



New Jersey's Clean Energy Program™

Honeywell's Residential Energy Efficiency and Renewable Energy Program Plan Filing for 2010

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New Jersey's Clean Energy Program™

Honeywell's Residential Energy Efficiency and Renewable Energy Program Plan for 2010

Introduction

This Program Plan provides program descriptions, marketing plans, goals, and budgets for the five residential energy efficiency and two renewable energy programs to be managed and/or supported by Honeywell in 2010:

Residential Energy Efficiency Programs

- Residential New Construction (New Jersey ENERGY STAR® Homes) Program
- Residential Gas & Electric HVAC (Cool and Warm Advantage) Program
- Energy Efficient Products Program
- Existing Homes Program (Home Performance with ENERGY STAR®)
- Community Partners Initiative

Renewable Energy Programs

- Renewable Energy Incentive Program (REIP)
- Solar Renewable Energy Certificate (SREC)Registration Program

The following Program Plans begin with narrative descriptions of each program, including the overall strategy, key activities for the year, marketing and communications plans and program goals. The program designs detailed in the narratives are an outgrowth of months of exploration of various options for enhancing the effectiveness of both individual programs and the portfolio of energy efficiency and renewable energy programs as a whole.

In carrying out the 2009 Program Plan, we made some substantial changes and/or additions to programs or program portfolios to better enable New Jersey to get on a path to achieving the aggressive clean energy goals established and presented in the Energy Master Plan. Examples included a much overhauled Home Performance with ENERGY STAR program as well as additions to the Energy Efficient Products Program which

bolstered delivery of energy efficient products through a grass roots campaign. This program also added an appliance early retirement component focused on removing 2nd refrigerators and freezers from the grid.

For 2010, we have attempted to strike a balance between maintaining and changing current programming. We will continue to allow several of the program changes instituted in 2009 to take hold and mature thus increasing customer and trade participation in the 2010 programming. In addition, we have proposed some modified programming whereby we will allow components of the current programming to be brought to the market through several new channels. For example, in the Residential New Construction program, we will allow program services previously delivered by the Market Manager to be offered through an open market approach.

Furthermore, these 2010 program plans reflect the work that has been conducted in late 2009 to support the utilities' energy efficiency and economic programs. We have also considered and planned for the American Recovery and Reinvestment Act of 2009 (ARRA) activities the State plans to enact in 2010, and have incorporated the costs to administer these activities in the associated program budgets. Specifically, we have incorporated ARRA program administration and application processing costs into the budgets for the Energy Efficient Products, Residential Gas and Electric HVAC, and Existing Homes programs.

This plan, an iteration of several versions of our thinking on new directions, was presented to key stakeholders at public meetings held from June through September. Based on review of the comments received and input from the Office of Clean Energy, many of the comments are incorporated into the program descriptions.

Following the program descriptions are three Appendices. **Appendix A** represents the 2010 residential energy efficiency and renewable energy Marketing Plan. **Appendix B** provides a summary of total proposed 2010 program costs, broken down by cost category. **Appendix C** presents our proposed performance incentive mechanism for calendar year 2010. As required by Treasury, specific goals and the associated performance incentive levels tied to meeting them will be submitted to the Office of Clean Energy, the BPU Board and Treasury for consideration by way of a contract modification request.

It is important to note that all of the various components of this filing are intimately linked. For example, goals presented in Appendix C are appropriate only if the program design changes captured in the program narratives, marketing strategies outlined in Appendix A, and budgets presented in Appendix B are approved. In addition, some goals outlined in Appendix C presume that certain contract modifications necessary for Honeywell to implement program changes are in place in early January 2010.

New Jersey's Clean Energy Program™
2010 Residential New Construction Program
“New Jersey ENERGY STAR® Homes”

Description

The NJ Clean Energy Program's (NJCEP) Residential New Construction Program is designed to increase the energy efficiency and environmental performance of residential new construction in New Jersey.

The Program has the long-term objective of transforming the market to one in which a majority of residential new construction in the state is “net zero-energy” i.e. extremely efficient buildings whose low energy needs can be met by on-site renewable energy generation. In the mid-term, the Program supports the transition to a residential new construction energy code that is at least equivalent to the current EPA ENERGY STAR Homes standard. The Market Managers will track the implementation of new construction code changes and will propose incentives modifications as appropriate.

In 2009, the Program plan included a new, tiered structure with higher incentives for higher levels of energy efficiency. The 2010 program will maintain the new tiered structure, transition to an open market structure for the provision of home energy ratings, and prepare the market for adoption of the 2011 ENERGY STAR standards.

There are a number of market barriers to efficiency investments in new construction in New Jersey. Key among these are:

1. conflicting design criteria (i.e. builders who make design and procurement decisions do not pay the homeowner operating costs associated with those decisions);
2. lack of information regarding the benefits of efficiency and environmental performance on the part of consumers, builders, lenders, appraisers, realtors and others;
3. limited technical skills on the part of some of the builders and their subcontractors to address key elements of efficiency; and
4. inability of consumers, lenders, appraisers and others to differentiate between efficient and standard homes.

This program employs several key strategies to overcome these barriers:

- Direct incentives to builders of homes that meet program standards.

- Marketing assistance to builders to promote the energy and environmental benefits of NJ ENERGY STAR Homes participating projects.
- A comprehensive consumer marketing campaign designed to drive homebuyer demand for NJ ENERGY STAR Homes as direct incentives to builders are reduced.
- Technical assistance to builders and their subcontractors on energy efficient construction and installation practices.
- Evaluation of the 2010 incentives and the feasibility of a transition from builder incentives to home buyer incentives.
- Verification (inspections and testing) and program certification of qualified homes.
- Technical support/training on residential energy code updates and implementation.

Target Market and Eligibility

Single family, multi-single (“townhome”) and low/mid-rise multi-family buildings (up to six floors) are fully eligible for program benefits if the home uses natural gas and/or electricity supplied by a New Jersey public utility; and each unit has its own gas or electric heating system and/or central air conditioning system.

In order to ensure a single statewide technical standard and statewide brand for energy efficiency (under NJCEP), the program will offer incentives for any new home or existing home undergoing substantial (“gut”) renovation or remodeling that meets the above criteria, regardless of its location in the state. However, consistent with the State’s policy initiative to support development and redevelopment in Smart Growth areas and not subsidize growth outside of these areas, rebate incentives for new construction, including those offered under this program, are limited to buildings constructed in a State designated “Smart Growth” area (defined as Planning Areas I and II and the Designated Centers using the “Policy Map of the New Jersey State Development and Redevelopment Plan” found at <http://www.nj.gov/dca/osg/resources/maps/index.shtml> and described in NJAC 14:3-8.2). The only exception to this Smart Growth limitation is for (1) state funded “Affordable Housing” projects which may qualify for rebate incentives regardless of their location and/or (2) “exemptions from cost limits on areas not designated for growth.” Such projects must be eligible for an exemption from “designated growth area: limits as provided for in N.J.A.C 14:3-8.8 as these rules now specify or as they may be amended in the future.”

Larger homes inherently use more energy, and ENERGY STAR allows total home energy use to grow with size. Therefore, starting in 2009 the Program required that homes that are over 4,000 square feet of finished floor area meet Tier 2 performance

criteria (see definitions below) in order to qualify for direct incentives and marketing support, even when located in a qualifying Smart Growth location.

New homes are not eligible for participation or incentives under the Residential Gas and Electric HVAC program (Cool Advantage/Warm Advantage). HVAC contractors serving homes participating in the Residential New Construction Program may participate in the HVAC Program Quality Installation and Verification (QIV), provisionally available¹ in 2010, providing technical assistance and incentives for correctly installing and testing central cooling equipment in order to optimize efficiency.

Offerings and Incentives

To meet the Tier 1 level, a new home must:

1. Meet either the EPA ENERGY STAR Homes performance standard (currently a HERS index of 85 or lower in NJ) or the alternative prescriptive EPA National Builder Option Package (climate zone specific “BOP”). Multifamily buildings over three floors and up to six floors² may be required to demonstrate compliance through the newly expanded EPA ENERGY STAR for High-Rise Multifamily Buildings pilot (buildings over six floors may participate in this pilot through the C&I Smart Start Buildings program);
2. Comply with the EPA Thermal Bypass Inspection Checklist, as applicable;
3. Comply with EPA’s mandatory additional requirements (including proper HVAC sizing and duct leakage limits), as applicable;
4. Install ENERGY STAR qualified HVAC equipment (or highest available alternative);
5. Fully duct all HVAC supplies and returns and fully seal all duct system joints and seams with mastic compound (no tapes), as applicable;
6. Install ENERGY STAR qualified mechanical ventilation with automatic 24-hour control;
7. Install at least three ENERGY STAR labeled hard-wired light fixtures and/or ENERGY STAR labeled screw-based CFL bulbs in at least 50% of all light fixtures (including exterior fixtures); and

¹ Pending review of the 2009 pilot results.

² At least 50% of the occupied space and building energy use must be residential. The building must include 4-6 above-grade occupiable stories. Any occupiable space, including commercial space, should be counted toward the number of stories except garages, basements, or cellars. A partial story should be counted if 20% or more of the space is occupiable. This definition is consistent with the “LEED for Homes Pilot for Mid-Rise Multifamily Buildings Program Guidelines, Version 1.1”

8. Install only direct or power vented space heating, water heating, and/or fireplace combustion appliances, when present.

To meet the Tier 2 level, a home must:

1. Meet all of the Tier 1 requirements, and
2. Achieve an energy rating HERS index of 65 or less (approximately equivalent to the federal tax credit efficiency level) or equivalent High-Rise Multifamily Pilot performance.

A limited number of Tier 3 “NJ Microload Home” projects will be approved in 2010 based on program development work initiated in 2008 in coordination with the New Jersey Institute of Technology.

Table 1: Certification Progress Payment Schedule for Tiers 1 and 2

Building Type	At Commitment Letter Issued* (per model unit)	At Completion of Pre-Drywall Inspection(s)* (per unit inspected)	At Final Certification
Single Family, Multiple Single Family (“Townhouse”), or Multiple-Family Building (“Multifamily”)	\$300	\$300	\$600

* Credit for passing through each progress milestone will be granted and tracked.

Table 2: 2010 Financial Incentives per Unit³

Building Type	2010 Tier 1 (≤ 4000 sq.ft).	2010 Tier 2	2010 Tier 3
Single Family	\$2,500	\$3,300	\$10,000 to achieve 50 points, plus \$800 per index point below 50 points (maximum incentive is \$26,000/unit)
Multiple Single Family ("Townhouse")	\$1,300	\$2,200	\$7,000 to achieve 50 points, plus \$500 per index point below 50 points (maximum incentive is \$17,000/unit)
Multiple-Family Building ("Multifamily")	\$700	\$1,500	\$4,000 to achieve 50 points, plus \$400 per index point below 50 points (maximum incentive is \$12,000/unit)

In order to maximize electric efficiency savings, the program will provide builders with the option of receiving incentives equal to the full cost of an approved list of screw-in Compact Fluorescent Lamps (CFLs). These approved CFLs will be made available through a builder portal of the NJCEP online program store. Builders will order approved CFLs for installation in high use light sockets of participating homes (specific minimum and maximum limits may apply).

