



Federal Economic Recovery Funding for Energy Efficiency and Renewable Energy Projects

Title IV of American Recovery and Reinvestment Act (ARRA) of 2009 - Department of Energy (DOE)

<p>State Energy Program \$ ARRA – \$3,100,000,000 \$ NYS Share – \$123,110,000</p>	<p>Status</p> <ul style="list-style-type: none"> • Program Guidance issued by DOE on 3/12/2009 • NYSERDA submitted Plan to DOE on 5/12/2009 • http://www.nyserda.org/Economicrecovery/documents/NYS%20SEP%20ARRA%20Grant%20Application.pdf • DOE approved the NYS Plan on 7/2/09 • The first competitive solicitation for projects will be issued in July, with applications due in late August 	<p>Potential Uses</p> <ul style="list-style-type: none"> • Energy efficiency (EE) and renewable energy capital projects • Building and facility energy audits • Energy Code support • Transportation EE and alternative fuels
<p>Energy Efficiency and Conservation Block Grants \$ ARRA -- \$3,200,000,000</p> <ul style="list-style-type: none"> • \$ 400,000,000 for competitive grants • \$2,800,000,000 by formula <p>\$ NYS Share</p> <ul style="list-style-type: none"> • \$175,122,300 by formula <ul style="list-style-type: none"> - \$29,760,600 to NYSERDA for small municipalities - \$23,739,000 to 10 largest counties - \$121,622,700 to 44 largest cities/towns • \$ from competitive grants to be determined 	<p>Status</p> <ul style="list-style-type: none"> • Program Guidance issued by DOE on 3/26/2009 • Due date for large city, county, and tribal organization applications extended from 6/25/2009 to 8/10/2009 • NYSERDA submitted its EECBG plan on 6/25/2009 • http://www.nyserda.org/pdfs/NYS%20EECBG%20Plan-%206-09-rev2.pdf • NYSERDA will solicit applications for projects from small municipalities following DOE approval of Plan 	<p>Potential Uses</p> <ul style="list-style-type: none"> • Building energy audits • Financial incentives for EE retrofits • Transportation EE programs • Building code services • Energy distribution technologies • Material conservation programs • Technologies to reduce or capture greenhouse gases from landfills • Replacement of traffic signals and street lighting with EE technologies • On-site renewable energy technology that generates electricity for government buildings
<p>Weatherization Assistance \$ ARRA – \$5,000,000,000 \$ NYS Share – \$394,686,513</p>	<p>Status</p> <ul style="list-style-type: none"> • Program Guidance issued by DOE on 3/12/2009 • DHCR submitted Plan to DOE on 5/12/2009; Plan approved on 6/26/2009 • http://www.dhcr.state.ny.us/Publications/WeatherizationRecoveryActFundingPlan/Weath_ARRA_Plan.pdf • DHCR will distribute funds to a network of local community organizations to meet local household needs 	<p>Potential Uses</p> <ul style="list-style-type: none"> • Assist income-eligible households to reduce their heating and cooling costs and improve the safety of their homes
<p>Energy Efficiency Appliance Rebate Program and the ENERGY STAR® Program \$ ARRA – \$300,000,000 \$ NYS Share - Formula allocation to NYSERDA still to be determined</p>	<p>Status</p> <ul style="list-style-type: none"> • Pending issuance of funding opportunity by DOE • NYSERDA will receive funds from DOE and structure program for distribution of funds 	<p>Potential Uses</p> <ul style="list-style-type: none"> • Provide incentives to replace old appliances with energy efficient ENERGY STAR® Products
<p>Alternative Fueled Vehicles Pilot Grants \$ ARRA – \$300,000,000 \$ NYS Share - \$ from competitive grants to be determined</p>	<p>Status</p> <ul style="list-style-type: none"> • FOA for Clean Cities FY09 Petroleum Reduction Technologies Projects for the Transportation Sector issued by DOE; Proposals were due 5/29/2009 • NYSERDA submitted seven applications for more than \$94 million of ARRA funds in partnership with five of New York’s Clean City coalitions, NYS DOT, the New York Metropolitan Transportation Coalition, and New York City on 5/29/2009. The Greater Long Island Clean Cities Coalition submitted two applications in partnership with Nassau and Suffolk Counties. 	<p>Potential Uses</p> <ul style="list-style-type: none"> • Alternative fueled vehicles, hybrid vehicles, or fuel cell vehicles • Fueling infrastructure • Operation and maintenance

