

SECTION 8. Workforce Development Initiative

8.1 Description of Workforce Development Initiative

In its June 2009 *Order Authorizing Workforce Development Initiatives*,¹ the New York State Public Service Commission (Commission) approved a Workforce Development (WFD) Program to be administered by NYSERDA. The goals of the program are to overcome the barriers to workforce training and to expand the existing energy efficiency training infrastructure across the State. These efforts will provide the present and future workforce with the technical skills necessary to serve the needs of the portfolio of programs funded through the EEPS. The WFD Operating Plan details specific goals for the number of participants, projecting about 6,200 trained and certified workers during the first year of the expanded program, plus an additional 2,300 trained through the New York State Department of Labor's (NYS DOL) Career Pathways initiative. NYSERDA will work closely with NYS DOL to leverage other State and federal funds to develop training for workers and emerging workers through NYS DOL One Stop Centers and the State's Workforce Investment Boards.

The WFD Operating Plan also sets forth the strategies and initiatives that will be used to achieve the WFD Program goals; summarizes how NYSERDA will administer, evaluate, and report on each program component; identifies the funds allocated to each program component and corresponding metrics; and discusses program delivery and collaboration activities. The WFD Operating Plan also includes descriptions of marketing, outreach, and evaluation efforts for these initiatives.

NYSERDA will immediately focus on expanding partnerships with existing training entities through training partnership agreements and provide funding for new initiatives with new training organizations. NYSERDA will expand existing and deploy new training programs through Training Partnership Agreements with existing training institutions and entities. Using competitive solicitations, NYSERDA will address gaps, new EEPS program training needs (to account for new technologies) and target new training organizations or entities that focus on Career Pathways and Technical Training. Activities that NYSERDA will undertake and that are described more fully in this Operating Plan are:

- adding three new residential/multifamily training centers through its contract with Hudson Valley Community College (as described below);
- working with unions and trade groups to add more training locations, and provide additional energy efficiency and building science classes;
- expanding opportunities for internships and apprenticeships to provide on-the-job training for energy efficiency services for both existing and emerging practitioners;
- developing and providing basic skills courses to provide pathways out of poverty, working closely with community-based organizations and environmental justice communities and organizations;
- training additional trainers in all sectors;
- developing on-line training; and,
- supporting certification and professional development initiatives.

¹ Case 07-M-0548 Proceeding on Motion of the Commission Regarding an Energy Efficiency Portfolio Standard, Order Authorizing Workforce Development Initiatives, issued June 22, 2009.

Table 8-1 below outlines the projected Workforce Development Program budget for 2009-2010.

Table 8-1. NYSERDA Workforce Development Program Budget

Program Component	Annual Budget (\$)	Participants Trained	Number of Programs
Career Pathways for Engaging Disadvantaged Communities	\$1,250,000	1097	0
Basic Skills Training	400,000	650	-
Train-the-Trainer	100,000	41	-
Internship/Apprenticeship	750,000	406	-
Technical Training	1,550,000	1,425	23
Training Incentives/Curriculum Dev/Equipment, etc.	500,000	1,040	-
Expand HVCC (Res/MF) CEEBS	300,000	-	3
LRC Expansion	50,000	-	1
Labor Unions/Trades	150,000	-	3
Train - the - Trainer	200,000	55	-
Coordinate with Manufacturers	100,000	-	8
Professional Development (CEU)	50,000	330	-
Online/Distance Learning	200,000	-	8
Internships/Apprenticeships	300,000	-	15
Workforce Development Institute	75,000	-	-
Colleges/Universities	75,000	-	-
Trades/Unions	75,000	-	-
Employer Partnerships	75,000	-	-
Certifications/Reimbursements	1,095,500	2,215	0
Building Analyst (BPI) - Participant Certification	450,000	900	-
Energy Efficient Building Operations (BPI)	49,500	60	-
Certified Energy/Facility Manager (AEE/IFMA)	71,000	355	-
USGBC LEED AP	75,000	100	-
Quality Building Modeler (ASHRAE)	0	-	-
Quality Energy Auditor (ASHRAE)	0	-	-
Building Operator Certification (BOC)	400,000	400	-
Lighting Certification (NCQLP)	18,750	150	-
HVACR Certification (NATE)	31,250	250	-
Annual Solicitation	1,250,000	1500	0
Career Pathways	750,000	700	-
Technical Training	500,000	800	-

Program Component	Annual Budget (\$)	Participants Trained	Number of Programs
Marketing	362,600		
Marketing Materials - Home Shows, Career Fairs	72,520		
Multi Media Campaign	108,780		
Integrated PR	0		
Web Portal	54,390		
Co-Op Advertising with Training Partners	126,910		
TOTAL BUDGET ON NYSERDA WFD MEASURES	5,808,100	6,237	38
Evaluation (5%)	330,006		
Evaluation Plan Development	20,000		
Market Characterization/Assessment & Logic Model	205,006		
Process Evaluation	105,000		
Administration (7%)	462,008		
TOTAL NYSERDA WFD BUDGET	6,600,114		
NOTE: In addition to the NYSERDA budget shown in this table, NYS DOL will administer a \$5,000,000 budget for its Career Pathways effort.			

