recovery Act

Administering agency: US Department of Transportation, Federal Transit Administration


Details: $750,000,000 will be distributed through a complicated allocation and redistribution formula including population and measures such as fixed guideway revenue, vehicle-miles, and route-miles.

Other information: N/A

Target development field(s): Infrastructure

Source: http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_bills&docid=f:h1enr.pdf

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Capital Investment Grants

Initiating program: Recovery Act

Administering agency: US Department of Transportation, Federal Transit Administration


Details: This provides an additional $750,000,000 targeted toward projects that are currently underway or could have funds obligated within 150 days.

Other information: N/A

Target development field(s): Infrastructure

Source: http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_bills&docid=f:h1enr.pdf

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Interstate Highway Construction Program

Initiating program: General Federal Aid

Administering agency: West Virginia Department of Transportation, Division of Highways

Agency website: http://www.wvdot.com/11_WVDOT/11_about.htm

Details: The interstate program was initiated to construct a network of four-lane, controlled-access highways linking, in as direct a route as possible, the principal metropolitan areas, cities, and industrial centers within the nation to serve the national defense. Interstate funds are also used to rehabilitate, reconstruct, resurface, and repair those highways. (90% Federal; 10% state match)

Other information: 2008: $74,866,638; 2009 (est.): $72m; 2010(est.): $61,524,900

Target development field(s): Infrastructure


Page: 200 (202 in pdf)
Appalachian Highway Program

Initiating program: General Federal Aid

Administering agency: West Virginia Department of Transportation, Division of Highways; Appalachian Regional Commission

Agency website: http://www.arc.gov/index.do?nodeId=1006

Details: The Appalachian Highway Program was developed to provide the Appalachian region with an efficient, modern transportation system of farm-to-market highways. (80% Federal; 20% state match)

Other information: 2008: $75,355,653; 2009 (est.): $128,000,000; 2010 (est.): $81,272,000

Target development field(s): Infrastructure


Page: 200 (202 in pdf)

Other federal aid programs

Initiating program: General Federal Aid

Administering agency: West Virginia Department of Transportation, Division of Highways

Agency website: http://www.wvdot.com/

Details: Other federal aid programs include: 1) construction projects on federal and primary roads, 2) construction projects on rural secondary roads that are federally designated rural collector routes, 3) construction projects on urban routes designated in each urbanized area, 4) other construction on designated routes, i.e., scenic and forest highways or as designated by Congress, 5) federally approved highway research projects, and 6) safety and hazard correction projects. (80% Federal; 20% state match) Federal Catalog Number: 20.205

Other information: 2008: $206,910,141; 2009 (est.): $260m; 2010 (est.): $263m

Target development field(s): Infrastructure


Page: 201 (203 in pdf)
**Flood Disaster [date of event]**

**Initiating program:** General Federal Aid

**Administering agency:** US Department of Transportation, Federal Highway Administration

**Agency website:** [http://www.fhwa.dot.gov/pressroom/fhwa0204.htm](http://www.fhwa.dot.gov/pressroom/fhwa0204.htm)

**Details:** Emergency relief funds provided by Federal Highway Administration to repair or replace roads and bridges damaged or destroyed in a federally declared flood.

**Other information:** Funding varies by flood and by year. Match rate also varies.

**Target development field(s):** Infrastructure

**Source:** [www.wvbudget.gov/FedFunds2010.pdf](http://www.wvbudget.gov/FedFunds2010.pdf)

**Page:** 201-204 (203-206 in pdf)

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**Section 5303 Metropolitan Planning Organization Planning Grant Program**

**Initiating program:** General Federal Aid

**Administering agency:** US Department of Transportation, Federal Transit Administration


**Details:** This is a continuous grant program that provides funds to subsidize planning activities and services offered by the metropolitan planning organizations across the state. (80% Federal; 20% local match)

**Other information:** 2008: $138,480; 2009 (est): $0; 2010 (est): $0

**Target development field(s):** Planning/infrastructure

**Source:** [www.wvbudget.gov/FedFunds2010.pdf](http://www.wvbudget.gov/FedFunds2010.pdf)

**Page:** 204 (206 in pdf)
Section 5305 State Planning and Research Program from Federal Transit Administration

Initiating program: General Federal Aid

Administrating agency: US Department of Transportation, Federal Transit Administration