<p>Transportation Electrification \$ ARRA – \$400,000,000 \$ NYS Share - \$ from competitive grants to be determined</p>	<p>Status</p> <ul style="list-style-type: none"> • FOA for Transportation Electrification issued by DOE on 3/19/2009 • NYSERDA submitted an application for \$10.7 million to place electric-powered trailer refrigeration units and infrastructure at several locations, and provided cost-share and letters of support for proposals being submitted by Ford and Chrysler on 5/13/2009 • NYSERDA informed by DOE-NETL that its preliminary evaluation was positive, and its application will, therefore, be subject to a comprehensive evaluation in accordance with the technical evaluation criteria (est. completion-3 months). 	<p>Potential Uses</p> <ul style="list-style-type: none"> • Projects that encourage the use of plug-in electric drive vehicles • Truck-stop electrification, electric truck refrigeration, electric rail
<p>Advanced Battery Manufacturing Grants \$ ARRA – \$2,000,000,000 \$ NYS Share - \$ from competitive grants to be determined</p>	<p>Status</p> <ul style="list-style-type: none"> • FOA for Electric Drive Vehicle Battery and Component Manufacturing Initiative issued by DOE on 3/19/2009; Proposals were due 5/19/2009 • NYSERDA and ESD provided letters of support for companies that submitted applications to DOE 	<p>Potential Use</p> <ul style="list-style-type: none"> • Manufacturing of advanced batteries and components
<p>Applied Research, Development, Demonstration and Deployment Activities \$ ARRA – \$2,500,000,000:</p> <ul style="list-style-type: none"> • \$800 million for biomass projects • \$350 million for the geothermal projects • \$256 million for the Industrial Technologies Program • \$117 million for the Solar Technologies Program • \$100 million for facility and infrastructure improvements at the National Renewable Energy Laboratory • \$93 million to support wind energy projects • \$50 million for Information and Communications technology • \$41.9 million to spur growth of Fuel Cell Markets • \$25 million for the Massachusetts Wind Technology Testing Center • \$41.5 million for Solid State Lighting • \$107.5 million Building Efficiency • \$32 million - Hydropower • Other discretionary R&D <p>\$NYS Share - \$ from competitive grants to be determined</p>	<p>Status</p> <ul style="list-style-type: none"> • FOA for Recovery Act: Deployment of Combined Heat and Power (CHP) Systems, District Energy Systems, Waste Energy Recovery Systems, and Efficient Industrial Equipment issued by DOE on 6/1/2009; Proposals due 7/14/2009 • FOA for Enhanced Geothermal Systems Component Research and Development Analysis issued by DOE; DOE has modified this FOA to replace prior funding with \$56,000,000 in ARRA funds and to expand Topic Areas; New proposal due date, extended to 7/17/2009; NYSERDA is considering letters of support • FOA for Enhanced Geothermal Systems Demonstration issued by DOE; DOE modified this FOA to replace prior funding with \$90,000,000 in ARRA funds; New proposal due date, extended to 7/30/2009; NYSERDA is considering letters of support • FOA for Recovery Act - Demonstration of Integrated Biorefinery Operations issued by DOE on 5/7/2009; Notice of Intent to Apply due 5/29/2009; Applications due 6/30/2009; NYSERDA provided several applicants letters of support • FOA for Recovery Act – Geothermal Technologies Program issued by DOE on 5/27/2009; Applications due 7/22/2009 • FOA for Recovery Act: High Penetration Solar Deployment issued by DOE on 5/27/2009; Applications due 7/30/2009 • FOA for Recovery Act: Solar Market Transformation issued by DOE on 5/27/2009; Applications due 7/30/2009 • FOA for Recovery Act: National Laboratory Call for Foundational Photovoltaics and Concentrating Solar Power Research and Development issued by DOE on 5/27/2009; Applications due 7/15/2009 • FOA for Recovery Act: Wind Energy Consortia