8.1.1 Background

NYSERDA submitted an initial WFD proposal in September 2008 in response to the Commission’s June 23, 2008 *Order Establishing Energy Efficiency Portfolio Standard and Approving Programs*.

NYSERDA’s proposal included a strategy for developing a qualified workforce equipped to meet the EEPS goals, and was informed by the work of EEPS Working Group VII. EEPS Working Group VII included representatives of 14 entities including utilities, customer advocates, efficiency services providers, workforce development professionals, and government agencies and authorities. In its report submitted in October 2008, EEPS Working Group VII recommended that the Commission approve NYSERDA’s proposal and further recommended that an additional \$2 million per year for three years be approved to provide energy efficiency training to low-income populations, in conjunction with the “pathways out of poverty” program to engage disadvantaged communities. NYSERDA incorporated this recommendation (“Career Pathways for Engaging Disadvantaged Communities”) in its December 2008 supplement to its previous WFD proposal.

8.1.2 Collaborations and Leveraging

NYSERDA works closely with the NYS DOL and other EEPS Working Group members, including utilities, on workforce development efforts to establish a comprehensive training agenda for New York that supports existing and planned energy efficiency programs. NYSERDA will meet regularly with all EEPS program implementers, including State agencies and utility representatives on WFD efforts during implementation of programs under this plan. Quarterly conference call meetings will be used to inform all parties of program implementation progress, and to further coordinate efforts.

As stated in the Commission's June 22, 2009 Order, federal assistance under the American Recovery and Reinvestment Act (ARRA)² has been provided to some State agencies, and is available for energy efficiency programs, including workforce development. NYSERDA plans to continue to coordinate and collaborate with appropriate parties to pursue federal funding to support New York's efforts. NYSERDA and its partners will leverage State funds with available federal funds. As noted in the Order, NYSERDA will work closely with NYS DOL to seek reimbursement for EEPS WFD funding to the extent permissible under ARRA.

8.1.3 Relationship to SBC III Programs – Programs in Progress

NYSERDA used System Benefits Charge (SBC) funds to develop and support the training programs outlined in this section, to improve the skills, knowledge, and awareness of practitioners involved in design, specification, installation, operation and maintenance, and advance controls of building systems and equipment. These activities were funded through NYSERDA's **New York Energy \$martSM** programs. A network of energy efficiency training centers and partners across the State have been engaged to provide training in all aspects of energy efficiency work. Funds support curriculum development, equipment purchase, tuition reimbursement for participants, program marketing, instructor development and certification, resource libraries, and other important elements of quality training programs. With EEPS funding, the following efforts established with SBC funding will be expanded to increase the number of skilled practitioners trained throughout the State to help meet the EEPS goals as outlined in Section 8.2.

8.1.3.1. Residential Energy Efficiency Training

Center for Energy Efficiency and Building Science (CEEBS). The Center for Energy Efficiency and Building Science (CEEBS), headquartered at Hudson Valley Community College, develops and delivers workforce development building science training across the State. CEEBS began in December 2006 as the successor to a previous workforce training contract. To date, over 2,200 practitioners have been trained through the CEEBS network. The training provided by CEEBS learning centers, which is recognized by the Building Performance Institute (BPI), provides building science instruction to building technicians, architects, engineers, and other building professionals. Current subject areas include: Building Analyst, Envelope Professional, Heating Professional, Cooling Professional, Home Energy Rating System Rater, Multifamily Building Analyst, Multifamily Building Operator, Multifamily Hydronic Heating System Design, Home Performance Sales and Marketing, and Insulation and Air Sealing Technician.

In 2007 and 2008, CEEBS trained a total of 1,150 students. Another 1,030 students were trained through June 2009, and it is expected that the rate of trainings will continue to increase. There are currently ten CEEBS Learning Center Locations with two additional Centers coming on line in 2009,³ including Monroe Community College. In addition to the contract with HVCC, NYSERDA has established

² Public Law 111-5 (2009).

³ The CEEBS centers are: Hudson Valley Community College, Troy, NY; OCM BOCES, Syracuse, NY; Broome Community College, Binghamton, NY; Erie Community College, Buffalo, NY; Bronx Community College, New York, NY; Association for Energy Affordability (AEA), New York, NY; Fulton-Montgomery Community College, Johnstown, NY; Westchester Community College, Valhalla, NY; Onondaga Community College, Syracuse, NY; and SUNY Canton, Canton, NY.

training partnerships with several other organizations to provide supplemental training related to its residential energy efficiency programs, which are described below.