Details: This is a continuous grant program that provides technical and planning assistance to the state’s transit providers. (80% Federal; 20% state match)

Other information: 2008: $36,077; 2009 (est): $210,250; 2010 (est): $207,750

Target development field(s): Planning/Infrastructure


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Section 5309 Bus and Bus-related Facilities Discretionary Grant Program

Initiating program: General Federal Aid

Administrating agency: US Department of Transportation, Federal Transit Administration


Details: This program provides capital funds for the purchase of transit vehicles and associated spare parts, facilities, renovations to existing facilities, shop equipment, etc. It also provides 80% federal funding for the Division to administer the program. The required 20% match for administration is included in the state appropriations. (80% Federal; 15% state; 5% local match)

Other information: 2008: $5,742,216; 2009 (est): $6,934,893; 2010 (est): $7,210,398

Target development field(s): Public Transit


Page: 205 (207 in pdf)
Section 5310 Capital Assistance Program for Elderly Persons and Persons with Disabilities

**Initiating program:** General Federal Aid

**Administering agency:** US Department of Transportation, Federal Transit Administration


**Details:** Funding is apportioned to the state for the purpose of purchasing equipment such as lift-equipped vans for private nonprofit agencies that provide transportation services for the elderly and the disabled. No state funds are utilized in this program.

**Other information:** Administration is 100% federal funds. Capital equipment is 80% federal, 20% state and local. Operating subsidy is 50% federal, 50% state and local. 2008: $547,078; 2009 (est): $955,765; 2010 (est): $925,000

**Target development field(s):** Public Transit

**Source:** [www.wvbudget.gov/Fed Funds2010.pdf](http://www.wvbudget.gov/FedFunds2010.pdf)

**Page:** 206 (208 in pdf)

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Section 5311 Public Transportation for Nonurbanized Areas

**Initiating program:** General Federal Aid

**Administering agency:** US Department of Transportation, Federal Transit Administration


**Details:** This program provides operating and administrative funds to subsidize public transportation services offered in the nonurbanized areas of the state. The grant also provides 100% federal funding for the division to administer the program.

**Other information:** Administration is 100% federal funds. Capital equipment is 80% federal, 20% state and local. Operating subsidy is 50% federal, 50% state and local. 2008: $4,632,478; 2009 (est): $6,439,925 2010 (est): $6,590,430

**Target development field(s):** Public Transit

**Source:** [www.wvbudget.gov/Fed Funds2010.pdf](http://www.wvbudget.gov/FedFunds2010.pdf)

**Page:** 206 (208 in pdf)
Section 5316 Job Access and Reverse Commute Program

Initiating program: General Federal Aid

Administering agency: US Department of Transportation, Federal Transit Administration


Details: This is a continuous grant program that provides funding for local programs to provide job access and reverse commute services to low-income individuals.

Other information: Matching formula varies.
2008: $26,858; 2009 (est): $1,116,226; 2010 (est): $818,900

Target development field(s): Public Transit

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Section 5317 New Freedom Program

Initiating program: General Federal Aid

Administering agency: US Department of Transportation, Federal Transit Administration


Details: This is a continuous grant program that provides capital and operating costs for services and facility improvements beyond those required by the Americans with Disabilities Act.

Other information: 2008: $0; 2009 (est): $620,419; 2009 (est): $525,000

Target development field(s): Public Transit

Page: 207 (209 in pdf)
Ethanol Research

Initiating program: Recovery Act

Administering agency: USDOE, Energy Efficiency and Renewable Energy

Agency website: http://www1.eere.energy.gov/biomass/

Details: The Biomass Program is planning to use $20 million of the Recovery Act funding in a competitive solicitation to achieve the following:
- Optimize flex-fuel vehicles operating on high octane E85 fuel (85% ethanol, 15% gasoline blend)
- Evaluate the impact of higher ethanol blends in conventional vehicles
- Upgrade existing refueling infrastructure to be compatible with fuels up to E85.

Other information: $20 million total.