Builders may still opt to meet the program lighting requirement by installing at least three ENERGY STAR qualified light fixtures, but fixtures will no longer be eligible for incentives through the Program. ENERGY STAR qualified light fixtures may be purchased through the NJCEP online store at significantly reduced prices.

A maximum HERS index of 50 points, *prior to the inclusion of renewables*, is required in order to qualify for Tier 3 incentives. The per point incentives for HERS indices below 50 is for efficiency improvements only, not including renewables. Tier 3 incentives from

³ Homes over 4000 square feet of finished floor area are required to meet Tier 2 performance criteria in order to qualify for direct incentives and marketing support. If no ENERGY STAR rated HVAC equipment is available for the specific configuration, proposed equipment specifications must be submitted for approval (generally highest efficiency available alternative); .

the Residential New Construction Program will be paid according to the following schedule based on continued qualification at each stage.

Table 3: Tier 3 Progress Payment Schedule

Building Type	At Completion of Enrollment (Sign-In)*	At Completion of Pre-Drywall Inspection(s)*	At Final Certification
Single Family	\$3,000	\$3,000	Balance
Multiple Single Family (“Townhouse”)	\$2,000	\$2,000	Balance
Multiple-Family Building (“Multifamily”)	\$1,000	\$1,000	Balance

* Failure to complete the project, or to meet Tier 3 (NJ Climate Choice Home) minimum specifications and/or performance goals, will result in repayment to the Program of incentives paid, less any applicable incentives for meeting all lower tier (Tier 1 or 2) requirements.

Projects that complete and are certified to the Tier 3 level by 12/31/2010 will receive a \$5,000 per unit bonus.

Table 4: 2010 Lighting, HVAC and Appliance Incentives

Additional Incentives	All 2010 Tiers
ENERGY STAR Lighting	All installed CFLs purchased through the builder portal of the NJCEP online store will be rebated on a pilot basis (specific minimum and maximum limits may apply)
ENERGY STAR Appliances ⁴	N/A

In order to maximize savings potential, participation in both the CFL lighting offer and the QIV protocols will be available on a limited basis to homes completed in 2010, regardless of enrollment date.

A cooperative marketing offer for participating builders will drive homebuyer demand for qualifying homes. This co-op marketing offer will supplement a Residential New Construction component within the overall marketing campaign of the NJCEP in order to further raise consumer demand. An aggressive consumer focused marketing campaign will be essential to the program’s ability to maintain builder participation (and therefore market share) at the same time as incentives are reduced and requirements are increased.

⁴ Builders will be encouraged to take advantage of any rebates available for retail purchases through the Energy Star Products program.

Note that the Tier 2 incentive level is intended to complement the Federal Energy Tax Credit for new home construction (currently \$2,000) in order to encourage participation at this advanced level (in 2008, fewer than 1% of new homes in New Jersey met this level of performance).

New program requirements, procedures and/or incentives will take effect 60 days from written notification to program participants (i.e. builders, developers, etc.). Any completed application received after the 60 day notification period will be subject to new program rules.

Planned Program Implementation Activities for 2010

In 2010, the Program will continue to train builders, developers, trade subcontractors, design professionals, and real estate and code enforcement personnel on Program requirements and benefits. The Program will also continue to expand the number of projects participating in verification inspection sampling. In addition, the Program will support:

Transition to an Open Market for HERS Ratings

In 2009, the Program designed and implemented a transition plan to an Open Market for HERS ratings. Beginning in January, 2010, or upon Board approval of program filing and contract modifications, all new project rating enrollments will be provided by Program qualified raters, with the exception of multi-family high rise and Tier 3 enrollments. Until Board approval the program will continue to operate under the 2009 program and incentive structure.

In addition to the standard home energy rating requirements defined by RESNET and BPI, qualifying raters will comply with NJCEP criteria to ensure quality services within the Program. Projects already enrolled may complete the rating process in accordance with their existing contract or choose to re-enroll with a new qualifying rater. In the case of re-enrollment, the incentive available would be reduced in accordance with the value of services already provided to the project under the prior enrollment.

To facilitate the transition, the incentive design for the open market rating services aims to be cost neutral to the average builder relative to the single source program. Because rating services will now be provided by raters operating independently of the Program, the costs of providing those services—now borne by a separate agreement between the builder and their preferred rater—have been recast as progress payments towards program certification. This incentive is paid direct to the builder on a timeframe more in line with how and when the requisite costs are incurred

An open market requires a more robust quality control and oversight process than the single-source model. Quality Assurance activities will be performed by the Program, in proportion to the track records of raters and builders through independent inspections.

Possible Changes to NJ State Residential Building Code

The Program is prepared to modify Tier 1 and Tier 2 standards, incentives, marketing and other program design elements in order to accommodate the introduction of any new state energy code promulgated during the 2010 program year. The Program will promote participation at the Tier 2 (“Tax Credit”) and Tier 3 “Microload Pilot” program levels and develop a plan for a “next generation” RNC program based on this type of advanced performance approach. Revisions will be designed to reflect changes in code, incremental costs, market barriers, and other relevant market factors, climate change impacts and goals. The start date(s) for new incentives, marketing strategies and/or approaches to service delivery will be such that there is sufficient time to conduct analysis of needed changes, get input from the industry, provide notice of changes to industry, maintain high standards for quality of program services, and to pilot the introduction of changes, as appropriate. The Program will support the State to provide technical assistance on the code update process.

Expansion into Multi-family Market

The program will continue the expanded participation, begun in 2009, in the ENERGY STAR for Multifamily Buildings (new construction) pilot for eligible buildings over three floors (based on the ASHRAE 90.1 modeling methodology rather than the Home Energy Rating System), with corresponding adjustments to qualification criteria and implementation services (project review and verification).

Research and Development

The NJ Energy Master Plan has established ambitious goals for energy efficiency. Currently available efficiency measures, and the initiatives that deliver them, will not be able to achieve these goals. The Program will pursue the development of new technologies and approaches that will become regular Program offerings in the future.

Areas for research in residential new construction may include the performance metering of program homes and optimized new home designs for significant reduction or elimination of cooling energy requirements. Additionally, with the pending adoption of IECC 2009 energy codes, the Program will work with the Department of Community Affairs (DCA) to look at two areas: Developing a model for achieving higher compliance rates with new upgraded codes, including working with building code officials to bring in independent verifiers (e.g. HERS raters) who could serve as energy code compliance agents; and researching what cost effective measures are not included in IECC 2009 that might be adopted into an enhanced energy code for the state of NJ.

Creative Initiatives

Starting in 2010, the Program will consider opportunities to solicit creative proposals for pilot-scale promotions associated with the development of the Micro-load home Tier.

This pilot will solicit competitive proposals from builders interested in building micro-load homes (i.e. very low HERS scores with renewable energy systems), select up to a half dozen participants, and use the construction process and completed homes as an opportunity to showcase the potential for these very low-energy homes that many builders and buyers currently consider too futuristic. Regular media stories, project documentation for future publicity, press events and ribbon-cutting events will all demonstrate the viability of this next generation of homes. Energy consumption meters and monitoring will be built into these homes to enable future tracking of actual performance.

Preparation for Tier 1 Phase-Out

The program will take steps preparing for the planned phase-out of incentives for Tier 1, and may accelerate phase-out if budgets are constrained, leaving the higher tier incentives intact. This move can help to prepare the market for coming program changes resulting from new 2011 ENERGY STAR Homes standards.

Marketing and Communications Plan

Target Audiences:

- Primary: Consumer - Residential Home Buyers of custom and production single family, multi-single “townhome”, and low/mid-rise multi-family buildings (up to six floors).
- Secondary: Business (Trade Allies) -- Builders and developers of new and gut rehab custom and production single and multi-single “townhome”, and low/mid-rise multi-family buildings (up to six floors); affordable housing; developers/investors who finance residential new construction projects; realtors; architects; and subcontractors. Builders and architects interested in building a New Jersey Climate Choice Home⁵. Qualified HERS raters who comply with NJCEP criteria to ensure quality services within the *New Jersey ENERGY STAR Homes* program.

⁵ New Jersey Climate Choice Homes have been previously referred to as “NJ Microload Homes”.

Program Goals and Objectives:

To meet the challenges of a slow residential new construction housing market, increased code standards, reduced builder incentives, proposed efficiency/incentive tiers to reward high performance homes, new consumer incentives and transition to a market-based, home energy rater network, the following program strategies and tactics are being proposed:

- Integrated consumer marketing program, including advertising, public relations, special events, and online promotion to build awareness and consumer demand.
- Builder financial incentives and increased promotion of co-op marketing program.
- Carbon footprint label for high performance homes.

Creating consumer awareness and demand will continue to be critical in 2010 to:

- Encourage builders to exceed ENERGY STAR guidelines given potential increase in state building code to current ENERGY STAR guidelines.
- Differentiate builders in the growing “green building” consciousness of consumers.
- Increase consumer awareness and demand of high performance homes for both economic and environmental benefit and promote a new consumer incentive for 2010.
- Achieve 27% of the total New Jersey permits issued for qualifying residential new construction types in the current year (i.e., single family, townhouse, and multi-family buildings eligible to participate in the Program) with commitments to build to the NJ ENERGY STAR Homes program standard within two years of enrollment.
- Achieve 28% of total New Jersey Certificates of Occupancy for qualifying residential new construction types (single family, townhouse, and multi-family) certified to the NJ ENERGY STAR Homes program standard in the current year.
- Train at least 150 builders, subcontractors, architects, and/or other key trade allies on program elements and aspects that will improve the energy efficiency, performance and sales of homes they design and build.
- Enroll a network of qualified market-based home energy raters who will assist builders in meeting the technical guidelines of the program, and will provide testing, inspections and certifications.

2009 Accomplishments & Lessons Learned

- Cooperative advertising program with incentives ranging from \$10K-\$50K, was implemented in 2008, providing assistance to builders for promoting their

- qualifying projects. The program provided over \$132K in co-op advertising incentives as of August 2009.
- Response to marketing efforts, e.g., BPU speakers, advertisements, event presence, continues to generate awareness and interest among state residents, as evidenced by higher call volumes and web hits, coinciding with key efforts.
 - Public relations efforts, including media events/tours and press interviews with BPU staff, residential customers and builders, have increased visibility of the program and its value.
 - Customer satisfaction has been high with customers agreeing to participate in testimonials to support advertising and public relations efforts.
 - Trainings providing overview of new program changes and co-op advertising were valuable to builders and other trade allies.
 - The Affordable Comfort Inc. (ACI) New Jersey Conference, which took place in 2008, proved to be successful in terms of event participation and attendance. The conference introduced the first awards program geared to contractors and builders.
 - Several successful media events took place during 2009, including one with Governor Corzine, which occurred in August 2009 at a Home for Our Troops project, located in Hillsdale, NJ. This is the first Tier 3/ NJ Climate Choice Home in the state. The project is also pursuing LEED Platinum certification.
 - In 2009, the New Jersey Clean Energy web site enhanced the residential new construction section with a “virtual home tour” that takes the viewer on an animated walk-through of an ENERGY STAR Home, as well featuring a variety of New Jersey home sites statewide. The virtual tour is also being leveraged and used by builders on their sites as part of the co-op advertising program.