between Institutions of Higher Learning and Industry issued by DOE on 5/29/2009; Letter of Intent due date extended to 6/29/2009; Applications due 7/22/2009 • FOA for Recovery Act – Geothermal Technologies Program: Ground Source Heat Pumps issued by DOE on 6/02/2009; Application due 8/06/2009 • FOA for Recovery Act: Energy Efficient Information and Communication Technology issued by DOE on 6/03/2009; Letter of Intent due 6/30/2009; Applications due 7/21/2009 • Special Notice for Recovery Act, Office of the Biomass Program, FOAs for two R&D related opportunities (1. intermediate ethanol blends, and 2. algal and advanced biofuels) issued by DOE on 5/05/2009; Anticipated FOA release date Summer 2009: • FOA for Recovery Act - Systems Level Technology Development, Integration, and Demonstration for Efficient Class 8 Trucks (SuperTruck) and Advanced Technology Powertrains For Light-Duty Vehicles (ATP-LD) issued by DOE on 6/09/2009; Applications due 9/09/2009 • FOA for Recovery Act: Large Wind Turbine Drivetrain Testing Facility issued by DOE on 6/23/2009; Letter of Intent required, due 7/15/2009; Application due 8/06/2009 	<p>Potential Uses</p> <ul style="list-style-type: none"> • Applied research, development, demonstration, and deployment activities

	<ul style="list-style-type: none"> FOA for Recovery Act - Solid State Lighting U.S. Manufacturing - Round 1 issued by DOE on 6/29/2009; Applications due 8/24/2009 FOA for Recovery Act - Solid-State Lighting Product Development Funding Opportunity – Round VI issued by DOE on 6/29/2009; Applications due 8/17/2009 FOA for Recovery Act – Solid-State Lighting Core Technologies – Round VI issued by DOE on 6/29/2009; Applications due 8/10/2009 FOA for Recovery Act: Training Program Development for Commercial Building Equipment Technicians, Building Operators, and Energy Commissioning Agents/Auditors issued by DOE on 6/29/2009; Applications due 9/01/2009 FOA for Recovery Act: Advanced Energy Efficient Building Technologies issued by DOE on 6/29/2009; Applications due 8/18/2009 FOA for Recovery Act - Building America Energy Efficient Housing Partnerships issued by DOE on 6/29/2009; Applications due 8/24/2009 FOA for Recovery Act: Hydroelectric Facility Modernization issued by DOE on 6/30/2009; Letter of Intent due 7/20/2009; Applications due 8/20/2009 	
<p>Electricity Delivery and Energy Reliability \$ ARRA – \$4,500,000,000 \$ NYS Share - \$ from competitive grants to be determined</p>	<p>Status</p> <ul style="list-style-type: none"> FOA for Synchrophasor Research issued by DOE on 3/27/2009; Applications due 5/27/2009 FOA for Smart Grid Investment Grant Program issued by DOE on 6/25/2009; Letters of Intent due 7/16/2009, 10/23/2009, and 2/10/2010; Applications due 8/06/2009, 11/04/2009, and 3/03/2010 FOA for Recovery Act – Smart Grid Demonstrations issued by DOE on 6/25/2009; Applications due 8/26/2009 FOA for Recovery Act - Enhancing State Government Energy Assurance Capabilities and Planning for Smart Grid Resiliency issued by DOE on 6/15/2009; Applications due 7/30/2009 FOA for Recovery Act-Resource Assessment and Interconnection-Level Transmission Analysis and Planning issued by DOE on 6/15/2009; Applications due 8/14/2009 FOA for Recovery Act – State Electricity Regulators Assistance issued by DOE on 6/15/2009; Applications due 8/31/2009 	<p>Potential Uses</p> <p>Smart Grid – Regional Demonstrations and Grid-Scale Energy Storage (including advanced battery systems (including flow batteries), ultra-capacitors, flywheels, and compressed air energy systems, wind and photovoltaic (PV) integration with the grid, upgrade deferral of transmission and distribution assets, congestion relief, and system regulation).</p> <ul style="list-style-type: none"> Accelerate the modernization of the nation’s electric transmission and distribution systems and promote investments in smart grid technologies, tools, and techniques that increase flexibility, functionality, interoperability, cyber-security, situational awareness, and operational efficiency. Eligibility varies among FOAs.