New York State Builders Association Research and Education Foundation (NYSBAREF). For several years, NYSEDA has partnered with NYSBAREF to provide advanced building science and business training to contractors and builders. NYSBAREF administers educational seminars and training programs throughout New York State on contract management, the benefits of ENERGY STAR qualified homes and products, and Building Sciences designed to enhance and promote better building practices. Through this partnership, NYSEDA provides tuition support for contractors and home builders to take classes offered by NYSBA REF.

Building Performance Contractors Association (BPCA). NYSEDA has partnered with BPCA to train over 1,350 contractors. BPCA is a coalition of building performance contractors, home energy raters, building diagnosticians, energy auditors and consultants in New York State providing services that increase the comfort, health and safety, efficiency and durability of housing through the treatment of the house as a whole system. BPCA offers workshops and seminars across the State. As with the NYSBA REF classes, the training events offered by BPCA provide training to contractors that supplements and complements the BPI-recognized training provided through CEEBS. BPCA typically brings in nationally-recognized experts to conduct the training events. Topics have included Advanced Diagnostics, Building Performance Training – HVAC, Ventilation, Indoor Air Quality, and Combustion Training and Carbon Monoxide Testing.

New York State Weatherization Directors' Association (NYSWDA). NYSEDA has partnered with NYSWDA since 2007, ensuring that efforts are not duplicated and that resources are leveraged. NYSWDA trains practitioners to provide weatherization services through funding support from the Division of Housing and Community Renewal (DHCR). NYSEDA provides practitioners with more advanced building science and energy efficiency training to provide career pathways and job growth opportunities. NYSEDA has also worked with NYSWDA to develop teaching tools for building technicians. NYSWDA recently established a training facility that includes a classroom, heating lab, and laboratory house. The laboratory house provides a variety of situations for building technicians to diagnose and solve through the use of such amenities as hidden dampers and controls. NYSEDA is working with NYSWDA and DHCR to replicate this versatile teaching tool at locations across the State for both weatherization and building science training.

8.1.3.2 Commercial and Industrial Training Programs

Building Operator Training and Certification. Since 2003, NYSEDA has sponsored Building Operator Certification for over 175 facility managers, mainly in the K-12 schools sector. This effort has been expanded as an example of effective train-the-trainer efforts to promote national standards in building science for building operators through NYSEDA's sponsorship of City University of New York (CUNY) as an approved provider for the Northwest Energy Efficiency Council's (NEEC) Building Operator Certification curriculum. CUNY Building Performance Institute serves as a local provider for government staff, trade unions, and commercial building owners and managers to deliver BOC training for building operators.

Green Building Training. NYSEDA sponsored the development and delivery of green building and sustainability training for the Service Employees International Union (SEIU) Local 32 BJ and International Union of Operating Engineers (IUOE) Local 94. Offering standard curriculum based on the USGBC Leadership in Energy and Environmental Design (LEED-Operations and Maintenance)

guidelines has helped the trades improve technical abilities and mechanical skills sets to address air quality, environmental control, and building operations.

Training for Business Partners. The Business Partners Programs leverages SBC and federal resources to train contractors in New York. For example, the U.S. DOE Motor Decisions Matter (MDM) initiative sponsored three webcasts and one instructor-led workshop during 2008 that each averaged approximately 50 attendees. These webcasts are open to participating contractors, and include topics in motor and energy management. The online training platform for High Performance Schools Design was launched in 2003 and offers 25 course modules for design professionals. It continues as a NYSERDA online venue for design training and can be leveraged for other curriculum as needed.

8.2 Workforce Development Deployment Strategy and Components

8.2.1 Expanding and Leveraging Existing Training Partnerships

The existing programs and infrastructure established through SBC, and described in Section 8.1, provide the foundation for increased training efforts necessary for achieving EEPS goals. These new efforts are expanded under this Operating Plan and are presented below. In addition, new programs will be developed and deployed.

NYSERDA will ramp up training activity by building on existing efforts throughout the State with additional training activities. The expanded efforts will enable more students to be trained on more topics. Emphasis will be placed on providing support for infrastructure (training equipment, training trainers, training manuals, etc.), providing or developing standardized curriculum, and financial assistance for tuition, certification, and internships/apprenticeships. Partners include State Universities, community colleges, trade unions, manufacturers, and third-party training organizations.