2010 Marketing Strategies – Homebuyers

- Attract media attention to relevant projects and associated savings realized by residents, especially for Climate Choice Home Projects, which incorporate both energy efficiency and renewable energy technologies.
- Continue to build awareness of program and benefits through targeted advertising programs. Drive consumer demand for energy efficient homes.
- When appropriate, leverage community partner and/or *Green New Jersey Resource Team* relationships to help educate builders, town officials, and residents on program and benefits.
- Explore opportunities to work with residential realtors to promote New Jersey ENERGY STAR homes.

2010 Marketing Strategies – Builders/Architects/HERS Raters

- Continue to build relationships with residential builders through educational seminars and training to increase higher performance building practices and to help build a Green Workforce.
- Promote business-building tools; .e.g., training, co-op advertising, technical assistance, sales support and materials for builders, architects and realtors.

Key Consumer Messages

- *New Jersey ENERGY STAR Homes* provide a lifetime of savings, comfort, and value.
- *New Jersey ENERGY STAR Homes*: Built to be better. Performance tested to prove it.
- Energy-efficient homes help lower energy costs, increase affordability, increase durability, and improve health and safety.
- High performance homes reduce impact on the environment.
- Independent third-party testing and certification provides peace of mind and confidence in the home building/buying decision-making process.
- *New Jersey ENERGY STAR Homes* are between 15-35% more energy efficient than standard built homes.

Key Builder/Architect Messages

- Differentiation in the marketplace by building high performance homes that are third-party tested and certified to use less energy and provide greater value.
- Improved building practices and technologies help create homes that perform better for greater customer satisfaction, and reduce call backs and builder liability.
- Be a part of the solution for sustainable living to help combat global warming.

Tactics Rationale

Public Relations/Media Outreach. Media outreach and events have proven very successful in garnering news media attention through open house tours, press releases, case studies, testimonials, BPU commissioner presentations, and feature stories focusing on energy and financial savings, new technologies (solar), and environmentally sound building practices. Given the beginnings of a recovery in new home construction and concern for “greener” buildings, it will be critical to feature *New Jersey ENERGY STAR Homes* in the media as the best choice for combating rising energy prices and climate change. We will continue to spotlight key residential developments, homes that feature new energy-saving technologies, renewable energy, and very high performance homes, in

terms of their energy rating and reduced environmental impact, i.e., Tier 3/ Climate Choice Home or “micro-load homes”. Demonstration Home Tour events of champion builders and “greener” homes in the state will continue to secure print and broadcast media attention.

Advertising. As in 2009, we propose to continue targeted consumer advertising to help increase consumer awareness, education and demand for New Jersey ENERGY STAR builders. If customers understand the value of ENERGY STAR and why it is the best choice for new home construction, they will request it of their builder. Especially because new home sales are in the early stages of a recovery it is important to maintain presence in the marketplace, since customers may consider and prepare for building a new home well in advance of breaking ground. The media selection will include targeted print advertising in major daily papers (real estate sections), and select lifestyle focused magazines and online advertising timed in early spring, summer and fall, as well as online banners on select geo-targeted web sites. We will continue to participate in EPA’s co-op program to secure online Google sponsored advertising to supplement state program advertising as value added. Trade advertising to builders is also conducted as part of home builder association events and sponsorships.

Events. For trade allies, the *New Jersey ENERGY STAR Homes* Program is an active member and sponsor of home builder association events including the Atlantic Builders Convention, Builders’ League of South Jersey, Builder and Remodeler’s Association of Northern Jersey, Community Builders Association, Shore Builders Association of Central New Jersey, and the New Jersey Builders Association. The program is also a member, speaker, and/ or exhibitor at affordable housing oriented organizations/ agencies, such as the Housing and Community Development Network of NJ and NJ Housing and Mortgage Finance Agency. *New Jersey ENERGY STAR Homes* also participates in other trade ally and green building-related organizations, such as NJ Future, AIA-NJ (and local affiliates), USGBC-NJ (and affiliates), and Delaware Valley Green Building Council. In addition, *New Jersey ENERGY STAR Homes* sponsors, exhibits at, and/or speaks at such state-wide events such as the Governor’s Conference on Housing and Development, New Jersey’s Clean Energy Conference, and industry events, such as ACI-NJ’s Home Performance Conference. The 2010 ACI conference will feature New Jersey’s second Recognition and Awards program to honor leading builders and contractors in the state participating in *New Jersey’s Clean Energy Program*TM. These events secure awareness and participation from trade allies, builders and contractors to support the construction of high efficiency homes. The program also participates in a variety of community home show events to represent the portfolio of residential energy efficiency programs available to New Jersey residents.

Direct Mail/Email. For the current and prospective builders and trade allies direct mail and email is regularly used to communicate program progress, special events, workshops/trainings and any changes in program guidelines.

Collateral. A variety of sales and educational materials have been created for the program for both consumers and builders/architects/HERS raters. Additional materials are planned for 2010, including updated consumer and builder brochures, educational fact sheets, table-top displays for events and builder sales offices, lawn signs, banners for public events, technical training field guides and information packages for builders and contractors, as well as promotional items for give-aways at events e.g., pens.

Web Promotion/Enhancements. The web site has significant opportunity to be further developed as a promotional and educational resource. In 2010, we plan to expand the site to include additional consumer and builder success stories, as well as educational information. We will continue to add more testimonials, as well as promote special offers that may be of interest to new home buyers, i.e. clothes washers, dehumidifiers, as well as links to other products and services.

2010 Marketing Opportunities

- Convergence of significant economic and environmental concerns: rising energy prices, dependence on foreign energy sources, and climate change that can be remedied through energy efficiency.
- Increased awareness of green and sustainable living practices, and impact of carbon footprint reduction.
- Greater awareness of residential indoor air quality, health and safety issues for better living.
- Promotion of New Jersey's comprehensive Energy Master Plan to reduce energy use 20% by 2020.
- Supporting the increased development of a green workforce by promoting green job training.
- Green builders promoting sustainable homes to residential consumers.

2010 Marketing Challenges

- The current economic uncertainty may suppress numbers of ENERGY STAR home sales, particularly if residents are not well educated on the benefits of such homes.
- Awareness of ENERGY STAR homes among realtors and residential home buyers/builders remains relatively low.

- Reduced builder incentives, which began in 2009, particularly in an uncertain housing market, may limit the numbers of new projects initiated in 2010.
- Due to resource constraints, the team will be carefully evaluating events according to performance metrics, including but not limited to projected event attendance and cost, as compared with other events. Events that cannot be supported by the Market Manager team will be referred to the BPU Speaker’s Bureau or the *Green New Jersey Resource Team* for review.

Residential New Construction: Consumer Marketing Objectives, Strategies, and Tactics

<u>Objective</u>	<u>Strategy</u>	<u>Tactics</u>
Market Awareness	Attract media attention to relevant projects and associated savings realized by residents.	<ul style="list-style-type: none"> • BPU Commissioner Champion presentations • Case studies • Issue press releases following significant project completions • Submit story ideas to relevant reporters/media (energy, lifestyle, business, environmental)
	Continue to build awareness of program and benefits through targeted advertising programs.	<ul style="list-style-type: none"> • Secure/utilize customer testimonials • Refine schedules for print and web • Educational collateral • Enrich web site with more information
Market Awareness, Market Education	When appropriate, leverage community partner and <i>Green New Jersey Resource Team</i> relationships to help educate residents on program and benefits.	<ul style="list-style-type: none"> • Speaking opportunities • Community Partner and/or <i>Green New Jersey Resource Team</i> events
Realtor Participation	Explore opportunities to work with residential realtors to promote New Jersey ENERGY STAR homes.	<ul style="list-style-type: none"> • Educational collateral • Event exhibits/materials/speaking opportunities

Residential New Construction: Builder/Developer Marketing Objectives, Strategies, and Tactics

<u>Objective</u>	<u>Strategy</u>	<u>Tactics</u>
Developer awareness and education on program, Developer participation, Trade Ally Training	Continue to build relationships with residential builders.	<ul style="list-style-type: none"> • Trade advertising, featuring case studies of successful builders/developers • Continue to promote builder co-op program • Educational collateral/ training; e.g., , NJ Climate Choice Home, enroll a network of qualified market-based home energy raters • Issue press releases following significant/ unique project completions; e.g., NJ Climate Choice Home • Submit story ideas to relevant reporters/media
	Promote business-building tools; .e.g., training, co-op advertising, technical assistance, offered by residential builders.	<ul style="list-style-type: none"> • Sponsor trade events and training workshops; e.g., Affordable Comfort Conference, etc. • Direct mail/email • Educational collateral • Promotional items

Quality Control Provisions

The move to a market-based HERS delivery infrastructure requires a new structure and set of standards for quality assurance. While the responsibility for ratings rests with Providers and RESNET, it is incumbent upon the program to assure that a robust system for identifying and communicating quality issues exists to manage the credibility of the savings and certifications offered.

In addition to data reviews for completeness of forms and applications, on-site inspections and technical review of buildings and rater files will be required in proportion to the demonstrated proficiency of the builders and raters. Inspection requirements will be adjusted based upon the track record of the program participants. Initial inspection rates for new participants will be significantly higher and will decrease as they demonstrate proficiency in proper building techniques and the qualifying requirements of the Program.

Being subject to the performance of the Program participants, the overall inspection rate cannot be effectively gauged, particularly given that 2010 is the first year of Program participation for most of the market. The average site inspection rate in the first year of the market-based ratings structure will be targeted to 15% of completions.

Budget

A detailed budget for this program for 2010 is attached in Appendix B.

Only the direct incentive costs for units expected to be built in 2010, as well as the value of direct incentives for homes committed in 2010 but will not be completed until the following year(s), are included for the duration of their enrollment prior to expiration.

Goals and Energy Savings

Goals

Program goals for 2010 are as follows:

- 27 percent of the total New Jersey permits issued for qualifying residential new construction types in the current year (i.e. single family, townhouse and multi-family buildings eligible to participate in the Program) will be for projects that have committed to build to the NJ ENERGY STAR Homes program standard within two years of enrollment.
- 28 percent of total New Jersey Certificates of Occupancy for qualifying residential new construction types (single family, townhouse and multi-family) will be for projects that have been certified to the NJ ENERGY STAR Homes program standard in the current year.
- Train at least 150 builders, subcontractors, architects and/or other key trade allies on program elements and aspects that will improve the energy efficiency, performance and sales of homes they design and build.
- Qualify at least four HERS providers to conduct rating activities in NJ.

Energy Savings

Energy savings will be calculated consistent with the latest Board approved protocols.

