

American Recovery and Reinvestment Act of 2009: A Guide to Renewable Energy and Energy Efficiency Opportunities for Local and Tribal Governments



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1 INTRODUCTION

This section provides information on the American Recovery and Reinvestment Act of 2009 (ARRA), as well as links to EPA resources and other organizations. The following section focuses on key funding opportunities for local and tribal government efforts in clean energy. The final section of this paper describes tax incentives and bond programs relevant to clean energy efforts. The paper highlights potential opportunities to maximize clean energy investments; but local and tribal governments should refer to guidelines published by the federal agency administering each funding stream for more detail about allowable activities.

1.1 Overview of American Recovery and Reinvestment Act

The ARRA was signed into law by President Barack Obama on February 17, 2009. The ARRA is a wide-ranging effort to jumpstart the weakened economy and to lay the groundwork for developing an economy that will be able to meet the challenges of the 21st century through investment in infrastructure, energy, education, and tax cuts. If successful, ARRA could create up to 3.5 million jobs by the end of 2010. The ARRA includes a large number of funding opportunities and tax incentives to support investment in clean energy at the local level. These incentives are designed to strengthen the economy and to promote clean and renewable energy.

ARRA will directly foster improved energy efficiency and increased production and use of renewable energy sources through grants and loans for specific projects and indirectly through tax incentives. Direct funding opportunities include grants for weatherization and energy improvements for affordable housing projects; schools; local government operations; water quality protection programs; and research and job training to prepare workers for careers in renewable energy and energy efficiency industries. Tax incentives in ARRA that are relevant to state and local governments include expansions of pre-existing tax credits for installation of renewable energy generation and related utility installation; an entirely new tax credit for facilities that invest in, rather than produce, renewable energy sources; and expansion of a credit for installing alternative fuel pumps. These and other programs are detailed below. For more information on ARRA's purpose, funding details, and the cost to taxpayers, visit www.recovery.gov. The bill, in its entirety, is available at http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_bills&docid=f:h1enr.pdf.

1.2 EPA Resources

The EPA provides a broad array of web resources to help the public take advantage of the funding opportunities and tax credits discussed in this paper. Following the program descriptions below are several EPA resources specific to individual program area. In addition to those are the following general EPA resources available to the public:

- *The EPA Recovery Website*. General information about the ARRA and EPA-specific activities under the bill are available at <http://www.epa.gov/recovery/>.
- *The Local Clean Energy Webcast Series*. This series of EPA webcasts provides useful information on a variety of EPA programs designed for local governments. In addition to trainings on specific clean energy topics, a webcast titled "Navigating the Grant Process for Local Governments," provides a useful guide on applying for federal grants. Retrieve this and other webcasts at <http://epa.gov/cleanenergy/energy-programs/state-and-local/webcast.html>.

1.3 Federal Agency Recovery Websites

Each Federal Agency has established a website to provide information about their implementation of ARRA. Websites for agencies included in this paper are:

- US Department of Education <http://www.ed.gov/recovery/>
- US Department of Energy <http://www.energy.gov/recovery>
- US Department of Housing and Urban Development <http://www.hud.gov/recovery/>
- US Department of Labor <http://www.dol.gov/recovery/>
- US Department of Transportation <http://www.dot.gov/recovery/>
- US Environmental Protection Agency <http://www.epa.gov/recovery/>

1.4 Additional Resources

The following websites and online documents contain more detail about the ARRA, including many of the programs discussed here, as well as other programs funded under the ARRA that are not included in this paper. While this paper focuses on opportunities for local governments, in some cases details have not yet been released regarding new and increased funding for federal agencies. It is likely that as money from the ARRA is disbursed by federal agencies, additional funding opportunities for local or tribal governments may become available. The following resources will likely provide useful information about developments in funding opportunities.

- ICLEI. February 2009. "Stimulus Funding Updates." <http://www.icleiusa.org/action-center/financing-staffing/stimulus-funding-updates>
- National Association of Regional Councils (NARC). February 17th, 2009. HR1 Economic Recovery Conference Report. [http://narc.org/uploads/HR%201%20Conference%20Report%20Summary%20-%20Prepared%20by%20NARC%20021709\(2\).pdf](http://narc.org/uploads/HR%201%20Conference%20Report%20Summary%20-%20Prepared%20by%20NARC%20021709(2).pdf)
- U.S. Conference of Mayors Recovery Tracking and Implementation Website. <http://www.usmayors.org/recovery/>.
- Climate Communities. <http://climatecommunities.us/>.
- American Council for an Energy Efficient Economy. <http://www.aceee.org/>.
- National Governors Association. <http://www.nga.org/>.
- National Association of Clean Air Agencies. <http://www.4cleanair.org/>.

2 FUNDING OPPORTUNITIES

This section highlights major funding opportunities for local and tribal governments related to clean energy in the following program areas:

- energy,
- affordable housing,
- green schools,

- transportation and alternative fuels, and
- green job training.

Under each area, one or more funding opportunities are described, along with eligibility requirements, program funding levels, and links to agencies responsible for program administration. Finally, a list of EPA resources is provided for each program area.