NYSERDA will rapidly expand existing programs and partnerships such as the CEEBS Learning Centers. These additional Centers will be selected to ensure that training is provided geographically across the State, particularly targeting demand for training in the downstate region. Possible locations include the lower Hudson Valley, New York City, North Country (east), Utica/Watertown, and Central New York. In addition, new curriculum for all Centers will be developed, as well as advanced training for builders and contractors, commercial and industrial training through CUNY and the Lighting Research Center (LRC).

In addition, existing partnerships with trades and trade unions such as, but not limited to, IUOE Local 94, SEIU Local 32 BJ, and the IBEW will be expanded along with partnerships with professional and trade associations, including such groups as NYSBA-REF, BPCA, International Facility Management Association (IFMA), Northwest Energy Efficiency Council (NEEC), and others. Programs and initiatives will be developed and implemented to expand the number of students in target areas such as HVAC contractors, electricians, plumbers, builders, and general contractors. This will include increasing the number of training facilities, developing or purchasing new curriculum where needed, working with community-based organizations to target training and outreach efforts toward displaced and disadvantaged workers, enhancing basic skills training to prepare workers for technical training, and working with employers through internships and apprenticeships to help provide on-the-job training.

NYSERDA will work with training institutions across the State to establish a comprehensive portfolio of energy efficiency training initiatives that support SBC-funded energy efficiency programs, while building in sufficient flexibility to support additional program needs identified over time. NYSERDA plans to use three mechanisms to expand existing and deploy new training programs:

Training Partnership Agreements with Existing Training Providers. These agreements will be developed, along with Training Partnership Guidelines, using the strategies outlined in this Plan. This will allow NYSERDA to quickly expand existing training and work with new training partners, that have established training programs. Areas to be addressed include: basic skills training, train-the-trainer, internships, apprenticeships, on-line and distance learning, professional development and practitioner certification. These Agreements will be executed through an open enrollment. The intent of the Training Partnership Agreements is to allow NYSERDA to quickly move forward with training with established training providers with vetted training programs, that are ideally accredited or recognized by an independent third party.

Request For Proposals (RFP) or “Mini Bids” from Existing Training Providers. If needed, NYSERDA will issue an RFP or, “mini bid,” for specific initiatives to help address gaps or new needs (to be administered through Training Partnership Agreements). RFPs could be issued in specific areas (geographical areas, technical training area, basic skills training in a new language, HVAC internships, apprenticeship programs for electricians, CEUs for architects/engineers, or energy efficiency training modules for manufacturers). The RFP will also target established training partners and will be used as a tool to quickly fill gaps for new training needs (to account for new technologies) and help meet the goals set forth in the Commission’s Order.

Competitive Solicitations for New Training Providers and New Training Initiatives. NYSERDA will issue a competitive solicitation that will target new training organizations or entities and new initiatives that will focus on Career Pathways and Technical Training and will be used to fill in technological and geographical gaps in training. The Competitive Solicitation will be used for innovative training or new partnerships for training programs that may not yet be accredited and will require vetting through the competitive selection process and assistance with development and implementation.

8.2.2 Program Components, Component Budget, and Metrics

The following operating plan program components will be implemented using the training partnership agreements, RFPs, and competitive solicitations.

Basic Skills Training for Career Pathways. NYSERDA will work with community-based organizations, environmental justice advocacy groups listed on NYS DEC’s website, DHCR, OTDA, and NYS DOL to identify training needs and to develop training for minority, low-income, displaced and disadvantaged workers. This will help workers to develop the necessary basic skills⁴ to prepare them for more technical energy efficiency classes (i.e., building analyst, HERS rater, building operator, etc.). Classes will include: basic math, basic computer skills, English as a second language, writing, basic science principles, energy and energy efficiency basics, graphing/control monitors, a business primer, customer service, project management, and scheduling and estimating jobs. Basic skills training will vary depending on the basic skills a potential worker already has and the technical energy efficiency courses for which workers are being prepared. Basic skills training modules will be provided and matched to the technical training necessary to meet the portfolio of programs funded under and the goals of the EEPS.

Total Budget-\$400,000, Number Trained- 650

⁴ In some cases, basic skills will mean that the worker has English reading, writing, or computing skills at or below the 8th grade level on a generally accepted standardized test or a comparable score on a criterion-referenced test.

Internship/Apprenticeship for Career Pathways. NYSERDA will work closely with the NYSDOL, unions and trade groups, the Workforce Development Institute, DHCR, OTDA, and other entities to develop internships and apprenticeships to help disadvantaged workers that have completed the necessary basic skills training and technical training for their intended job. Internships and apprenticeships will be designed for these workers to find permanent employment, obtain necessary certifications, or move to the next level of competency on a professional track.