New Jersey’s Clean Energy Program™
2010 Residential Gas & Electric HVAC Program
 “New Jersey *WARM*Advantage & *COOL*Advantage”

Description

The New Jersey Residential Gas & Electric HVAC Program promotes the purchase of efficient home heating, cooling and water heating equipment, and the quality installation of such equipment. Its long-term goal is to make the high quality installation of high efficiency residential HVAC equipment the norm in the NJ market. For this program the market is considered transformed when rebates can be reduced or eliminated without a decrease in market penetration for targeted HVAC equipment or products.

The program must continue to address several market barriers to achieve its goals:

- Consumers inability to differentiate, and therefore value, the difference between good and poor quality HVAC installation;
- Consumers lack of information on the benefits (both energy and non-energy) of efficient equipment and quality installations;
- HVAC contractor perception of low value and/or sense of difficulty to program participation;
- On-going training needs for HVAC contractors on key installation issues and approaches to “selling” energy efficiency, and;
- Split incentives (between contractors and homeowners).

The program employs several key strategies to address these barriers:

- Financial incentives for the purchase of ENERGY STAR-qualified gas heating equipment and energy-efficient water heaters;
- Financial incentives for the purchase of high efficiency electric cooling and heating equipment;
- Financial incentives for the installation of solar domestic water heating systems;
- Financial incentives and program support for the accurate analysis of building cooling and heating loads, the proper sizing and selection of cooling and heating equipment according to established industry standards;
- Financial incentives and program support for quality cooling equipment installation that confirms appropriate system refrigerant charging and air flow across the interior coil at time of installation;

- Financial incentives and program support for quality heating equipment installation that optimizes operating efficiency at time of installation;
- Financial incentives for contractor participation for each eligible new equipment application.
- Outreach and education for HVAC manufacturers, distributors and contractors;
- ENERGY STAR sales training for contractors (i.e. how to sell efficiency);
- Technical training for HVAC contractors on the proper sizing, selection and installation of HVAC equipment;
- Promotion of HVAC technician certification through North American Technical Excellence (NATE) certification testing; and
- Support for enhanced incentives in areas not covered by additional utility offerings to further NJCEP goals for statewide consistency and stability.

New Jersey’s Clean Energy Program will continue to support efforts, where technically and economically justifiable, to upgrade federal appliance efficiency standards and state building codes. This includes participation in regional and national efforts coordinated by organizations such as the Northeast Energy Efficiency Partnerships (NEEP) and the Consortium for Energy Efficiency (CEE), and also includes submitting letters in support of efficiency standards and building codes. The program also provides, when necessary, technical support for the development of such upgrades, tracking of activities and monitoring developments, and review and modification of program designs to integrate changes to the standards and codes.

Target Market and Eligibility

*COOL*Advantage promotes the installation of new, energy efficient, residential electric air conditioners and heat pumps. The program covers conventional, centrally ducted air conditioning systems and “ductless mini-split” systems. The program also covers both air-source and ground-source heat pumps.

*WARM*Advantage promotes energy efficient natural gas-fired furnaces, boilers and water heaters for use in residential buildings. In 2010, *WARM*Advantage will continue to pilot incentives for the purchase and installation of solar domestic water heating systems for electric water heating customers.

In 2010, the NJ Residential Gas & Electric HVAC program will also support the state’s ARRA Appliance Program. This includes expansion of the solar domestic water heater incentive to gas water heating customers, and offering *WARM*Advantage and *COOL*Advantage incentives to any customer not previously served by NJCEP (to include customers that heat with oil or propane, and customers served by municipal electric utilities).

Incentives are available for the installation of qualified HVAC equipment in all existing residential buildings (retrofit). There will continue to be a special outreach to builders who have participated in the program in the past in order to further facilitate their participation in the ENERGY STAR homes new construction program, as was initiated in 2009.

Offerings and Incentives

COOLAdvantage

This plan offers incentive levels similar to those offered under the 2008 COOLAdvantage program. Recommended adjustments to savings estimates from efficient equipment alone indicate that further measures must be explored to broaden program offerings. Therefore, starting in 2010, COOLAdvantage will add a new higher efficiency Tier (\geq SEER 16, and EER 13), as well as require correct sizing of any Tier system in order to receive the efficient equipment incentive. Full implementation of expanded Quality Installation Verification (QIV) and Efficiency Tune-Up incentives are subject to staff approval as the program evaluates the results of the 2009 QIV pilots.

Equipment incentives will be paid directly to homeowners, or with written consent, assignable to contractors as summarized in Table 1 below.

Table 1: COOLAdvantage Central A/C and Heat Pump Customer Incentives⁶

Eligible Equipment Category ⁷	Full Incentive Amount	Confirmation Documentation
\geq SEER 16 and EER 13	\$600	<ul style="list-style-type: none"> Compressor/ coil combination ratings⁸ Proper sizing and selection
\geq SEER 15 and EER 12.5	\$400	
\geq SEER 14.5 and EER 12	\$300	

The 2010 COOLAdvantage incentives above signify a return to the 2008 incentive levels and, along with the additional tier for eligible equipment, align the program rebates with other regional utility offerings.

⁶ Note that ductless mini-split (DMS) systems are eligible to participate under the same requirements as central air conditioners or heat pumps, except as noted. For equipment incentive purposes, eligible, ENERGY STAR-qualified, ground source heat pumps (GSHP) will continue to be treated as Tier 2 equipment (i.e. analogous to SEER 15, EER 12.5, HSPF 8.5). GSHP systems must be ENERGY STAR qualified to be eligible for incentives.

⁷ In the case of heat pumps: HSPF 8.5

⁸ From CEE-ARI directory or equivalent ENERGY STAR listing.

Table 2: Contractor Participation Incentive

Requirement	Incentive Amount	Documentation
Completed <i>COOL</i> Advantage applications for qualifying equipment installation.	\$100	<ul style="list-style-type: none"> • Qualifying Equipment specifications⁹ • Proper sizing and selection

In 2010, the program will continue to offer incentives for QIV on new units and Efficiency Tune-Ups on existing units, pending a favorable evaluation of the existing pilot. The incentives will be paid directly to contractors, and are summarized in Table 2 below.

Table 3: *COOL*Advantage QIV and Efficiency Tune-Up Contractor Incentives

Incentive Category	Full Incentive Amount	• Confirmation Documentation
QIV and Existing Equipment Efficiency Tune-up	\$200	• Passing Score Quality Verified Tune-up ¹⁰

The \$200 incentive available for QIV is less than the amount offered in the pilot, but will still provide the necessary support as the program seeks to expand QIV activity in the contractor community. Upon successful evaluation of the QIV pilot and subject to staff approval, the program will aim for a two-year rollout of QIV technology training and adoption, setting realistic yet aggressive targets for penetration. Targets for 2010 will be that approximately 1/3 of installed units receive QIV and approximately 1,500 Efficiency Tune-Ups are performed by program contractors. By 2011, we aim for QIV penetration to reach 75% of new installs.

*COOL*Advantage participation decreased significantly in 2009 due to many factors that include a combination of recessionary economics with cooler than normal temperatures, as well as a perceived reduction of incentives. The revised incentive structure above seeks to remedy those issues and provide a rebound in program volumes in 2010.

WARMAdvantage

The *WARM*Advantage program promotes gas heating equipment that meets the ENERGY STAR efficiency standard (i.e., minimum AFUE of 92% for furnaces and 85% for

⁹ From CEE-ARI directory or equivalent 3rd party verified qualifying equipment list.

¹⁰ Specific eligibility requirements for verification of quality installation and/or efficiency tune-ups are pending the results of the 2009 pilots.

boilers). Beginning in 2008, the program also offered incentives for two tiers of efficient gas water heaters with an Energy Factor of at least 0.62 and 0.82 (the second tier is intended to include tankless water heating technologies.) Table 2, below, describes applicable efficiency levels and corresponding incentives for high efficiency gas equipment.

Table 4: WARMAdvantage Natural Gas Fired Furnace, Boiler and Water Heater Incentives

Equipment	Minimum Efficiency	Incentive Levels
Furnace	92% AFUE or greater, ENERGY STAR	\$300
Furnace with Electronically Commutated Motor (ECM) or equivalent	92% AFUE or greater, ENERGY STAR	\$400
Boiler	85% AFUE or greater, ENERGY STAR	\$300
Water Heater, Tier 1	0.62 Energy Factor or greater	\$25
Water Heater, Tier 2	0.82 Energy Factor or greater	\$300
Solar Domestic Hot Water	TBD and approved by staff through evaluation of pilot performance	TBD

Incentives will continue to be available for residential solar domestic water heating systems. Eligibility will still initially require that customers have electric water heaters. The rebate incentive level of \$1,200 per system has been established to offset approximately 20% of the incremental costs associated with this measure installation. At the customer’s request, WARMAdvantage incentives may be payable to the consumer or the HVAC contractor. Incentive levels may be adjusted in future years for all eligible equipment based upon market assessments as program market barriers are overcome.

COOLAdvantage and WARMAdvantage

In 2010 the program will continue to explore the suitability of upstream incentives in partnership with HVAC manufacturers and distributor groups to increase sales of efficient HVAC equipment and the quality of the installations of HVAC equipment. Such efforts will still be largely coordinated with regional efforts led by NEEP to the extent practical and appropriate. Promotions could be for central cooling equipment, heating equipment, and quality installation.

In 2010, both COOL and WARMAdvantage participants will be eligible to receive services designed to reduce the loss of conditioned air through residential ductwork. Incentives during 2010 will be set pending the outcome of the 2009 pilot.

Table 5: Duct Sealing Incentive¹¹

Requirement	Documentation	Incentive Amount
Residential ductwork must achieve significant measured reduction in leakage	Diagnostic test data through program approved protocol	\$500 (estimated unit cost)

All new program requirements, procedures and incentives will take effect 60 days from written notification to the HVAC industry. Any application for a purchase made after the 60 day notification period will be subject to new program rules. For applications addressing purchases made before or during the notification period, consumers and HVAC contractors will be enrolled in the existing (i.e. 2009) program.

Creative Initiatives

Homeowner and contractor awareness of program and energy efficient opportunities remain key elements to the success and progress of market transformation. The Program will continue to solicit creative proposals for targeted promotions either of new HVAC efficiency technologies, or of alternative approaches to promoting technologies already covered by the program. Such initiatives may include cooperative efforts with community outreach or other mission-oriented groups or organizations that offer significant potential to support the program’s objectives.

Incentives will be provided to initiatives that promote these efforts, particularly to areas with low participation levels in the HVAC program. The incentives will be negotiated with creative initiative providers and will vary depending upon the proposed offering and the market segment targeted.

Planned Program Implementation Activities for 2010

The following program implementation activities will be undertaken in 2010:

- Refocus program marketing efforts to increase program participation by customers and contractors. In 2009 a survey identified that approximately 50% of the HVAC contractors active in NJ are not participating in the program. In 2010, in addition to continuing to offer contractor participation incentives, the program will target marketing to homeowners and initiate new contractor enrollments through the addition of an account management resource. The program will also pursue

¹¹ The results of the duct-sealing pilot will inform the target percentage requirement, effective protocol and documentation requirements and cost-effective incentive amount.

opportunities for enhancing cross-marketing with other programs, particularly the Utility approved enhanced incentive programs.