Some of the programs are new; others are existing programs receiving increased funding under ARRA. In general, the funds allocated under ARRA are designated as “emergency funds” designed to be spent as soon as feasible. All funds under ARRA are made available for obligation until September 30, 2010, unless otherwise stated. Any additional guidelines for funding allocation timelines are provided below.

2.1 Energy in Local Government Operations

2.1.1 Energy Efficiency and Conservation Block Grants

- Description:** The Energy and Environmental Block Grant program assists local, state and tribal governments in developing and implementing strategies to help the nation meet its energy and climate goals. The purpose of the program is to help eligible entities reduce fossil fuel emissions, reduce the total energy use of eligible entities and improve energy efficiency in the transportation, building, and other sectors. Of the \$3.2 billion in total program funds, \$2.8 billion will be allocated as authorized in Title V, Subtitle E of the Energy Independence and Security Act of 2007. An additional \$400 million will be available in competitive grants.
- Eligibility:** States, Indian tribes, and specified units of local government (cities and counties). Entities eligible for direct formula grants from DOE are 1) cities with a population of at least 35,000 people or that are one of the top ten most populous cities in the state; 2) counties with populations of at least 200,000 or that are one of the top ten most populous counties in the state; 3) Federally-recognized Indian tribes; and 5) states including the District of Columbia and U.S. Territories. Entities eligible for sub grants from states are cities, counties, and Indian tribes ineligible for formula grants from DOE. All entities are eligible for competitive funds.
- Funding Allocation:** \$3.2 Billion
- Program Administration:** The Office of Weatherization and Intergovernmental Programs of the Office of Energy Efficiency and Renewable Energy (EERE) of the US Department of Energy (DOE) http://apps1.eere.energy.gov/wip/block_grants.cfm

2.1.2 State Energy Program

- Description:** Under the terms of the ARRA, the DOE Secretary provides grants to the State and Territory governors. The funds, distributed to the states by formula allocation, will be used for state-wide energy programs such as building retrofits, programs that incent efficiency for utilities, adoption and enforcement of energy efficient building codes, and transportation measures. The states will prioritize the programs carried out with these funds toward increased energy efficiency and renewable energy applications.
- Eligibility:** The 56 governors of the States, Territories and the Mayor of the District of Columbia are eligible to receive ARRA funds as long as the governor notifies the DOE Secretary in writing that he has received assurances that (1) the PUC will institute a policy to incent efficiency for utilities, (2) energy efficient residential and commercial building codes will be adopted and a plan developed to achieve compliance, and (3) prioritize grants toward funding energy efficiency and renewable energy programs.
- Funding Allocation:** \$3.1 billion

- d. **Program Administration:** The Office of Weatherization and Intergovernmental Programs of the Office of Energy Efficiency and Renewable Energy (EERE) of the US Department of Energy (DOE)
http://apps1.eere.energy.gov/state_energy_program/

2.1.3 Clean Water State Revolving Funds and Drinking Water State Revolving Fund Capitalization Grants

- a. **Description:** Clean Water State Revolving Fund programs provide monies to fund water quality protection programs for wastewater treatment, nonpoint source pollution control, and watershed and estuary management. The programs provide low-interest loans with flexible terms. The Drinking Water State Revolving Fund operates in a similar manner by providing financial incentive for public and private water systems to finance drinking water infrastructure improvements. The ARRA allocated money to both of these programs, which the specification that not less than 20% of each Revolving Fund be available for projects to address green infrastructure, water and/or energy efficiency, innovative water quality improvements, decentralized wastewater treatment, stormwater runoff mitigation, and water conservation.
- b. **Eligibility:** Applicants must be states or Puerto Rico in order to receive capitalization grants. States use funds awarded to them to provide loans and other types of financial assistance to eligible public water systems, local communities, interstate agencies, and Indian tribes. Strong preference is given to projects that are ready to begin construction within 12 months of the enactment of the ARRA.
- c. **Funding Allocation:** \$6 billion total, \$4 billion for the Clean Water State Revolving Funds, \$2 billion for Drinking Water State Revolving Fund.
- d. **Program Administration:** Office of Water, Environmental Protection Agency (EPA)
<http://www.epa.gov/owm/cwfinance/cwsrf/>
<http://www.epa.gov/safewater/dwsrf/index.html>

2.1.4 Rural Community Facilities Program Account and the Rural Water and Waste Disposal Program Account

- a. **Description:** The purpose of these two accounts is to provide capital for rural programs to improve the quality of the community. These accounts directly fund loans and grants for rural community facilities programs and for waste and water programs as described in the Consolidated Farm and Rural Development Act. The Rural Community Facilities Program Account provides capital for projects that support overall community development, such as child care facilities, food recovery and distribution centers. The Rural Water and Waste Disposal Program Account funds may be used for the construction or renovation of rural water facilities or rural waste disposal facilities.
- b. **Eligibility:** Municipalities, counties, and other local governments, associations, NGOs, Indian tribes located in exclusively rural areas can apply. Eligible beneficiaries for the funds for the Rural Community Facilities Program Account can include farmers, ranchers, rural residents, rural business and other users of public facilities.
- c. **Funding Allocation:** \$130 million for the Rural Community Facilities Program Account, \$1.38 billion for the Rural Water and Waste Disposal Program Account.
- d. **Program Administration:** Rural Housing Service, Department of Agriculture (USDA)
<http://www.rurdev.usda.gov/>