Total Budget- \$750,000, Number Trained- 406

Train-the-Trainer for Career Pathways. NYSERDA will work with existing training partners and develop new partnerships to train the trainers that will implement the basic skills training identified in Career Pathway initiatives. Training will be primarily for existing trainers in related fields; however, opportunities to train new trainers will be explored.

Total Budget - \$100,000, Number Trained- 41

Training Incentives, Curriculum Development, Equipment Incentives. Training and equipment incentives will be provided to students and facilities through Training Partnership Agreements for training initiatives that are already developed. Assistance for new initiatives will be provided through the annual solicitation. Training topics identified include: benchmarking, lighting design, lighting retrofits, green motors, green plumbers, HVAC, retro-commissioning, building envelope, hydronic systems, heat pumps, kitchen equipment efficiency, ENERGY STAR Homes, HERS Rater, weatherization, and business support training .

Total Budget- \$500,000, Number Trained- 1,040

Expand the HVCC CEEBS Network. NYSERDA will add three CEEBS learning centers in 2009-2010 to ramp up training for residential and multifamily markets. These additional Learning Centers will be selected to ensure that training is provided geographically across the State, particularly targeting demand for training in the downstate region. Locations of interest include the lower Hudson Valley, New York City, North Country (east), Utica/Watertown, and Central New York. Distribution of Learning Centers will be driven by the demand for trained and certified building science and energy efficiency practitioners, the need for trained or certified practitioners in the final portfolio of EEPS programs, the potential for integration with existing building science and trade training programs, the type of workers needed (such as electricians, plumbers, HVAC contractors, home improvement contractors, builders, designers/architects, and building operators).

Total Budget- \$300,000, Learning Centers- 3

Lighting Research Center (LRC) Expansion. Existing lighting training being conducted by the LRC through the SBC program will be expanded to include advanced lighting design and lighting controls.

Total Budget- \$50,000, Programs - 1

Labor Unions/Trades. Existing training relationships with the unions and the trades will be expanded (IUOE Local 94, SEIU Local 32 BJ, IBEW, NYSBA, BPCA, etc.) through Training Partnership Agreements. New initiatives will be developed through the annual solicitation. Training topics may include HVAC diagnostics, USGBC Green Skills Facilities Operation and LEED O&M, Building Operator Certification, IBEW Advanced Lighting Controls, and building analyst. Labor unions and trades will also be eligible for funding provided under initiatives such as train-the-trainer, professional development, an annual solicitation, on-line and distance training, and interns and apprenticeships.

Total Budget - \$150,000, Programs- 3

Train-the-Trainer. This initiative will include training existing and adding additional trainers. Topics will include field training and support for HVAC, plumbing, motors, lighting, electricians, and sector-based training, building science and “whole-house approach” training, and training to address certification and accreditations needs. Instructors will include trainers at two- and four-year colleges, BOCES and technical high schools, union training facilities, trainers working with the various trades, etc.

Total Budget- \$200,000, Number Trained - 55

Coordinate with Manufacturers. NYSERDA will partner with manufacturers of energy efficiency equipment to address optimizing the performance and energy savings of energy equipment and systems through procurement, design, installation, and operation and maintenance training. This initiative will be designed to take advantage of the comprehensive training programs implemented by energy equipment manufacturers and facilitate the incorporation of energy efficiency and building science principles and considerations.

Total Budget- \$100,000, Programs- 8

Professional Development. Professional development is an important component of developing career pathways. NYSERDA will work closely with entities such as the New York State Department of State (DOS), American Institute of Architects (AIA), Building Performance Institute (BPI), Association of Energy Engineers (AEE), and others to obtain continuing education credits for courses; as well as to provide continuing education and professional development for professionals, certified practitioners and others, when possible.

Total Budget - \$50,000, Number Trained - 330

Online/Distance Learning. NYSERDA will work with online and distance learning providers through Training Partnership Agreements. On-line and distance learning classes will be delivered to allow training to be provided across the State, provide training at convenient times for students, facilitate basic skills and professional development training, etc.

Total Budget - \$200,000, Programs-8

Workforce Development Institute (WDI). Funding will be provided through partnership agreements to the WDI and Consortium for Worker Education to develop the infrastructure needed to support internships and apprenticeships for labor and working families. Additionally, students participating in these programs may be eligible for tuition and certification reimbursement. This initiative will be closely aligned with the Career Pathway initiatives for minority, low-income, and disadvantaged workers.

Total Budget- \$75,000, Programs-2

Colleges/Universities. NYSERDA will work closely with existing training partners at two- and four-year colleges and universities to develop internship and apprenticeship programs for students completing training.

Total Budget- \$75,000, Programs 3-5

Trades/ Unions. In coordination with the training initiatives developed in partnerships with trades and unions, NYSERDA will help facilitate internship and apprenticeship programs to help prepare workers for energy efficiency jobs.