- Based on pilot results expand the quality installation verification (QIV) component, involving “real-time”, third-party, in-field verification of proper refrigerant charge and airflow using qualified diagnostic tools.
- Based on pilot results, expand the central A/C and heat pump maintenance program component – with financial incentives, marketing and other support – using QIV to correct charge and airflow for older central A/C and heat pump units.
- Based on pilot results, expand the residential duct sealing program designed to optimize the performance of conditioned air distribution systems in homes.
- Based on pilot results expand the solar water heating as a *WARMA* Advantage program measure.
- Train HVAC technicians on the proper calculation of heating and cooling loads using ACCA Manual J v.8 and Manual S compliant software, on proper A/C refrigerant charging and how to achieve proper airflow across the indoor coil, on the use of approved QIV systems, on technical material that must be understood to pass the NATE certification tests and/or Building Performance Institute (BPI) certification tests, proper duct sealing, duct design using ACCA Manual D, ENERGY STAR sales techniques, high efficiency gas heating system installation and selection practices and/or any other substantial form of training that is directly related to the promotion of energy efficiency and quality equipment installation.
- Support ENERGY STAR sales training for sales representatives of HVAC contractors.
- Evaluate joint upstream promotions with HVAC manufacturers (and/or possibly distributors or contractors). This may be done either through regional efforts led by NEEP or independently. Effort may include financial incentives or co-op marketing to support sales of efficient equipment and or documented quality installations. Promotions could be for either central A/C or heating equipment or both.

Research and Development

The NJ Energy Master Plan has established ambitious goals for energy efficiency. Currently available efficiency measures, and the initiatives that deliver them, will not be able to achieve these goals. The Program will pursue the development of new technologies and approaches that will become regular Program offerings in the future.

The Program is interested in verifying the performance of condensing and non-condensing furnaces in the field. Various reports have suggested that performance may not be accurately reflected in the AFUE rating, though the sample size in these reports was not large enough to draw definitive conclusions. In addition, the performance of new technologies, such as Heat-Pump Water heaters, and ductless mini-splits are not well understood and research is needed into the system effects of design and technology choices in determining final energy consumption.

There are significant savings potential in these technologies, but the real-world performance and persistence of new equipment savings must be demonstrated before the Program can broadly support them.

Marketing and Communications Plan

Target Audiences:

- Primary: Consumer – Owners of single family homes and small multi-family buildings
- Secondary: Business – HVAC contractors, distributors, manufacturers

Program Goals and Objectives:

- Increase consumer awareness and purchase of high efficiency heating and cooling equipment—gas space and water heating equipment, central air conditioners, heat pumps, and solar water heaters.
- Increase consumer education about proper maintenance procedures to help secure energy savings and longevity of equipment.
- Process 9,000 central air conditioner and heat pump equipment correct sizing and efficient equipment incentive applications statewide.
- Process 22,000 energy efficient gas space heating and/or water heating equipment incentives statewide. Develop a central air conditioning and heat pump third party verification program to help optimize the efficiency of systems by correcting common installation problems (QIV) and secure long term system performance and savings of existing central air conditioning systems (Tune-up). Process 4,500 applications for QIV and Efficiency Tune-ups combined.
- Continue duct sealing pilot to identify and reduce loss of conditioned air (heating and cooling) and thereby maximize the performance efficiency and comfort of the entire residential HVAC system. The goal is to secure 100 participants in a pilot of new program component to offer duct sealing services.
- Train at least 1,000 HVAC technicians on either Manual J load calculations (including use of software applications), Manual S equipment selection, proper charging and airflow, technical material required to pass the North American Technician Excellence (NATE) and/or Building Performance Institute (BPI) certification tests, duct sealing, duct design using ACCA Manual D, ENERGY STAR sales techniques, high efficiency gas heating system installation and selection practices, and any other substantial form of

training that is directly related to program goals. Any training conducted using the same curricula provided by the program, including training provided by industry allies, shall count towards the goal, and assist with the State’s workforce development efforts.

- Develop a co-op advertising program with contractors and/or manufacturers.
- Solicit creative strategies from manufacturers, contractors, and *Green New Jersey Resource Team* (GNJRT) to increase awareness and participation in the program.
- Help meet New Jersey’s comprehensive Energy Master Plan goal to reduce energy usage 20% by 2020.

2009 Accomplishments & Lessons Learned

- In 2009, there are over 2,500 HVAC contractors that support the program.
- The *COOL*Advantage program is behind goal due to reduced incentives, milder weather, and consumer delay in replacing or installing new equipment due to economic down-turn and expected to increase in 2009 given rising energy prices.
- There is lower consumer interest in these programs, based on call center volumes and web hit rates.
- Most consumers participate in the program through referral and recommendation by participating contractor.
- Press releases with seasonal tips and program offerings sent during the heating and cooling seasons have highlighted the *COOL*Advantage and *WARM*Advantage programs and have stimulated awareness and interest in the programs.
- Media outreach plans during “hot days” and “cold days” were not implemented due to milder winter and summer temperatures.
- Greater consumer awareness and education is needed to create not just demand for the equipment, but to inform consumers on the importance of proper installation and maintenance of the equipment by a participating HVAC program contractor or an accredited *Home Performance with ENERGY STAR*® contractor.
- Continue integration of HVAC Program with *Home Performance with ENERGY STAR* for more comprehensive, “whole house” solutions.
- Successful participation of HVAC contractors in 2009 Affordable Comfort Conference (ACI) to increase activity in *New Jersey’s Clean Energy Program*™.

2009 Program Results against goal:

As of July 2009 the program was at 77% of the 2009 goal with *WARM*Advantage trending at 100% to last year (LY), while *COOL*Advantage was only at 43% to LY; affected by a slow economy, cool summer, and reduced incentive levels.

2010 Marketing Strategies – Homeowners

- Educate consumers about high efficiency heating (gas furnaces, boilers, water heaters) and cooling equipment (central air conditioning systems, heat pumps) to drive demand through contractors.
- Educate consumers on the need for proper installation and sizing of heating and cooling systems, as well as the maintenance of these systems and duct sealing to maximize performance. Promote duct sealing and maintenance pilots.
- Leverage seasonal public relations messaging to grow consumer interest and to show how consumers can contribute to 20% energy reduction by 2020. Work with community partners, as well as local officials, such as mayors and council members, to educate consumers on the need to participate.
- Build awareness of program and benefits through advertising programs, including online and broadcast (Energy Minute radio campaign).
- Promote HVAC programs with Home Performance programs.
- Leverage relationships with 2,500+ participating HVAC contractors of Warm Advantage/Cool Advantage Programs to promote proper installation, duct sealing and maintenance services to their customers.
- Cross-promote HVAC services to completed recipients of ENERGY STAR product incentives, residential solar customers and Home Performance with ENERGY STAR participants.
- Promote financial incentives on equipment at supply centers.
- Enhance the information on njcleanenergy.com web site to increase awareness and participation.

2010- Marketing Strategies – Contractors

- Continue to build relationships with large contractor organizations and seek champions to lead and provide role model for other contractors.
- Promote benefits of BPI-certification and home performance work, as well as home energy rating system, to HVAC contractors' businesses.
- Showcase leading, participating contractors in public relations and media outreach.
- Promote business-building tools; e.g., Green Workforce training, co-op advertising, offered by NJCEP to HVAC contractors.
- Leverage industry networking—upstream and downstream—manufacturers, distributors and contractors.

Key Consumer Messages:

- Correctly sized and properly installed, high efficiency systems connected to well designed and sealed duct systems will save energy and perform better for greater comfort and savings for years to come.
- Routine quality maintenance is an important factor in keeping your HVAC system running properly and providing even temperatures from room to room.

Key Contractor Messages:

- Increase sales, reduce call backs, differentiate your company and build long term relationships with customers by offering financial incentives, quality installations, and comprehensive maintenance service programs to maintain system performance.
- Build your business by participating in *Home Performance with ENERGY STAR* to expand service offerings; i.e., insulation and air sealing services. Helping consumers Go Green can grow your business.

Tactics Rationale

Public Relations/Media Outreach. An effective public relations program includes press releases, case studies, success stories, testimonials, seasonal story ideas, commissioner presentations, and consumer guide features to help customers make informed decisions on equipment purchases. Seasonal heating/cooling features with how-to's for buying a system and hiring a contractor to perform quality installations, along with "Hot Days" promotion during high-temperature periods in the summer, with specific broadcast and public relations messaging in peak temperature periods. Similarly, focusing on ways to stay warm, reduce energy costs, and maintain, upgrade or replace a heating system is an important winter message.

We would also like to propose a consumer contest to increase public awareness of the HVAC program and its incentives. Based on similar contests conducted by utilities nationally, we suggest several promotions, including the "Oldest Furnace Contest", "Oldest Central AC Contest," and "Oldest Water Heater Contest." The winners would receive replacement equipment. The contest announcement would be done through press releases, which provide opportunity to promote the available HVAC program offerings and incentives. The promotion would provide media attention when the winners are announced through follow-up press releases.

Advertising. Historically, the HVAC program has not conducted separate advertising; however, it has been promoted through *New Jersey's Clean Energy Program* Energy Minute advertising campaign which included broadcast and print. We will also include some targeted online advertising, directing customers to toll-free number and web site for more information and list of participating customers.

In 2010, we would also like to consider a co-op advertising program for participating contractors, similar to the co-op program available for *Home Performance with ENERGY STAR* contractor and ENERGY STAR builders. It would provide incentives to contractors, distributors and product manufacturers to promote high efficiency equipment and *New Jersey's Clean Energy Program*. In addition, working cooperatively with gas utilities in joint promotions of programs and incentives will continue in 2010, along with anticipated ARRA funding.

Events. The program currently participates in several types of trade networking and training events, primarily focusing on contractors, distributors and manufacturers. Program sales promotion and communications with manufacturers, distributors and supply centers helps to increase awareness and participation of contractors.

The program is also represented at community events and part of Community Partner communications. More opportunities exist in working with the community partners to expand consumer awareness at the local level.

Direct Mail/Email. New Jersey's On-Line Home Energy Analyzer tool, provided to customers at no charge, offers a simple, cost-effective way to engage and inform potential customers of energy efficiency services. When customers complete the on-line survey tool they are provided a report of recommended improvements and available program services to help reduce energy use. The on-line survey participants are encouraged to take the next step and contact a participating contractor, or they can call or visit the web site for more information. Other program services are also cross-marketed in the rebate checks sent to participating HVAC customers.

For participating contractors and contractor associations, direct mail is used several times a year to inform contractors of eligible measures, incentives, program changes, and technical guidelines. To a lesser extent, digital communications are used, however, we are looking to increase the contractor email database and provide more regular communications with contractors.

Collateral. As in 2009, a variety of collateral materials will need to be produced to support the program. Materials include: updated educational brochures, application forms, point-of-purchase displays and "tips" sheets on purchasing/maintaining equipment at home improvement retailers, supply centers, as well as through contractor distribution

to consumers. This will include information about *WARM*Advantage, *COOL*Advantage, *Home Performance with ENERGY STAR*, duct sealing, quality installation verification (QIV) and maintenance programs, as well as program identification materials. Materials will educate on how purchasing and maintaining equipment will support the goal of 20% energy usage reduction by 2020.