<p>Fossil Energy Research and Development \$ ARRA – \$3,400,000,000</p> <ul style="list-style-type: none"> \$800,000,000: Clean Coal Power Initiative, Round 3 \$50,000,000: Site characterization activities in geologic formations \$20,000,000: Geologic sequestration training and research grants \$1,520,000,000: Carbon capture and energy efficiency improvement projects \$1,000,000,000 for fossil energy research and development programs <p>\$ NYS Share - \$ from competitive grants to be determined</p>	<p>Status</p> <ul style="list-style-type: none"> Pending issuance of additional Funding Opportunity Announcements by DOE FOA for Recovery Act: Clean Coal Power Initiative - Round 3 issued by DOE on 6/09/2009; Letter of Intent Due 7/24/2009; Applications due 8/24/2009 FOA for Recovery Act: Site Characterization of Promising Geologic Formations for CO2 Storage issued by DOE on 6/02/2009; Applications due 8/03/2009; NYSERDA is considering letters of support FOA for Recovery Act: Regional Sequestration Technology Training issued by DOE on 6/02/2009; Applications due 7/22/2009 NOI to Issue FOA DE-FOA-0000032 entitled Recovery Act: Geologic Sequestration Training and Research issued by DOE on 5/20/2009 FOA for Recovery Act: Carbon Capture and Sequestration (CCS) from Industrial Sources and Innovative Concepts for Beneficial CO2 Use issued by DOE on 6/08/2009; Applications due 8/07/2009; NYSERDA is considering letters of support FOA for Recovery Act: Geologic Sequestration Training and Research issued by DOE on 6/29/2009; Applications due 8/11/2009 	<p>Potential Uses</p> <ul style="list-style-type: none"> Fossil energy research and development projects, including carbon capture and sequestration projects and geological characterization Clean Coal Power Projects- specifically targeting advanced coal-based systems and subsystems that capture and sequester, or put to beneficial use, CO₂ emissions. The announcement is also open to any coal-based, advanced carbon capture technologies that result in co-benefits with respect to efficiency, environmental, or economic improvements potentially capable of achieving CCPI coal technology performance levels specified in the EPACT 2005, Title IV, Subtitle A, Section 402 (Table 1).
<p>Science – Advanced Research Projects \$ ARRA – \$1,600,000,000 \$ NYS Share - \$ from competitive grants to be determined</p>	<p>Status</p> <ul style="list-style-type: none"> DOE announced on 4/27/2009 awards for 46 new Energy Frontier Research Centers (EFRCs), to be funded, in part, with ARRA funds. Five EFRCs to be located in NYS. Pending issuance of additional FOAs by DOE 	<p>Potential Uses</p> <ul style="list-style-type: none"> Research and development of energy technologies Research to reduce energy imports; energy-related GHG emissions; and improve energy efficiency in all sectors

<p>Advanced Research Projects Agency -- Energy \$ ARRA - \$400,000,000 \$ NYS Share - \$ from competitive grants to be determined</p>	<p>Status</p> <ul style="list-style-type: none"> FOA for Advanced Research Projects Agency – Energy (ARPA-E) issued by DOE on 4/27/2009; DOE originally accepting concept papers between 5/12/2009 and 6/02/2009; Concept paper deadline extended to 6/10/2009 (this does not extend deadline for initial Cover Sheet submission) NYSERDA provided support and guidance to applicants submitting Concept papers, as well as the potential for additional funding for projects in the energy storage area, if successful, for underlying R&D projects. 	<p>Potential Uses Energy technology projects that:</p> <ul style="list-style-type: none"> Translate scientific discoveries and cutting-edge inventions into technological innovations and Accelerate transformational technological advances
<p>Innovative Technology Loan Guarantee Program \$ ARRA – \$6,000,000,000</p>	<p>Status</p> <ul style="list-style-type: none"> Pending issuance of FOA by DOE 	<p>Potential Uses</p> <ul style="list-style-type: none"> Technology Development and Demonstration
<p>Diesel Emission Reduction Act Grants \$ ARRA – \$ 300,000,000 \$ NYS Share - \$1,730,000 by formula to NYSDEC for State Clean Diesel Grant Program; with competitive grant portion to be determined</p>	<p>Status</p> <ul style="list-style-type: none"> EPA awarded \$1,700,000 in formula grant to NYSDEC under State Clean Diesel Grant Program Request for Applications for National Clean Diesel Funding Assistance Program issued by EPA on 3/6/2009; On 4/28/2009, NYSERDA coordinated and submitted 10 applications for more than \$50 million in funding Request for Applications for Clean Diesel Emerging Technologies Program issued by EPA on 3/6/2009; Applications were due 5/5/2009; NYSERDA supported applications for this program Request for Applications for SmartWay Clean Diesel Finance Program issued by EPA on 3/6/2009; on 4/28/2009, NYSERDA submitted an application for more than \$3 million in funding 	<p>Potential Uses</p> <ul style="list-style-type: none"> Support diesel emission reduction programs Support the use, development, and commercialization of emerging technologies that reduce emissions from diesel engines Support the creation of national, state or local innovative clean diesel financing programs