Total Budget- \$75,000, Programs 3-5

Employer Partnerships. NYSERDA and its partners will develop internships and apprenticeships with employers to help workers enter the job market, while minimizing the risk to employers. Initiatives will help offset the costs associated with hiring new workers that require on-the-job training, or workers in need of certification or professional development. The main objective of this initiative is to provide support to employers willing to hire new employees or to help retrain existing workers.

Total Budget- \$75,000, Programs 3-5

Certifications/Reimbursements. NYSERDA will work with training institutions, students, and workers to help them obtain practitioner certifications and company accreditations where appropriate. Reimbursement for certifications from BPI, AEE, International Facility Management Association (IFMA), USGBC (LEED AP), American Society of Heating Refrigeration and Air-conditioning Engineers (ASHRAE), Northeast Energy Efficiency Council Building Operator Certification (BOC), National Council on Qualifications for the Lighting Professions (NCQLP), and the North American Technician Excellence (NATE) will be targeted, as well as other certifications and accreditations related to energy efficiency skills and competencies. Typical support for certification is reimbursement for a portion of the costs associated with necessary training and certification through a nationally recognized certifying entity.

Total Budget- \$1,095,500, Number Trained- 2,215

Annual Solicitation. NYSERDA will issue a competitive solicitation for training projects and initiatives. The solicitation will target new training initiatives focusing on career pathway and technical training initiatives, and be used to fill in technological and geographical gaps in training. As described earlier, the annual solicitation will target innovative programs that may not have been accredited and will require vetting through the competitive solicitation process. This solicitation will have two main categories for projects: Career Pathways initiatives (\$750,000) and Technical Training programs (\$500,000).

Total Budget- \$1,250,000, Number Trained- 1,500

An implementation schedule for the commitment and disbursement of WFD funds is presented in Table 8.2.

Table 8-2. Workforce Development Program Implementation Schedule

Program Component	Third Quarter 2009	First Quarter 2010	Second Quarter 2010	Third Quarter 2010
Expand CEEBS		X	X	
Execute Training Partnership Agreements	X	X	X	X
RFP/Mini Bid(s)		X	X	X
Competitive Solicitation Issued	X			
Contracts Executed Competitive Training Initiatives		X		
Marketing Materials Developed	X	X		
Multi-Media, Marketing, Advertising and PR Implemented	X	X	X	X
Web Portal Launched		X		
Co-Op Advertising		X	X	X
NOTE: All funds will be committed by September 1, 2010 and all funds will be disbursed by December 31, 2011.				

8.3 Marketing and Outreach Strategies and Plan

NYSERDA marketing efforts for workforce training will be targeted and aligned with New York’s needs and recommended training resources. NYSERDA’s primary marketing objectives will be to increase:

- awareness of opportunities and careers in energy efficiency/clean energy;
- awareness of training facilities and programs to support clean energy career training; and
- enrollment in workforce training programs.

The marketing strategies that NYSERDA intends to use to reach the objectives include:

- leveraging networks and outreach activities of existing and new partnerships, including the development of a plan to align messages based upon a comprehensive analysis of partners' current marketing and outreach activities;
- the use of targeted media through such vehicles as a internet search engines, job search sites and trade association sites.
- lessons learned from successful participants to gain insights on successful messages and mechanisms;

- creating a clear vision of the opportunities related to green collar careers by developing profiles of the "new workforce." These new profiles will be used in publicity to create excitement around these new career opportunities and will link directly to regional opportunities;
- working with NYS DOL to target employers facing job reduction and working with human resource departments and local partners such as community-based organizations to deliver workshops; and
- identifying opportunities to penetrate low income areas, including check cashing operations, community centers, unemployment offices, etc.

NYSERDA will coordinate with any statewide marketing implemented by the Commission and its marketing contractor as well as initiatives such as New York City’s marketing and customer outreach efforts underway associated with its PlaNYC to address energy efficiency workforce issues. NYSERDA will work with the Mayor’s Office of Long Term Planning and Sustainability, NYC & Company and NYC EDC’s Energy Policy Department to incorporate workforce issues into ongoing energy efficiency campaigns.

8.3.1 Marketing Plan

The goals of the Workforce Development Initiatives cannot be met without an aggressive, dedicated, and integrated marketing, outreach, and education component. These efforts will be closely coordinated with the Commission’s umbrella marketing efforts as well as efforts by the utilities to reach out to and train contractors. The plan is designed to provide on-going awareness and support, education, and promotional opportunities in order to educate existing and emerging workers about training, internship, and apprenticeship opportunities. Marketing, outreach and education initiatives will include the use of websites and internet advertisements, very effective and cost effective tools to educate and inform consumers. The total budget for marketing and outreach is \$362,600. Marketing elements and associated budgets are presented below.