2.1.5 EPA Resources for Energy

- a. ENERGY STAR

- i. ENERGY STAR for local governments
http://www.energystar.gov/index.cfm?c=government.bus_government_local
- ii. ENERGY STAR for Water and Wastewater Utilities
http://www.energystar.gov/index.cfm?c=water.wastewater_drinking_water
- iii. ENERGY STAR for K-12 Schools
http://www.energystar.gov/index.cfm?c=k12_schools.bus_schoolsk12
- iv. Portfolio Manager
Portfolio Manager helps you maximize your stimulus spending in three easy steps: 1) prioritize projects, 2) track progress, and 3) verify results. The tool lets you track and assess energy and water consumption within individual buildings as well as across an entire building portfolio. Managers of drinking water systems and wastewater treatment plants can now track energy use, energy costs, and associated carbon emissions by using Portfolio Manager, EPA's online benchmarking tool. Portfolio Manager also offers wastewater treatment plant managers the ability to compare the energy use of their plants with other peer plants using the EPA energy performance rating system.
<http://www.energystar.gov/benchmark>
- v. ENERGY STAR Challenge Toolkit contains materials to help local governments communicate commitment to energy efficiency and promote learning in the community.
http://www.energystar.gov/index.cfm?c=challenge.challenge_toolkit
- vi. Quick List of ENERGY STAR resources for buildings.
http://www.energystar.gov/ia/business/challenge/get_started/QuickListBusiness.pdf
- vii. Menu of ENERGY STAR options for higher education.
http://www.energystar.gov/ia/business/higher_ed/menu_of_offerings_higher_ed.pdf
- b. Local Climate and Energy Program
 - i. This page contains links to best practices and training to help local governments implement cost effective energy efficiency and renewable energy in their communities.
<http://epa.gov/cleanenergy/energy-programs/state-and-local/local.html>
- c. Lead by Example Guidebook—Coming Soon
 - i. This guide for state and local officials details how to “lead by example” by establishing programs that achieve substantial energy cost savings within their own operations, buildings, and fleets and demonstrate the feasibility and benefits of clean energy to the larger market. The guide will be available online at: <http://epa.gov/cleanenergy/energy-programs/state-and-local>
- d. National Action Plan for Energy Efficiency (Action Plan)
 - i. The Action Plan is a private-public initiative to create sustainable, aggressive national commitment to energy efficiency through collaborative efforts of gas and electric utilities, utility regulators, and other partner organizations.
<http://www.epa.gov/cleanenergy/energy-programs/napee/index.html>
- e. Heat Island Resources
 - i. EPA's Heat Island Effect website contains resources on what heat islands are and how communities can combat their negative effects.
<http://www.epa.gov/heatisland/index.htm>
- f. Combined Heat and Power Partnership
 - i. Combined heat and power (CHP), also known as cogeneration, is an efficient, clean, and reliable approach to generating power and thermal energy from a single fuel source.
<http://www.epa.gov/chp/>
- g. Landfill Methane Outreach Program
 - i. The U.S. EPA's Landfill Methane Outreach Program (LMOP) is a voluntary assistance and partnership program that promotes the use of landfill gas as a renewable, green energy source.

- iii. Weatherization Assistance Program Technical Assistance Center:
<http://www.waptac.org/>
- iv. State by State Breakdown of Weatherization Funding (p4):
<http://usmayors.org/mser/documents/arra-report-Stateprog.pdf>

2.2.2 Public Housing Capital Fund

- a. **Description:** The Public Housing Capital Fund provides formula grants to Public Housing Agencies (PHAs) for capital and management activities, including modernization and development of public housing. These grants benefit the residents of low-income public housing. The stimulus funds specified in the ARRA are allocated for the energy efficient modernization and renovation of the public house inventory.
- b. **Eligibility:** The applicant must be a PHA that has demonstrated its legal authority to develop, own, modernize, and operate a public housing development in accordance with the 1937 Act. The beneficiaries of the application must be low-income public housing residents.
- c. **Funding Allocation:** \$4 billion
 - i. \$1 billion from the Public Housing Capitol Fund funding to fund improvements in energy efficiency, including investments that leverage private sector funding or financing for renovations and energy conservation retrofit investments.
 - ii. Funds shall be obligated to public housing agencies within 30 days of enactment of the ARRA, which was signed February 17, 2009. Each public housing authority will execute a Capital Fund Program Amendment to the Annual Contributions Contract which must be signed by the local HUD field Office.
- d. **Program Administration:** Public and Indian Housing, Department of Housing and Urban Development (HUD)
<http://www.hud.gov/offices/pih/programs/ph/capfund/index.cfm>