Target development field(s): Renewable Fuels

Source: www.energy.gov/news2009/7375.htm

Page: N/A

Alternative Fueled Vehicle Pilot Program

Initiating program: Recovery Act

Administering agency: USDOE, Clean Cities Program


Details: This is a four-year program that includes two years of data collection and two years in which projects must be completed. Up to 30 awards will be awarded in FY09 and FY10 ranging from $5 million to $15 million each but there is a 50 percent matching requirement. Examples of eligible projects are those that will further the domestic manufacture and use of energy efficient advanced transportation vehicles, alternative fuel vehicles, and alternative fuels. Eligible entities are limited to state or local governments, a metropolitan transportation authority, or any combination of these, as long as they are in partnership with a designated Clean Cities Coalition.

Other information: The Department of Energy’s Clean Cities Program received $300 million from the stimulus plan, to help grant recipients acquire motor vehicles with a higher fuel economy, including hybrid vehicles, electric vehicles, commercially available plug-in hybrid vehicles and the necessary infrastructure. A total of 30 grants, based on geography, will be awarded on a competitive basis. Eligible recipients include states, local governments, metropolitan transportation authorities, air pollution control districts, and private or nonprofit enterprises. It should be noted the $300 million is only available until September 30, 2011.

Target development field(s): Renewable Fuels


Page: N/A
7.2 West Virginia Recovery Act disbursements for transportation improvements

Table 9: ARRA disbursements for transportation programs in West Virginia

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Division of Highways</td>
<td>$210,852,204</td>
</tr>
<tr>
<td>Public Transit - Rurals</td>
<td>$10,051,239</td>
</tr>
<tr>
<td>Public Transit - Urbans</td>
<td>$8,314,897</td>
</tr>
<tr>
<td>Rail Modernization</td>
<td>$309,000</td>
</tr>
<tr>
<td>Airport Funds (FAA)</td>
<td>$12,850,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$242,377,340</strong></td>
</tr>
</tbody>
</table>


7.3 West Virginia State Road Fund - revenue sources and outlays

Table 10: West Virginia State Road Fund – revenue sources and outlays

<table>
<thead>
<tr>
<th>Source</th>
<th>FY09 projection</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenues</strong></td>
<td></td>
</tr>
<tr>
<td>Motor fuel tax (11.7 variable, 20.5 fixed, 32.3 total cents/gallon)</td>
<td>$380,000,000</td>
</tr>
<tr>
<td>Privilege tax</td>
<td>$166,400,000</td>
</tr>
<tr>
<td>Registration fees</td>
<td>$91,700,000</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>$37,500,000</td>
</tr>
<tr>
<td>Total in-state road fund revenues</td>
<td>$675,600,000</td>
</tr>
<tr>
<td>Total federal reimbursement aid</td>
<td>$455,000,000</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>$1,130,600,000</strong></td>
</tr>
<tr>
<td><strong>Expenditures</strong></td>
<td></td>
</tr>
<tr>
<td>Set asides (DMV, Industrial Access, Claims)</td>
<td>$39,560,000</td>
</tr>
<tr>
<td>West Virginia Division of Highways priority expenditures</td>
<td></td>
</tr>
<tr>
<td>Debt service</td>
<td>$50,000,000</td>
</tr>
<tr>
<td>Administrative support (DMV, equipment, etc.)</td>
<td>$68,371,000</td>
</tr>
<tr>
<td>Routine maintenance</td>
<td>$272,425,000</td>
</tr>
<tr>
<td>Federal aid expenditures (matching funds)</td>
<td></td>
</tr>
<tr>
<td>Interstate</td>
<td>$134,000,000</td>
</tr>
<tr>
<td>ADHS</td>
<td>$93,421,000</td>
</tr>
<tr>
<td>Other federal aid projects</td>
<td>$325,700,000</td>
</tr>
<tr>
<td>Non-federal improvement expenditures</td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>$49,000,000</td>
</tr>
<tr>
<td>Renovation</td>
<td>$40,000,000</td>
</tr>
<tr>
<td>Contract paving</td>
<td>$113,000,000</td>
</tr>
<tr>
<td>Bridge repairs and replacement</td>
<td>$52,315,000</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>$1,237,792,000</strong></td>
</tr>
<tr>
<td><strong>Budget shortfall</strong></td>
<td><strong>($107,192,000)</strong></td>
</tr>
</tbody>
</table>