Web Promotion/Enhancements. The New Jersey Clean Energy web site will continue to be updated with information about qualifying models, incentive levels and technical requirements. The buyer's guide information provides information about how to purchase new equipment, select a contractor, and access available rebates. The online Home Energy Analyzer tool is critical in helping to direct customers to HVAC offerings. The web site will continue to include seasonal banners for promotion of equipment and incentives, as well as be a technical, informational resource for contractors.

2010 Marketing Opportunities

- Convergence of significant economic and environmental concerns: rising energy prices, dependence on foreign energy sources, and climate change that can be remedied through energy efficiency.
- Increased awareness of sustainable living practices and how the impact of carbon footprint can be reduced.
- Greater awareness of residential indoor air quality, health and safety issues for better living.
- Promotion of New Jersey's comprehensive Energy Master Plan to reduce energy use 20% by 2020.

2010 Marketing Challenges

- Despite financial incentives, HVAC project work may involve significant investment on the part of the home owner, particularly in times of softening housing prices, economic down-turn, and reduced consumer credit options. Customers may delay purchase until system failure.
- Low consumer awareness of program services due to limited advertising.
- Need for increased promotion and referral by contractors—the main influencer in the customer's buying decision.

HVAC 2010: Consumer Marketing Objectives, Strategies, and Tactics

<u>Marketing Objective</u>	<u>Strategy</u>	<u>Tactics</u>
Market Awareness, Market Education	Educate consumers about high efficiency heating (Gas furnaces, boilers, water heaters) and cooling equipment (Central air conditioning systems, heat pumps).	<ul style="list-style-type: none"> • Exhibit/present at key residential/home owner events • Case studies/success stories • Submit relevant energy saving/seasonal story ideas to reporters/media • Educational collateral • Web
	Educate consumers on the need for proper installation and sizing of heating and cooling systems, duct sealing, as well as the maintenance of these systems.	<ul style="list-style-type: none"> • Educational collateral • Promote maintenance pilot, duct sealing and QIV pilots
	Leverage seasonal public relations messaging to grow consumer interest.	<ul style="list-style-type: none"> • BPU Commissioner Champions • Press kit • Submit relevant energy saving/seasonal story ideas to relevant weather reporters/media
	Continue to build awareness of program and benefits through mass media advertising programs, including broadcast. Promote HVAC programs with Home Performance programs.	<ul style="list-style-type: none"> • Local advertising (Energy Minutes)
Demand Generation	Leverage relationships with 2500+ participating HVAC contractors of Warm Advantage/Cool Advantage Programs to promote proper installation and maintenance services to their customers.	<ul style="list-style-type: none"> • Direct mail/email • Sales collateral • Case studies/success stories • Exhibit/speak at key trade events
	Cross-promote HVAC services to completed recipients of ENERGY STAR product incentives, residential solar customers and Home Performance with ENERGY STAR customers	<ul style="list-style-type: none"> • Direct mail/email • Sales collateral • Digital Communications (web)
Demand Generation	Promote financial incentives on equipment.	
	Enhance the information on njcleanenergy.com web site to increase awareness and participation.	<ul style="list-style-type: none"> • Educational collateral translated to web • On line incentive applications

HVAC 2010: Contractor Marketing Objectives, Strategies, and Tactics

<u>Objective</u>	<u>Strategy</u>	<u>Tactics</u>
Expand overall supply & geographical representation of service availability	Continue to build relationships with large contractor organizations and seek champions to lead and provide role model for other contractors.	<ul style="list-style-type: none"> • Sponsor trade events and training workshops, including ACI, as well as product manufacturer events to promote the Green Workforce • Direct mail/email through contractor associations • Collateral
	Promote benefits of BPI-certification and home performance work to HVAC contractors' businesses.	
	Showcase leading, participating contractors in public relations and media outreach--trade.	<ul style="list-style-type: none"> • Case studies, success stories • Develop awards program
	Promote business-building tools; e.g., training, offered by NJCEP to HVAC contractors.	<ul style="list-style-type: none"> • Direct mail

Quality Control Provisions

Electric HVAC Quality Assurance

Documented policies and procedures provide proper guidelines to ensure consistency in the processing and quality control for all incentive program participants. All applications are reviewed as they are processed for verification of the documentation of qualifying equipment efficiency rating, proper sizing and proper installation. Qualifying equipment efficiency levels are verified with the ARI/CEE directory of air conditioning and heat pump equipment. Each application and its information are entered into a database which checks for duplicate applicants through an equipment serial number comparison. The use of third-party quality installation verification systems, piloted in 2009 will be expanded in 2010 to provide an additional level of assurance that proper installation has been achieved.

Gas HVAC Quality Assurance

Documented policies and procedures provide proper guidelines to ensure consistency in the processing and quality control for all rebate program participants. All applications are reviewed as they are processed for verification of proper documentation. Qualifying equipment efficiency levels are verified with the GAMA directory of gas heating equipment. Each application and its information are entered into a database, which checks for duplicate applicants through an equipment serial number comparison.

On an ongoing basis, a minimum of 5% or 1,000 units per technology type of both electric and gas rebate applications are selected for a quality assurance review and inspection. Assurance includes a paperwork review of the application and a field inspection to verify qualifying equipment installations and proper installation. A field inspection report is prepared for each inspection. The program will also look to assess the performance of installed equipment through Program R&D activities.

Budget

A detailed budget for this program for 2010 is attached in Appendix B

Goals and Energy Savings

Program goals are as follows:

- Process applications for more than 9,000 efficient central air conditioner and heat pump equipment installations statewide.
- Process 22,000 energy efficient gas space heating and/or water heating equipment incentive applications statewide.
- At least 4,500 applications for QIV and Efficiency Tune-Ups statewide
- Train at least 1,000 HVAC technicians on either Manual J load calculations (including use of software applications), Manual S equipment selection, proper charging and airflow, technical material that must be understood to pass the North American Technician Excellence (NATE) and/or Building Performance Institute (BPI) certification tests, duct sealing, duct design using ACCA Manual D, ENERGY STAR sales techniques, high efficiency gas heating system installation and selection practices, and any other substantial form of training that is directly related to program goals. Any training conducted using the same curricula provided by the program, including training provided by industry allies, shall count towards the goal.

Energy Savings

Energy savings will be calculated consistent with Board approved protocols.

New Jersey's Clean Energy Program™

2010 Energy Efficient Products Program

Description

The Energy Efficient Products Program promotes the sale and purchase of ENERGY STAR qualified and other energy efficient products including lighting, appliances and consumer electronics. The long-term goal of the Program is to transform the market for energy efficient products in New Jersey by removing barriers to new technologies and providing customers with the knowledge and motivation they need to make cost-effective purchases. The program employs several key strategies, including:

- Educating consumers on the energy usage of common household appliances and the role that energy efficiency can play in reducing home energy consumption;
- Support a retail infrastructure that offers a range of energy efficient qualified product choices to consumers;
- Marketing and training support for retailers, manufacturers and contractors selling energy efficient products;
- To move beyond traditional retail outlets by working with community-based initiatives and other innovative approaches to bring energy efficient technologies to target populations that do not respond to conventional, retail-based marketing approaches;
- Offering consumer access to energy efficient products through an online “store”;
- Supporting the development of NJ State appliance standards, minimum federal appliance efficiency standards and ENERGY STAR appliance specifications, as appropriate;
- Helping to develop and introduce new, energy efficient technologies;
- Offering early retirement options for old, inefficient equipment that is still in operation;
- Supporting and making consumers aware of product recycling and disposal services to address product lifecycle environmental impacts;
- Leveraging national energy efficient programs, promotions, marketing materials, and advertising as appropriate;
- Targeting rebates or other incentives to reduce first cost barriers of energy efficient lighting and appliances; and
- Coordinating with NJ Utility sponsored programs to co-brand and leverage customer participation and savings.

New Jersey’s Clean Energy Program (NJCEP) will continue to support efforts, where technically and economically justifiable, to upgrade federal appliance efficiency standards and state building codes. This includes participation in regional and national efforts coordinated by organizations such as the Northeast Energy Efficiency Partnerships (NEEP) and the Consortium for Energy Efficiency (CEE), and also includes submitting letters in support of efficiency standards and building codes. The program also provides, when necessary, technical support for the development of such upgrades, tracking of activities and monitoring developments, and review and modification of program designs to integrate changes to the standards and codes.

Target Market and Eligibility

The program will provide targeted rebates/incentives to consumers for the purchase of selected energy efficient products. The program will also offer marketing and training support to new retailers, manufacturers, contractors and other organizations while continuing to maintain existing partner relationships.

In 2010, the program will also provide support to the state’s ARRA Appliance Program, which expands rebate offerings to include dishwashers, new refrigerators, and a new tier of clothes washer.

Offerings and Customer Incentives

In 2010 the Energy Efficient Products Program will continue to offer retail price incentives through markdown and direct to consumer rebates via online and mail-in coupons on qualified lighting products, clothes washers and dehumidifiers on a year-round basis, and on room air conditioner as a seasonal promotion (May – August). These incentives will be supported with a variety of promotional approaches, including leveraging Environmental Protection Agency (EPA) and Department of Energy (DOE) national ENERGY STAR campaigns. We also plan to continue the Green New Jersey Resource Team (GNJRT) initiatives begun in 2008 pending completion of current cross-program marketing trials. The 2010 budget also includes provisions for the promotion of energy efficient consumer electronics and for the continuation of an “early-retirement” program for refrigerators and freezers begun in 2009. Qualifying residential swimming pool pumps and timers will also receive incentives for the first time in 2010.

On-line Energy Audit

2010 the program will coordinate with utility sponsored audits, providing links from the NJCEP website and marketing NJCEP offerings to the extent possible, as well as look

into the availability of other valuable on-line auditing tools that may be utilized at no cost to the program.

Incentives for ENERGY STAR qualified lighting products

Compact Fluorescent Lamp (CFL) penetration studies completed in 2009 by the DOE indicate a significant remaining potential for energy savings in NJ homes from switching incandescent lamps to CFLs. In 2010 the Program will continue to offer incentives to manufacturers and/or retailers to mark down the retail prices of eligible efficient lighting products. The Program will offer incentives for ENERGY STAR qualified Solid State Lighting (SSL) products for specific lighting applications beginning in 2010. Incentives will be applied to eligible products (up to a mutually negotiated volume) sold by participating New Jersey retailers during promotional periods. Incentives will vary by type of product, based on negotiations with manufacturers and/or retailers. Based on experience with the 2009 initiatives and regional promotions for qualifying SSL fixtures, the 2010 mark down incentives will be in the range of \$0.75-\$1.00 per standard CFL, \$2.00-\$3.00 per specialty CFL and \$10.00-\$30.00 per energy efficient light fixture, including qualifying SSL fixtures. In a change for 2010, the program will look to differentiate retail price incentives for the most common, most easily available, regularly lowest price CFLs with retailer and manufacturer partners that offer a clear distinction in the promotion of the NJCEP.