2.2.3 Native American Housing Block Grants

- a. **Description:** This program provides the means for tribal governing bodies to name a tribally designated housing entity to prepare an Indian Housing Plan. The block grant serves the housing needs of low-income American Indians and Alaska Natives. Eligible activities include modernization, construction, rehabilitation of homes, and housing related services. The funds provided by the ARRA require energy efficient modernization and renovation of housing maintained by these Native American housing programs and the development of sustainable communities.
- b. **Eligibility:** The block grant is made available annually using an allocation formula for Indian tribes with approved Indian Housing Plans.
- c. **Funding Allocation:** \$510 million
 - i. \$255 million of these funds will be distributed according to the same funding formula that was used to allocate Indian Housing Block Grants in fiscal year 2008.
 - ii. The Secretary of HUD may obligate \$255 million of the amount provided under this heading for competitive grants to eligible entities that apply for funds authorized under NAHASDA. The Secretary must obligate these funds by September 2009.
 - iii. Funding is available until September 30, 2011, however extensive legislation designates what percentage of total funding must be obligated within 1 years, 2 years and 3 years time.
- d. **Program Administration:** Indian Housing Block Grants, Department of Housing and Urban Development (HUD)
<http://www.hud.gov/progdsc/ihbg1208.cfm>

2.2.4 Assisted Housing Stability and Energy and Green Retrofit Investments

- a. **Description:** The Section 8 Program was developed by HUD to provide rental subsidies for eligible tenant families (including single persons) residing in newly constructed, rehabilitated, and existing rental and cooperative apartment projects. The ARRA sets aside \$2.25 billion for assistance to owners of properties receiving project-based assistance. \$2 billion of these funds are for project-based rental assistance for payments to owners for 12-month periods. HUD will use the \$2.0 billion to fund contract renewals under the Section 8 program. However, \$250 million are specifically set aside for energy efficient modernization and renovation of housing of HUD-sponsored housing for low income, elderly, and disabled persons.
- b. **Eligibility:** Beneficiaries must be residents of HUD-sponsored housing for low-income, elderly, and disabled persons. Owners must have at least a satisfactory management review rating, be in substantial compliance with applicable performance standards and legal requirements, and commit to an additional period of affordability in order to apply.
- c. **Funding Allocation:** \$250 million
 - i. Projects funded with grants or loans under this heading shall be provided through authorized programs administered by the Office of Affordable Housing Preservation of the HUD.
 - ii. Funds available until September 30, 2012.
- d. **Program Administration:** Office of Affordable Housing Preservation, Department of Housing and Urban Development (HUD)
 - i. <http://www.hud.gov/offices/hsg/omhar/index.cfm>
 - ii. <http://www.hud.gov/recovery/pbrassistance.cfm>
 - iii. <http://www.hud.gov/recovery/recoveryact.cfm>

2.2.5 HOME Investment Partnerships Program

- a. **Description:** HOME is the largest Federal block grant to state and local governments designed exclusively to create affordable housing for low-income households. HOME provides formula grants to states and localities that communities use to fund a wide range of activities that build, buy and/or rehabilitate affordable housing for rent or homeownership or provide direct rental assistance to low-income people. Participating jurisdictions may use HOME funds for a variety of housing activities, including tenant-based rental assistance, housing rehabilitation, assistance to homebuyers, and new construction of housing. HOME funds are allocated using a formula designed to reflect relative housing need. 60% is allocated to units of local government and 40% to states. The ARRA specifies \$2.25 billion to build and rehabilitate low-income housing under this program, including the use of green technologies during construction and renovation.
- b. **Eligibility:** HOME grants are awarded each year to participating jurisdictions based on an allocation formula. States are automatically eligible for HOME funds. However, local jurisdictions must meet a minimum allocation threshold in order to be a participating jurisdiction.
- c. **Funding Allocation:** \$2.25 billion available until September 30, 2011.
 - i. Housing credit agencies in each state will distribute funds competitively according to their qualified allocation plan.
 - ii. Housing credit agencies within each state must spend 75% of funds within one year of date of enactment of the ARRA and have spent all of the funds within 2 years.
- d. **Program Administration:** HOME Investment Partnerships Program, Department of Housing and Urban Development (HUD)
<http://www.hud.gov/offices/cpd/affordablehousing/programs/home>