Marketing Materials: NYSERDA will work with its Marketing group and existing marketing contractors, where necessary, to develop new creative materials to promote the WFD Program. New marketing materials will include printed brochures, new creative for print ads, home shows, career fairs, and other materials.

Budget - \$72,520

Media: A multi-media approach, as described below, will be used to market workforce training opportunities where possible.

Budget – \$108,780

- NYSERDA will leverage opportunities that are already available through NYSERDA’s local television and print contracts, currently consisting of 16 television affiliates and 42 community newspapers.

- Television (Cable and Broadcast) – NYSEERDA will work closely with its existing television contractors to incorporate information and tips about workforce training where practical. These contractors are currently working with NYSEERDA to promote SBC programs across the State.
- Online- Internet advertising will be used to promote workforce training particularly for downstate residents who prefer to obtain information from the Internet. Advertising on local newspaper web sites, search engines, and other high-traffic web sites have been effective for NYSEERDA initiatives. Online – Internet advertising will be designed to bring people to the www.GetEnergySmart.org Website to learn more.
- Press releases will be issued to highlight features and milestones of the WFD Program.

Advertising: NYSEERDA will incorporate information about workforce training initiatives in its existing advertising initiatives wherever possible. For example:

- Local print contracts, mainly weekly papers, will run a series of advertorials that will be used to educate people about workforce training opportunities and training partnerships across the State. Advertorials provide in-depth information to the consumer.
- Online or Internet ads will use key words to increase the click-through rate. Internet advertisements are cost-effective and provide a good opportunity to impact consumers who do not get their information from traditional mediums. The Internet will provide easy access to more information for those consumers who wish to learn more about training and job opportunities whenever possible. Along with the other mediums, the Internet marketing will encourage consumers to visit www.GetEnergySmart.org for more information.

Public Relations: NYSEERDA will also work closely with the Commission and utilities to develop and launch a public relations campaign for workforce initiatives through NYSEERDA’s communications staff. This campaign will promote the training opportunities and workforce success stories through press releases, testimonials, and press events. NYSEERDA will display training information and materials at more traditional events such as minor league baseball games, consumer events and trade shows, and the New York State fair. This work will be performed by NYSEERDA staff, therefore no EEPS program funds are budgeted.

Web Portal: NYSEERDA will work closely with the Commission and its marketing contractor, as well as the NYS DOL to develop a comprehensive workforce training and education web portal to serve as a central location for information on all residential and commercial training programs and job opportunities within the State. The portal will link to resources offered through www.nyserda.org, www.GetEnergySmart.org, utility websites, and any new website developed by the Commission as part of its umbrella marketing activities to recruit students; market training programs; market partnerships with colleges, universities and private companies participating in the internship and apprenticeship programs; and coordinate with entities such as the NYC EDC to educate consumers about the benefits of working with nationally-certified contractors and other trained providers.

Budget- \$54,390

Co-Op Advertising with Training Partners: NYSERDA will work closely with its training partners, through the Training Partnership Agreements, to develop co-op advertising to marketing workforce training initiatives supported through the EEPS. Co-op advertising will enable NYSERDA to leverage additional funds through cost share support for advertising with training partners. NYSERDA will work closely with the Commission and the utilities on co-op advertising initiatives.

Budget- \$126,910

8.4 Program Evaluation

8.4.1. General Evaluation Approach

Overview of the Evaluation Approach: The interim evaluation approach presented in this section is designed to reflect NYSERDA's plans for the implementation of the Workforce Development Program, and in the absence of potential funding set-asides and plans for overarching evaluation projects that would serve the needs of all EEPS program administrators. Therefore, the evaluation strategy provided here is designed to afford NYSERDA and its independent evaluation contractors' flexibility to adapt the evaluation approaches that best suit the program as implemented within the limits of final evaluation protocols and funding. NYSERDA's estimated evaluation budget for this program includes a set-aside for developing a detailed and comprehensive evaluation plan, an effort that will involve DPS Staff and the EEPS Evaluation Advisory Group (EAG).

Evaluations of work force training efforts should be grounded in Kirkpatrick's four levels of evaluation for assessing training effectiveness⁵. The four levels address response of the trainee to the training, assessing what was learned, assessing performance in the workplace and estimating the effects of the training on the work place. Addressing these four levels requires both process and market evaluation activities such as surveys and interviews with program implementation staff, NYSERDA program staff, trainers, participating and nonparticipating technicians, and actual and potential employers in the market place and broadly examining the market response to the efforts.