Incentives for ENERGY STAR qualified appliances and equipment

In 2010 the Program will continue to offer rebates of up to \$75 for energy and water efficient clothes washers at a minimum modified energy factor (MEF) of 2.2. In 2010 the Products program will continue the \$25 rebate for ENERGY STAR qualified dehumidifiers begun in 2008. Between May and the end of August 2010, the Program will offer a \$20 incentive for qualified ENERGY STAR qualified air conditioners.

The Program will offer incentives of \$300 per efficient pool pump and \$75 per pool pump timer in 2010, and investigate participating in a regional initiative for upstream and consumer rebate promotions.

Appliance Early Retirement

In 2010 the Program will continue the 2009 initiative to offer an incentive to New Jersey residents for turning in their working old, inefficient secondary refrigerators and freezers for recycling. However, the program will increase the incentive offered from \$30 to \$50 based on incentive levels of other programs in the region and the desire to increase participation in what is still a relatively new program. For 2010, the Program will consider the promotion of early retirement of room air conditioners in order to encourage recycling of old appliances and because the current refrigerator recycling contractor allows for free pick up and recycling of an old room air conditioner at the same time as the pick up of a refrigerator or freezer.

Creative Initiatives

The goal of the Creative Initiatives are to allow for innovative approaches to reach the estimated 20-40% of customers that haven't responded to the traditional retail price incentive campaigns and to engage them in the NJCEP. In 2010 the Program will expand on the creative initiatives begun in 2008 in lighting to also cover pilot-scale promotions of energy efficient consumer electronics products which could include televisions, set top boxes, LCD monitors and desk top computers. The incentives will be negotiated with initiative providers who will be selected through a competitive solicitation and will vary depending upon the type of product and the market segment targeted.

Planned Program Implementation Activities for 2010

The Products program will be offered on a consistent program design and implementation basis to ensure retailer support statewide. The following program implementation activities will be undertaken in 2010:

General Activities

Maintain existing retailer base and recruit new retailers as needed. Update and distribute collateral and "point of purchase" (POP) materials for product groups, continue retail associate training, and promote the Program on an as needed basis at NJCEP sponsored events.

Change-A-Light

The 2010 Change-A-Light program will include a continued focus on strengthening diverse lighting promotions throughout the year, including CFL retail price markdowns with select retailers, co-op advertising, brochures, promotion of the national Change-A-Light Pledge, and special energy education and lighting events at locations throughout the State.

The opportunity to use mark down incentives will be awarded on the basis of a proposal's value to the Program, the quality of the products included in the proposal, and other factors. In 2010 additional emphasis will be placed on transitioning retailers to offer onsite CFL recycling options to customers as part of Program participation and awarding incentive levels based on retailers' specific marketing efforts to raise awareness of the Program's other efficiency initiatives beyond lighting.

In 2008, the Program augmented the retail mark down promotion by soliciting creative proposals to promote energy efficient lighting at a grass-roots level, from faith-based organizations, non-profits, small businesses and volunteer organizations. Based on successful results from these activities, the Program will make resources available for creative promotions in 2010 and continue efforts started in 2009 for cross-cutting promotion of Home Performance and HVAC programs.

Online Store

Most energy efficiency programs in the northeast offer customers the opportunity to purchase energy efficient lighting on-line through internet portals such as www.myenergystar.com. In 2008, the Program selected Energy Federation, Inc. to create an online store as part of a creative initiative and the volume of products sold through the online store expanded 270% in 2009. In 2010 the Program will increase product and customer outreach through the online store and expand the availability of high quality, energy efficient lighting and other products.

ENERGY STAR National Appliance Promotions

In 2010, program staff will review the marketing templates created by ENERGY STAR and, as appropriate, use them to update collateral to retailers and enhance program information on the NJCEP website, www.njcleanenergy.com.

Cool Your World

The Program will participate in the 2010 national ENERGY STAR “Cool Your World” campaign from May through August. Program staff will review the national marketing templates created and, as appropriate, use them to update collateral to retailers and enhance program information on the NJCEP website.

Appliance “Early Retirement” Program

In 2010 the Program will continue a market-based effort to promote and facilitate the early retirement of inefficient working secondary refrigerators/freezers. Implementation will include:

- A marketing campaign appropriate to the year’s unit goals;
- In-house appliance pickup and direct access to customers to promote other NJCEP referrals through the employment and training of private haulers;
- Tracking of individual units and recording of the recovery and destruction of all hazardous materials in compliance with the EPA’s Responsible Appliance Disposal (RAD) guidelines by adding CFC removal and incineration to the existing NJ DEP recycling path; and
- Evaluating retail partnerships that support removal and recycling of refrigerators and freezers at the time of new product purchase.

New Technologies and Initiatives

In 2010, the Program will expand the reach of the Creative Initiatives to solicit proposals for delivering the “best of the best” in energy efficient products to NJ communities. As part of the effort, the program will capitalize on the rapid advancements in set top box, television, computer power supply and monitor efficiencies and the participation of local and state level cable service companies to focus community level efforts on the dramatic increase of energy consumption of consumer electronics. The pilot will involve consumer

marketing, local community organization and manufacturer partnering and product price incentives. The Program will further investigate opportunities for cross-cutting NJCEP program promotion through ENERGY STAR qualified set top box service providers.

Additionally, starting in 2010 the Program will introduce a pilot initiative with pool pump manufacturers and retailers to promote efficient variable speed and two-speed pool pumps and timers. Initial investigations in 2009 showed significant savings opportunities for New Jersey and potential for the support of a regional initiative.

Also new in 2010, the Program will partner with two utility companies to pilot a home energy report product that gives customers individualized feedback on their energy use as compared to similar households in the area. The report then offers suggestions for decreasing their energy use, including both energy efficiency upgrades and behavior changes, and updates are sent to the customer periodically to highlight the energy use impact. Evaluations of these home energy reports appear promising, as they suggest both cost effective energy savings generated from greater individual awareness of energy usage, as well as marketing benefits of increased participation in energy efficiency programs.

CFL Recycling

Following the voluntary initiation of an on-site CFL recycling program by a major NJ retailer in 2008, the Program’s 2010 mark-down solicitation’s proposal scoring system will provide a strong preference for proposals for mark downs that include a recycling option. The Program will also work with the NJ DEP to strongly encourage other NJ retailers to offer CFL recycling.

National and Regional Initiatives

The Top Ten initiative is intended to provide customers with on-line access to information about the “best of the best” energy efficient consumer products. The program will continue to participate in development discussions and evaluate the end product of the Top Ten initiative to determine a recommended level of NJCEP support and involvement

Research and Development

The NJ Energy Master Plan (EMP) has established ambitious goals for energy efficiency. Current efficiency measures and delivery techniques will not be sufficient. Continuing on efforts in 2009, all NJCEP residential energy efficiency programs will begin to actively develop the new technologies and approaches needed to achieve EMP goals.

Needs for R&D for energy efficient products includes learning more about how user behavior influences energy consumption and ways to minimize energy use by influencing the ways that people use technology. New technologies that are worth investigation include more energy efficient clothes dryers and clothes washers.

Special Events

Participate in several NJ based Earth Day events.

National Meetings

Program staff will attend the National ENERGY STAR Lighting, Appliance and Consumer Electronics Partners Meetings. Staff will be represented at the Behavior, Energy and Climate Change conference.

ENERGY STAR Products 2010 Marketing Plan

Target Audiences:

- Primary: Consumer – All, but sub-segments; e.g., purchasers of large appliances (refrigerators, dishwashers, clothes washers, room air conditioners, dehumidifiers), lighting, home electronics.
- Secondary: Business (Trade Allies) – Retailers, Manufacturers, Distributors, Community Partners, *Green New Jersey Resource Team* members.

Program Goals and Objectives:

The purpose of the *ENERGY STAR Products* program is to increase consumer awareness and sales of high efficiency, ENERGY STAR qualified lighting and appliances. Program goals include:

- Achieve annual sales and distribution of 7+ million ENERGY STAR qualified CFLs and 120,000 energy efficient lighting fixtures in New Jersey.
- Provide at least 30,000 rebates for select high efficiency ENERGY STAR qualified clothes washers.
- Provide at least 10,750 rebates for ENERGY STAR qualified room air conditioners.
- Provide at least 2,500 rebates for ENERGY STAR qualified dehumidifiers.
- Secure 750+ stores to participate in either co-op advertising or product incentive offerings.
- Help develop and introduce new, energy efficient technologies for power management. Provide new incentives for 400 qualified pool pumps, 1,500 pool pump timers, and at least 200,000 rebates for high efficiency computers, LCD monitors, set top boxes and televisions combined..
- Offer early retirement options for old, inefficient equipment that is still in operation. Support recycling of 40,000 refrigerators through the recycling program introduced in 2009.

- Continue to educate New Jersey residents on product recycling and disposal services to address consumer concerns about lifecycle environmental impacts.

2009 Accomplishments & Lessons Learned

- As of June 2009, there were more than 10,400 rebate applications submitted for clothes washers, over 1,400 for dehumidifiers, and over 1,200 for room air conditioners. Dehumidifier and room air conditioner results, while strong, are not surprising, due to the mild, wet summer months.
- The ENERGY STAR *Change the World*, formerly the *Change-A-Light* campaign, leveraged the growing strength of the *Green New Jersey Resource Team*, who drove 500,000 pledges in 2008 and are on track to reach their 1 millionth pledge in Q309.
- A consumer brochure, as well as web page at NJCleanEnergy.com, was developed to introduce and describe the members of the *Green New Jersey Resource Team* to state residents.
- The *Green NJ Resource Team* continued in 2009, expanding to seven members. The team has reached its lighting targets through unique means of targeting communities. As a result of their success with lighting, test campaigns have been developed to assess the team's effectiveness in promoting other energy efficiency programs to residents; e.g., *COOLAdvantage*.
- One of the *Green New Jersey Resource Team* members, HelpLight NJ, received an ENERGY STAR award from the EPA for its efforts in making energy efficient lighting available to senior and low income citizens throughout the State.
- As of August 2009 the implementation of online rebate applications for clothes washers, dehumidifiers, and room air conditioners was complete.
- A new refrigerator recycling program was launched in 2009 and is expected to grow in 2010.
- Improved retailer search capabilities with the 2009 launch of the trade ally database.

2010 Marketing Strategies – Consumers

- Continue to build awareness of ENERGY STAR products and benefits through retailer outreach and education, point-of-purchase consumer signage, events, mass media advertising, including broadcast, print, and online, as well as public relations media outreach. Step up promotion of clothes washer incentives to help drive increased 2010 results.
- Leverage integrated marketing and media outreach campaigns to drive aggressive progress toward 2010 consumer electronics goals. Media outreach may target specialty publications that consumers may reference; e.g., Consumer Reports, PC World, for higher involvement purchases, such as computers and televisions.