2.2.6 EPA Resources for Energy Efficiency in Affordable Housing:

- a. Energy Star for Affordable Housing:
ENERGY STAR offers affordable housing stakeholders proven, turn-key solutions that can be deployed via housing policies and programs to cost-effectively increase energy efficiency for low-income households.
http://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.pt_affordable_housing
- b. ENERGY STAR Affordable Housing Success Stories:
This Web site offers a series of affordable housing energy efficiency success stories from around the country.
http://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.pt_affordable_housing_success_stories
- c. ENERGY STAR Portfolio Manager:
This tool helps track and assess energy and water consumption within individual buildings as well as across an entire building portfolio. Portfolio Manager helps you maximize your stimulus spending in three easy steps: 1) prioritize projects, 2) track progress, and 3) verify results. The tool was recently modified to allow multifamily buildings to be benchmarked.
http://www.energystar.gov/index.cfm?c=evaluate_performance.bus_portfoliomanager
- d. ENERGY STAR Qualified Products:
Find products in more than 50 categories that are eligible for the ENERGY STAR. They use less energy, save money, and help protect the environment.
http://www.energystar.gov/index.cfm?fuseaction=find_a_product
- e. ENERGY STAR Procurement Guidance:
This site offers training, resources, and case studies to assist procurement officials in making smart purchasing decisions.
http://www.energystar.gov/index.cfm?c=bulk_purchasing.bus_purchasing
- f. ENERGY STAR Quantity Quotes:
This Web site connects institutions, corporations, and other purchasing groups with suppliers who sell ENERGY STAR qualified products in bulk.
<http://www.quantityquotes.net/>
- g. Local Government Clean Energy Strategies Guide Chapter on Energy Efficiency in Affordable Housing
http://epa.gov/cleanenergy/documents/Section_6.2_AffHousing.pdf
- h. Reaching out to the Broader Community
Local Governments can encourage residents who are not eligible for one of these funding programs to take steps making their homes more energy efficient with ENERGY STAR to reduce high energy bills, improve comfort and help to protect the environment.
 - i. ENERGY STAR Home Improvement:
http://www.energystar.gov/index.cfm?c=home_improvement.hm_improveme nt_index
 - ii. ENERGY STAR Home Energy Yardstick:
http://www.energystar.gov/index.cfm?fuseaction=HOME_ENERGY_YARDS TICK.showGetStarted

2.3 Green Schools

2.3.1 Higher Education Modernization, Renovation, and Repair (Green School)

- a. **Description:** The ARRA contains \$53.6 billion to be administered by the Department of Education for a State Fiscal Stabilization Fund. The Secretary of Education will allocate this money to the states based on population and age considerations. The Secretary will also grant money to the governor of each state. The governor will use 81.8% of the state's allocation under section 14001 for the support of education program and services. The governor shall use the remaining 18.2% of the state's

allocation for public safety and other government services, which may include assistance for elementary and secondary education and public institutions of higher learning, and for modernization, renovation, or repair of public school facilities and institutions of higher education facilities that are consistent with a recognized green building rating system.

- b. **Eligibility:** State governors are eligible to apply for State Fiscal Stabilization Funds.
- c. **Funding Allocation:** 18.2% of the state's allocation of the State Fiscal Stabilization Fund.
 - i. Each state's governor must return to the Secretary of the Department of Education any funds received that the governor does not commit within two years of receiving them and those funds will be reallocated to remaining states.
- d. **Program Administration:** Department of Education (Ed)
 - i. <http://www.ed.gov/policy/gen/leg/recovery/index.html>
 - ii. <http://www.ed.gov/programs/statestabilization/index.html>

2.3.2 EPA Resources for Green Schools

- a. ENERGY STAR for K-12 Schools.
This Web site provides resources for school districts to use as they plan energy efficiency activities, including energy management guidelines, information on financing options, and tools and resources to measure and track energy use.
<http://www.energystar.gov/schools>
- b. ENERGY STAR for Higher Education
Services include offerings for training, benchmarking/tracking, construction, financing, education, public outreach and more. <http://www.energystar.gov/highered>
- c. The ENERGY STAR Building Upgrade Manual
This manual includes, in addition to a general five-step approach, a chapter on the unique challenges and opportunities in K-12 school buildings.
http://www.energystar.gov/index.cfm?c=business.bus_upgrade_manual
- d. ENERGY STAR for Kids
School districts can use energy efficiency projects in school buildings as learning opportunities for their students. This Web site provides information for kids about energy efficiency.
<http://www.energystar.gov/kids>
- e. ENERGY STAR Success Stories
This Web site offers a series of K-12 energy efficiency success stories from school districts around the country.
http://www.energystar.gov/index.cfm?c=k12_schools.bus_schoolsk12
- f. Indoor Air Quality in Schools
This Web site offers resources on integrating energy efficiency and indoor air quality goals in school buildings.
http://www.energystar.gov/index.cfm?c=k12_schools.bus_schoolsk12_indoor_airquality

2.4 Transportation and Alternative Fuels

2.4.1 Alternative Fuel Vehicles Pilot Grant Program (DOE Clean Cities Program)

- a. **Description:** The Department of Energy has allocated some of the stimulus money granted to them by the ARRA to establish grants under the Alternative Fueled Vehicle Pilot Grant Program. These grants will be used to acquire alternative fuel vehicles, fuel cell vehicles, hybrid vehicles, and to develop the refueling infrastructure necessary for the continued success of these transportation means without federal support. The grant program may provide up to 30 geographically dispersed project grants, between \$5 million and \$15 million. The grants are dispensed on a

competitive basis. Grant recipients can include state governments, local governments, and metropolitan transportation authorities in partnership with an active designated Clean Cities Coalition.