The planned evaluation efforts will assess awareness and knowledge of NYSERDA and other related training efforts in New York, perceptions of the NYSERDA-funded training effectiveness and usefulness, recruitment as compared to certification rates, and participant and employer satisfaction. A key component of the efforts will be to assess the first year for each training effort and provide feedback to the trainers on student response to the curriculum. As each training effort matures, the evaluation efforts will shift toward examining market response to the training, exploring topics related to employer staffing needs, availability of skilled labor, and anticipated evolution of the marketplace.

The breadth of impact anticipated from workforce training requires a variety of data collection efforts. Sampling strategies will be developed for each training activity to ensure that sufficient feedback is provided such that the program curriculum can evolve effectively. Timing is also critical since input should be provided to trainers as soon as possible after training efforts are initiated so trainers can improve their curricula based on initial market feedback and also develop a mindset founded on the concept of continual improvement. As the workforce training effort grows, sampling of participants and targeted employers can be conducted at the 90/10 confidence/precision level. Information will be collected from market actor surveys and interviews by NYSERDA's independent evaluation contractors. Data analysis will be conducted by NYSERDA's evaluation contractors following established protocols.

¹ Kirkpatrick, D. *Techniques for Evaluating Training Programs*. Journal for the American Society of Training Directors, 13. 21-26, (1959b).

This evaluation effort includes conducting a joint process and market study to assess baseline measurements of key indicators including awareness of trainings, perceptions of trainings by training participants as well as employers, program penetration, number of jobs created, satisfaction and barriers to participation. An energy impact evaluation is not planned with the evaluation funds set aside for this program. However, energy savings impacts resulting from work force training efforts can be examined through evaluations conducted on the associated end-use programs (examples of complementary programs would include NYSERDA's Home Performance and Multifamily Performance programs).

Evaluation Budget: NYSERDA's evaluation budget for the Work Force Development Program is 5% of the program funding level, less yet-to-be determined funds set aside for statewide studies and other overarching costs borne by all EEPS program administrators. As the WFD Program is not expected to separately count direct energy savings, evaluation funding will be designed to account for the specific needs of the program, and allocated roughly equally between process and market evaluation. Should further program funding be provided by the NYS DOL, discussions should determine what portion, if any, will be allocated to evaluation. If additional evaluation funds are made available, activities proposed herein could be enhanced or supplemented, and would be presented in a subsequent detailed evaluation plan.

Evaluation Schedule: Evaluation activities to address process issues will occur during each year of program operation. During 2009 NYSERDA's independent evaluation contractors will work with NYSERDA evaluation and program staffs to develop post-training survey questions to assess curriculum usefulness and effectiveness for each training program funded by the NYSERDA WFD Program. These surveys will be conducted at the close of each training effort. The evaluation will include phone interviews with a sample of training participants to assess response to the training and assess the level of learning. The evaluation team will also conduct interviews with trainers to assess their perspectives on curriculum development. These interviews will be conducted in December 2009, and the surveys of trainees will be conducted in January and February 2010.

Evaluation activities to address market issues will also occur periodically during the years the program is operating. In 2009, program theory and logic models will be developed that summarize current program design and market conditions; program intervention strategies; and expected market outputs and outcomes. The theory and logic model will guide subsequent program evaluation activities with data collection efforts designed to target key measurement indicators and researchable issues identified in the theory and logic model. The second step of the market evaluation will be a baseline assessment of market needs among energy efficiency services industry employers exploring topics related to staffing needs, required skill sets, availability of skilled labor, and employers anticipated evolution of the marketplace.

Table 8.3 displays the key data collection activities for 2009.

Table 8-3. Workforce Development Program Process and Market Evaluation Details for 2009-2010

Target Group	Estimated Population Size	Estimated Sample Size	Expected Sampling Precision	Survey Administration By	Expected Start of Fielding
NYSERDA Program Staff	2	2	NA	Process Team	Sept 2009
Trainer Interviews	25	15	80±10% ¹	Process Team	Dec 2009
Trainee Interviews	200	70	90±10% ¹	Process Team	Jan 2010
Employer Baseline Survey	~10,000	1000	90±10% ²	Survey Team	Nov 2009
¹ Assumes proportional sampling, 2-tailed test, finite population correction, absolute precision. ² Assumes proportional sampling, 2-tailed test, absolute precision.					

Evaluation Plan Variations. Given the level of uncertainty regarding final evaluation protocols, statewide studies to be conducted by all program administrators, and funding levels needed to support overarching evaluation studies and activities, the evaluation plan presented in this section should be viewed as scalable and flexible. With reduced funds, NYSERDA would likely reduce the number of evaluation cycles. With enhanced funds, the market assessment anticipated for this project could be conducted at a much broader level to include traditional, non-energy efficiency services industry employers (e.g., architects, engineers, contractors, unions, etc.), but such a study would require statewide participation.