<p>Department of Labor-Training and Employment Services \$ARRA: \$750,000,000 for a program of competitive grants for worker training and placement in high growth and emerging industry sectors: <i>Provided</i>, That \$500,000,000 shall be for research, labor exchange and job training projects that prepare workers for careers in energy efficiency and renewable energy as described in section 171(e)(1)(B) of the WIA:</p> <ul style="list-style-type: none"> \$50,000,000: State Labor Market Information Improvement Grants \$100,000,000: Energy Training Partnership Grants \$150,000,000: Pathways Out of Poverty \$190,000,000: State Energy Sector Partnership (SESP) and Training Grants \$5,000,000: Green Capacity Building Grants 	<p>Status</p> <ul style="list-style-type: none"> TRAINING AND EMPLOYMENT (TEN) NOTICE NO. 44-08; describes ETAs initial plans for awarding “green job training” funds issued by DOL-ETA issued on 5/15/2009 SGA for Recovery Act - State Labor Market Information Improvement Grants issued by DOL-ETA on 6/24/2009; Applications due 8/14/2009 SGA for Recovery Act - Energy Training Partnership Grants issued by DOL-ETA on 6/24/2009; Applications due 9/04/2009 SGA for Recovery Act - Pathways Out of Poverty issued by DOL-ETA on 6/24/2009; Applications due 9/29/2009 SGA for Recovery Act - State Energy Sector Partnership (SESP) and Training Grants issued by DOL-ETA on 6/24/2009; Applications due 10/20/2009 SGA for Recovery Act - Green Capacity Building Grants issued by DOL-ETA on 6/24/2009; Applications due 8/05/2009 	<p>Potential Uses</p> <ul style="list-style-type: none"> Interested organizations can plan for the application process; encourages partnerships and collaboration, with key role for States; Prepare workers for careers in the energy efficiency and renewable energy industries, and the occupations and industries on which these grants will focus; Eligible applicants differ among SGAs, and include: <ul style="list-style-type: none"> State Workforce Agencies Private nonprofit organizations that must apply under one of two categories: 1) National labor-management organizations with local networks; or 2) Statewide or local nonprofit partnerships 1) National Entities and 2) Local Entities State Workforce Investment Boards DOL intends to build the green training capacity of its current grantees
<p>Department of Commerce -- National Institute of Standards and Technology(NIST) \$ARRA –\$610,000,000, includes:</p> <ul style="list-style-type: none"> \$5 million from NIST-STRS for competitive contracts re smart grid devices and systems; \$10 million transfer from DOE to help develop a comprehensive framework for a nationwide, fully interoperable smart grid for the U.S. electric power system. \$35 million for Recovery Act Measurement Science and Engineering Research Grants Program (from \$220 million allocated to Scientific and Technical Research and Services (STRS)) 	<p>Status</p> <ul style="list-style-type: none"> “Major Communication, May 8, 2009” issued by NIST on 5/8/2009 FOA for Recovery Act NIST Construction Grant Program issued by NIST on 5/26/2009; Letter of Intent due 6/25/2009; Proposals due 8/10/2009 FOA for Recovery Act Measurement Science and Engineering Research Grants Program issued by NIST on 6/01/2009; Applications due 7/13/2009 	<p>Potential Uses</p> <ul style="list-style-type: none"> Supports collaborative efforts with industry and federal agencies to develop a comprehensive framework for a nationwide, fully interoperable smart grid for the U.S. electric power system Construction Grant Program for construction of research science buildings Grants Program for financial assistance to support measurement science and engineering research proposals in: <u>energy, environment and climate change</u>, information technology/ cybersecurity, biosciences/healthcare, manufacturing, and physical infrastructure as part of NIST’s ARRA activities.

<p>Department of Defense -- US Army Materiel Command Army Research Laboratory and the Army Research Office (ARL/ARO) Core Broad Agency Announcement for Basic and Applied Scientific Research for Fiscal Years 2007 through 2011 – PHOTOVOLTAICS</p>	<p>Status</p> <ul style="list-style-type: none"> • Solicitation for White Papers for Novel Materials and Device Development for High Efficiency Solar Photovoltaics issued by Dept of Army-US Army Materiel Command on 5/20/2009; Proposals due 6/30/2009 	<p>Potential Uses</p> <ul style="list-style-type: none"> • Proposals may be submitted by degree-granting universities, nonprofit organizations, or industrial concerns • White paper for Novel Materials and Device Development for High Efficiency Solar Photovoltaics
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ADDITIONAL INFORMATION
For current information from NYSERDA, please sign up at www.nyserda.org/EconomicRecovery. If you have a specific question, please email EconomicRecovery@nyserda.org or call 1-866-NYSERDA (1-866-697-3732). Questions also may be directed to the Department of Public Service by contacting Kimberly Harriman at Kimberly_harriman@dps.state.ny.us