- b. **Eligibility:** Prospective applications will be limited to heads of state or local governments or a metropolitan transportation authority and a designated Clean Cities Coalition.
- c. **Funding Allocation:** \$300 million available for this funding opportunity in 2009.
- d. **Program Administration:** Clean Cities Program, Energy Efficiency and Renewable Energy, Department of Energy (DOE)
<http://www.afdc.energy.gov/cleancities/progs/solicitations.php>

2.4.2 Diesel Emission Reduction Act Grants

- a. **Description:** The ARRA provides funds to achieve significant reductions in diesel emissions from the existing fleet of 11 million diesel engines (locomotives, vessels, freight, transit, school buses, construction equipment, etc.). Funding is in the form of grants. Seventy percent of the available funds will be distributed as competitive grants to eligible entities, which include regional and local governments. The remaining 30% will be allocated to States for State clean diesel grant programs.
- b. **Eligibility:** States, local, tribal, or port agencies, including school districts and MPOs, with jurisdiction over transportation or air quality; and in some cases non-profit organizations with transportation or air-related missions.
- c. **Funding Allocation:** \$300 million
- d. **Program Administration:** Office of Transportation and Air Quality, Environmental Protection Agency (EPA)
<http://www.epa.gov/cleandiesel/grantfund.htm>

2.4.3 Transit Capital Assistance

- a. **Description:** 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. Priority will be given to projects that result in the greatest total energy savings. This funding is part of \$6.9 billion which the ARRA allocates to general transit assistance grants.
- b. **Eligibility:** Public transit authorities
- c. **Funding Allocation:** \$100 million
- d. **Program Administration:** Federal Transit Administration, Department of Transportation (DOT)
http://www.fta.dot.gov/index_9118.html

2.4.4 Supplementary Discretionary Grants for a National Surface Transportation System

- a. **Description:** These discretionary grants exist for local and state governments as well as transit authorities to make capital investments in surface transportation infrastructure. For example, the grants could fund New Starts and Small Starts programs, which provide a primary resource for supporting locally planned and implemented transit investments. The grants can also fund passenger and freight train rail transportation projects and highway and bridge projects.
- b. **Eligibility:** State and local governments, application process not made public yet.
- c. **Funding Allocation:** \$1.5 billion available through September 30, 2011.
- d. **Program Administration:** Department of Transportation (DOT)
<http://www.dot.gov/recovery/>

2.4.5 EPA Resources for Transportation and Alternative Fuel Projects

- a. EPA Office of Transportation and Air Quality (OTAQ)

- i. OTAQ regulates air pollution from many types of mobile sources, including cars. The OTAQ website contains information on pollutants, fuels, and programs which are related to air pollution from mobile sources. Visit <http://www.epa.gov/otaq/> for more information.
 - ii. The State and Local Transportation Resources website contains many resources for helping state and local governments determine emissions from mobile sources, research legislation surrounding the issue, find sources of funding for new projects and address air pollution at a local level. <http://www.epa.gov/otaq/stateresources/index.htm>
 - iii. OTAQ's "Transportation and Climate" page offers information on transportation GHG emissions, regulations, tools and analysis, and related links from other federal agencies and research institutions. <http://www.epa.gov/otaq/climate/index.htm>
- b. Local Climate and Energy Program
 - i. This program assists local governments in their climate and clean energy efforts by providing technical assistance, analytical tools and outreach support. <http://www.epa.gov/cleanenergy/energy-programs/state-and-local/index.html>
- c. National Clean Diesel Campaign
 - i. The National Clean Diesel Campaign promotes diesel emission reduction strategies. <http://www.epa.gov/cleandiesel/>
 - ii. The Clean Diesel Toolkit provides an array of tools and resources for designing, funding and evaluating programs that reduce diesel engine emissions. <http://www.epa.gov/otaq/diesel/slt/basicinfo.htm>
 - iii. A special Recovery Act web site for the National Clean Diesel Campaign is available. <http://www.epa.gov/otaq/eparecovery/index.htm>

2.5 Green Job Training

2.5.1 Training for Careers in Energy Efficiency and Renewable Energy

- a. **Description:** Funding includes a specific set aside for research, labor exchange, and job training projects that prepare workers for careers in energy efficiency and renewable energy, as described in the 2007 Green Jobs Amendment to the Workforce Investment Act. The Green Jobs Act focuses on training workers for jobs in a broad range of industries, including energy efficient vehicles, sustainability, and energy efficient building.
These funds are part of the training and employment services funding designated for the Department of Labor in the ARRA. Additional funding is available for programs under the Workforce Investment Act and Trade Adjustment Assistance program which could be used for clean energy related programs at the recipient's discretion.
- b. **Eligibility:** The Department of Labor has not yet published its application process. However, the Green Jobs Act of 2007 authorized appropriations of different types of funding for states, non-profits, and partnerships.
- c. **Funding Allocation:** A total of \$3.95 billion will be distributed by the Department of Labor for workforce training. \$500 million is set aside for fields outlined in the Green Jobs Act through June 30, 2010.
- d. **Program Administration:** Department of Labor
<http://www.dol.gov/recovery/>

2.5.2 EPA Resources for Green Job Training

- a. **Clean Energy Workforce Development**
 - i. EPA launched the State Climate and Energy Technical Forum to explore analytical questions and resolve key issues surrounding state clean energy

efforts. On February 24, 2009, EPA facilitated a call specific to clean energy workforce development. Materials from that call are available on EPA's website. <http://www.epa.gov/cleanenergy/energy-programs/state-and-local/state-forum.html#twoa>

3 TAX INCENTIVES AND BOND PROGRAMS

Along with the funding opportunities provided to local and tribal governments in ARRA are tax incentives that encompass several potential approaches to energy efficiency, such as credits for the implementation and maintenance of renewable energy supplies for buildings or motor vehicles. Local and tribal governments may be able to take advantage of these provisions directly, or share information with their communities to encourage individuals or businesses to use them.

Some of the credits modify or extend eligibility requirements to receive tax benefits in previously-existing laws while other credits are entirely new. In one example of a modification to an existing law, the existing \$2,000 cap on the 30 percent tax credit for the installation of solar- and geothermal-powered utilities has been lifted entirely, as has the previous small-scale wind power cap, which had been set at \$4,000. One of the entirely new tax credits is the *Advanced Energy Investment Credit*; this establishes a 30 percent tax credit for those who invest in "advanced energy property," which is defined as property that generates renewable energy, such as solar panels for buildings or advanced battery technology for hybrid cars. Credits up to \$2.3 billion total may be allocated for this effort.

The list below contains all of the energy-related tax incentives that may be relevant to local governments. More information on these incentives can be found at <http://www.ase.org/content/article/detail/5347> and http://www.acore.org/files/images/email/acore_stimulus_overview.pdf.

3.1 Existing Homes Tax Credit

This credit extends, and increases the value of, the existing credit for the cost of purchase and installation of qualified energy efficiency measures and renewable energy-generating property to 30 percent for 2009 and 2010. The cap for the credit has also been increased from \$500 to \$1500. Qualified deductible actions include the purchase and installation of insulation, windows, and energy-efficient air conditioners, boilers, and furnaces.

3.2 New Homes Tax Credit

The credits for home builders were extended through 2010. Home builders are eligible for a \$2,000 tax credit for a new energy efficient home that achieves 50% energy savings for heating and cooling over the 2004 International Energy Conservation Code (IECC) and supplements. At least 1/5 of the energy savings must come from building envelope improvements. This credit also applies to contractors of manufactured homes conforming to Federal Manufactured Home Construction and Safety Standards.

There is also a \$1,000 tax credit to the producer of a new manufactured home achieving 30% energy savings for heating and cooling over the 2004 IECC and supplements (at least 1/3 of the savings must come from building envelope improvements), or a manufactured home meeting the requirements established by EPA under the ENERGY STAR program.

3.3 Investment Tax Credit for Installation of Solar, Geothermal, and Wind Power

For residential properties, this credit removes the previous \$2,000 cap on the 30 percent federal tax credit for purchase and installation of solar thermal and geothermal property. For business, the previous \$4,000 cap for purchase and installation of small-scale wind property (defined as wind power with a maximum generation capability no larger than 20 kW). For example, if it cost a homeowner \$25,000 to purchase and install solar cells for electricity generation, the existing legislation would have limited the credit for installing this system to \$2,000. Under ARRA, \$7,500 of the installation cost would be offset by a tax credit. If a business were to spend \$100,000 installing small-scale wind property, the previous credit of \$4000 will no longer apply and the tax credit will instead be \$30,000.

3.4 Advanced Energy Investment Credit (AEIC)

The AEIC is an entirely new 30 percent tax credit for the investment in “advanced energy property,” including technology for the production of renewable energy, energy storage, energy conservation, and carbon sequestration, among other technologies. This will allow for up to \$2.3 billion in tax credits in the United States, total. Qualified investments include “personal tangible property that is depreciable and required for the production process.”¹

3.5 Renewable Energy Production Tax Credit Extension

The ARRA extends the Renewable Energy Production Tax Credit, so that initiation of this credit will be available for facilities put in place through 2013. Facilities that generate power from wind, geothermal, hydropower, landfill gas, waste-to-energy, and bio-energy are eligible for this credit, which provides a 1.9-cent per kilowatt-hour (kWh) benefit for the first ten years of a renewable energy facility's operation. This credit is an alternative to taking a tax credit to cover the cost of purchasing and installing the property that generates the energy. This credit will be based, as stated above, on the amount of energy generated.

3.6 Election of Renewable Energy Investment Credit in Lieu of Production Credit

This portion of ARRA establishes a credit for organizations that invest in renewable energy sources. While the Renewable Energy Production Tax Credit (see 3.5) is calculated based on electricity generated from renewable sources, this credit is calculated based on the capital cost of the projects. Recipients may choose either the production tax or the investment credit, but not both. The 30 percent investment credit applies to property that generates energy from “wind, closed-loop biomass, open-loop biomass, geothermal, landfill gas, trash, qualified hydropower, and marine and hydrokinetic renewable energy facilities placed in service in 2009 or 2010.”²

3.7 Coordination with Renewable Energy Grants

This portion of ARRA indicates that properties that utilize renewable energy grants are unable to also claim a tax credit for the production of that renewable energy. The purpose of this addition is to ensure that credits and grants aren't provided for the same property.

¹Database of State Incentives for Renewables & Efficiency (DSIRE): Federal Incentives for Renewables and Efficiency
http://www.dsireusa.org/library/includes/incentive2.cfm?Incentive_Code=US52F&State=federal¤tpageid=1&ee=1&re=1

²“Renewable Energy Law Alert: House Bill Proposes Increased Incentives for Renewable Energy Projects”
<http://www.stoel.com/showalert.aspx?Show=3486>

3.8 Repeal of Subsidized Energy Financing Limitation on Investment Tax Credit

Properties owned by businesses, government agencies, or individuals would be allowed to qualify for the *investment* tax credit, even if industrial development bonds or other subsidies finance the energy, but this does not apply to those who claim the *production* tax credit (see 3.6).

3.9 Installment of Alternative Fuel Pump Credit

This previously existing credit, which provided for the cost of purchase and installation of alternative fuel pumps so as to accelerate development of alternative fuel distribution networks, is expanded from 30 percent to 50 percent for tax years 2009-2010, up to a maximum of \$50,000.

3.10 Plug-in Electric Drive Vehicle Credit

The ARRA expands this previously existing credit for purchase of plug-in electric drive vehicles to a base amount of \$2,500 with an additional \$417 credit for each kWh of capacity in excess of 5 kWh, up to a maximum of \$5,000 per vehicle. For example, if a qualified electric vehicle's energy storage capacity is 8 kWh, the tax credit allowable for the cost of purchasing the vehicle is \$2,500 plus \$417/kWh (over 5 kWh) x 3 kWh = \$3,751.

3.11 Clean Renewable Energy Bonds

Tax credit bonds used to fund capital expenditures incurred on one or more qualified renewable energy facilities including wind, geothermal, hydropower, landfill gas, waste-to-energy, and bio-energy. ARRA authorizes an additional \$1.6 billion of new CREBs, to be allocated 1/3 to state, local, and tribal governments, 1/3 to public power providers, and 1/3 to electric cooperatives.

3.12 Energy Conservation Bonds

Increases and expands the bond limitation on energy conservation bonds by \$2.4 billion for loans and grants for qualified conservation purposes including a wide range of capital expenditures (e.g. reducing energy use in publicly-owned buildings, implementing green community programs, and developing rural renewable energy resources) and public education campaigns.

3.13 Qualified School Construction Bonds

State and local governments may issue up to \$22 billion in "qualified school construction bonds" (\$11 billion in 2009 and \$11 billion in 2010), a new type of tax credit bond for "the construction, rehabilitation, or repair of a public school facility, or for the acquisition of land on which such a facility is to be constructed". Tribal schools receive an additional \$400 million of the bonds (\$200 million in 2009 and \$200 million in 2010). Details about the qualified school construction bond program are not yet available.

3.14 Qualified Zone Academy Bonds

Funding for the Qualified Zone Academy Bonds (QZAB) program for schools is increased by \$2.8 billion (\$1.4 billion in 2009 and 1.4 billion in 2010). QZABs must be used for rehabilitating or repairing public school facilities, investing in new equipment and technology, developing challenging course materials, and training teachers. QZABs may not be used for new construction.

3.15 EPA and Other Federal Resources

The following websites provide more information about these tax credits and the programs targeted by these credits:

- AgStar (this program encourages the profitable use of methane recovery technologies at CAFOs that manage manure as liquids or slurries):
www.epa.gov/agstar
- Climate Leaders (this program works with companies to develop comprehensive climate change strategies):
www.epa.gov/climateleaders
- Coalbed Methane Outreach Program (a voluntary program that promotes the profitable recovery and use of coal mine methane):
www.eoa.gov/coalbed
- Combined Heat and Power Partnership (CHPP) (CHP can greatly increase a facility's operational efficiency and decrease energy costs):
www.epa.gov/chp
- Electronic Product Environmental Assessment Tool (EPEAT) (system to help organizations evaluate computers and monitors, in terms of energy efficiency):
www.epeat.net
- Energy Star Home Improvement:
http://www.energystar.gov/index.cfm?c=home_improvement.hm_improvement_index
- Federal Tax Credits for Energy Efficiency: www.energystar.gov/taxcredits.
- Green Communities: <http://www.epa.gov/greenkit/index.htm>.
- Green Power Partnership (GPP)(GPP promotes the use of renewable energy by providing technical assistance, networking, and public recognition to organizations that utilize green power):
www.epa.gov/greenpower
- Landfill Methane Outreach Program (LMOP) (LMOP encourages the recovery of landfill gas for use as an alternative energy source):
www.epa.gov/lmop
- Performance Track (This program recognizes and drives environmental excellence by encouraging facilities with strong environmental records to go above and beyond their legal requirements, setting an example for others):
www.epa.gov/performance-track
- Renewable Energy Production Incentive: <http://apps1.eere.energy.gov/rep/i/>