- Repeat successful *Change the World* program in conjunction with the EPA, working with the *Green New Jersey Resource Team* and community partners to driven results.
- Continue to educate consumers on the care and recycling of CFLs. Work with community partners, local governments, and the *Green New Jersey Resource Team* to inform residents.
- Continue to promote early retirement--removal and recycling--of old refrigerators and freezers (40,000 units). Utilize integrated marketing and public relations campaign to drive results.
- Work with trade allies throughout the State to drive results of energy efficient pool pumps and pool pump timers.
- Cross promote ENERGY STAR Products with other *New Jersey's Clean Energy Program*TM customers; e.g., renewables, *Home Performance with ENERGY STAR*[®] (Improvement of existing homes), *New Jersey ENERGY STAR Homes* (Residential new construction), HVAC.
- Enhance the navigation, information, and tools at NJCleanEnergy.com to increase awareness and participation.

2010 Marketing Strategies – Retailers, Manufacturers, Distributors, and Green NJ Resource Team

- Continue to support retailer education programs and rebate programs with point-of-purchase materials, as well as online information.
- Support development and promotion of online store.
- Support members of the *Green New Jersey Resource Team*, including One Change/Project Porch Light (Door to Door), Green Market Fundraising (Schools), Energy Federation Inc. (EFI) Online Store, Help Light NJ (Elderly/low income), Green Faith (Religious and non-English speaking, Double D/MaxLite (Shopping malls) and TechniArt (Corporate).
- Maintain retailer search capability on NJCleanEnergy.com through new trade ally database.

Key Messages for Consumers:

- Best choice - Buy energy efficient, ENERGY STAR qualified products to save money, energy, and the environment. Energy efficient products will help contribute to the goal of 20% energy usage reduction by 2020.
- Best price now - Incentives are available on select products during seasonal and year-long promotions.
- Safe recycling of CFLs and refrigerators is easy, convenient, and worthwhile.
- Early retirement of old, operating refrigerators and freezers will help reduce energy use significantly, saving money on energy bills, while helping the environment.

Key Message for Trade:

- Increase sales and market share - customers are looking for high-performance products that use less energy, without sacrificing comfort and convenience, and seek reliable sources.
- Differentiation in marketplace - be the “go-to” place for energy-efficient products.
- Improve customer service by educating customers and reinforcing good buying decisions.

Tactics Rationale

Public Relations/Media Outreach. The news media provides a powerful opportunity to increase public awareness and influence buying decisions, drive retail traffic and promote special events. Public relations efforts help reinforce all marketing and advertising efforts on both a regional and national level to create additional awareness, human interest, relevance, and a compelling story for the media to tell. A newsworthy, multifaceted public relations program includes press releases, case studies, success stories, testimonials, seasonal savings story ideas, promotion of financial incentives, and special media events. Based on past experience, as well as experience in other consumer product categories, these tactics provide the opportunity for wide-scale program awareness. It provides the opportunity to highlight specific examples of solutions for consumers, retailers, contractors, builders. Having the solutions and “energy-saving” tips presented or supported, as in the case of refrigerator recycling, by a third-party; e.g., journalist or news outlet, also offers greater credibility to the program and the benefit of *New Jersey’s Clean Energy Program*.

Advertising. The advertising program includes print, broadcast, and online, as well as retailer co-op advertising with promotion of financial incentives to help increase product sales. As in prior years, the products program will feature testimonial style advertising

using a New Jersey resident that made the ENERGY STAR choice with a high efficiency clothes washer. The creative approach kept the product promotion local and relevant to New Jersey residents. The message was strong in touting financial incentives (\$75 rebate), energy, water and environmental savings, along with a strong call to take action visit local retailer, call toll-free number, or visit website for more information. The refrigerator/freezer retirement program was also launched with media advertising, including print and online.

Direct Mail/Email. Targeted direct mail provides awareness, education, with a specific offer and strong call to action to a select customer group that is likely to participate based on specific criteria. For example, to help promote the purchase of *ENERGY STAR Products*, it is important to promote product offers to participants of *Home Performance with ENERGY STAR* who we know would benefit based on the needs of their home. Product offers can be included in rebate checks or in separate mailings. Similarly, lists of participants in the *ENERGY STAR Products* program will be tested for cross promoting other energy efficiency programs, such as *COOLAdvantage*.

Point-of Purchase Materials and Collateral: The retail sales floor provides the best opportunity to educate and influence consumers' buying decisions. While the advertising, web promotions and public relations outreach help draw customers into the stores, it's ultimately the retail setting that influences the final decision. Since 70% of the product purchase decisions are made on the retail floor at the point of purchase, we will continue to create visually stimulating educational materials that build the ENERGY STAR brand, maximize floor and shelf space, engage/influence the buying process and incorporate a call to action. The materials help enrich the shopping experience and empower customers to make informed product choices and be aware of rebate offers on select products. Point-of-purchase materials and sales/educational collateral includes brochures, fact sheets, retail point-of-purchase materials-rebate applications, in-store signage, product labels and clings, promotional items. Point-of-purchase materials generally include energy savings information, as well as a toll-free number and web site. Collateral typically provides more detailed program information, as compared with an advertisement, focusing on features, benefits, savings information as well as toll-free number and web address for more information or to take action

Web Promotion/Enhancements. *New Jersey's Clean Energy Program* web site provides a terrific opportunity to promote *ENERGY STAR Products* and incentives available for seasonal products like room air conditioners, as well as year-long incentives for clothes washers and dehumidifiers. Consumers often conduct product research online before making any purchases for relevant product information. The web site has been instrumental in supporting New Jersey's participation in the EPA's national *Change-A-Light* campaign, providing customers the opportunity to pledge online to change out incandescent bulbs with ENERGY STAR qualified lighting. Starting in 2008, New

Jersey residents have been able to purchase efficient lighting on line through Energy Federation, Inc. (EFI) one of the *Green New Jersey Resource Team*. For the consumer, digital communications provide the ability to increase awareness and education of available services, showcase success stories, promote special offers and incentives, link to participating retailers, access online store and special pricing such as those offered by EFI.

Refrigerator- Freezer Recycling Program

The program will continue to execute a campaign that increases awareness of the benefits of retiring and recycling refrigerators and freezers. Participants will be directed to call or go online to schedule an appointment to have their old unit picked up. Based on the 2010 program goal to recycle 40,000 units, the marketing mix will be varied throughout the year with increased tactics during peak Spring and Summer months. Plan tactics will include print advertising, online advertising, retail Point-of Purchase, collection truck signage, and search engine marketing. Public Relations strategies will continue to include ideas and pitches to media outlets as well as a Spring/ Summer Event to increase program awareness.

Additional tactics being planned for the 2010 program include a Retail Integration Program with major national retail partners, a social network pilot, and coordination with Utilities for potential bill insert use. All components of the media plan for the program will be monitored for effectiveness of the campaign.

2010 Marketing Opportunities

- Convergence of significant economic and environmental concerns: rising energy and water prices, dependence on foreign energy sources, and climate change that can be remedied through energy efficiency.
- Increased awareness of sustainable living practices and impact of carbon footprint reduction; understanding that every home can make a difference with the products they use
- Increasing consumer awareness of steps that can be taken to use less energy, save money, and help the environment for better living at the community level.
- Promotion of New Jersey’s comprehensive Energy Master Plan to reduce energy use 20% by 2020.

2010 Marketing Challenges

- Despite financial incentives, ENERGY STAR products may cost more, a barrier, particularly in times of economic concern.

- Retail sales people who are significant information sources and influencers for consumers may not promote specific products without financial incentives.
- The Marketing team will continue to carefully evaluate events according to performance metrics, including but not limited to projected event attendance and cost, as compared with other events. Events that cannot be supported by the Market Manager team will be referred as appropriate to the BPU Speaker’s Bureau or the *Green New Jersey Resource Team* for review.

ENERGY STAR Products: Consumer Marketing Objectives, Strategies, and Tactics

<u>Objective</u>	<u>Strategy</u>	<u>Tactics</u>
Market Awareness, Market Education, Product Sales	Continue to build awareness of ENERGY STAR products and benefits through mass media advertising programs and events, including broadcast, print, and online.	<ul style="list-style-type: none"> • Research media effectiveness, refine schedules for print, broadcast, web including refrigerator recycling and consumer electronics • Advertise clothes washers incentives to drive results. • Exhibit/present at key residential/home owner events. • Educational collateral, retail point-of-purchase materials • Promotional items • Web
	Leverage media, particularly specialty publications that consumers may reference; e.g., <u>Consumer Reports</u> , <u>PC World</u> , with higher involvement purchases, such as computers, televisions.	<ul style="list-style-type: none"> • Case studies and testimonials • Submit relevant energy saving/product story ideas to relevant reporters/media • Seasonal messaging and “energy tips” Media events <ul style="list-style-type: none"> • CFL safety--disposal and recycling
	Promote safe compact fluorescent light bulb (CFL) care and recycling	<ul style="list-style-type: none"> • Work with Community Partners, local governments, and <i>Green New Jersey Resource Team</i> • Point of Purchase materials • Customer informational brochure • Web banner ads and content
	Promote turn-in and recycling of old refrigerators	<ul style="list-style-type: none"> • Media advertising • Public relations outreach • Brochures/fact sheets • Point of Purchase materials • Web promotional banners
Product Sales	Support development and promotion of online store.	<ul style="list-style-type: none"> • Web page development • Online advertising: banner ads, paid search • Direct mail/email

		<ul style="list-style-type: none"> • Announce availability in NJCEP advertising
	Repeat successful <i>Change the World</i> campaign in conjunction with EPA, working through the <i>Green New Jersey Resource Team</i> .	<ul style="list-style-type: none"> • Employee/onsite exhibit/sign up • Educational collateral • Web advertising • Sampling; e.g., free CFLs • Work closely with Green NJ Resource Team •
Market Education, Product Sales	Cross promote ENERGY STAR products with other program customers; e.g., renewables, HVAC, home performance, residential new construction.	<ul style="list-style-type: none"> • Direct mail/e-mail/rebate inserts • Sales collateral • Leverage online store • Web promotional banners
	Enhance the navigation, information, and tools at NJCleanEnergy.com to increase awareness and participation.	<ul style="list-style-type: none"> • Update copy, incentives, provide additional links to information, etc. • Promote online store • Web promotional banners
	Launch pilot of energy efficient pool pumps and pool pump timers	<ul style="list-style-type: none"> • Point of Purchase materials • Web banner ads • Brochures • Rebate applications
	Continue to support rebate programs with point-of-purchase materials, as well as online information.	<ul style="list-style-type: none"> • Reprints • Update design and copy as appropriate, including for new products • Consider redesign rebate coupons to be self-mailing and postage paid at time of purchase to help reduce breakage rate

Quality Control Provisions

For promotions featuring customer rebates, documented policies and procedures provide proper guidelines to ensure consistency in the processing and quality control for all rebate program participants. All applications are reviewed as they are processed for verification of the documentation that the equipment meets program requirements.

Each application and its information are entered into a database that allows checking for duplicate applicants through an equipment serial number comparison. On an ongoing basis, 2-5% of all rebate applications are selected for a quality assurance review and/or follow-up telephone customer survey to verify the information on the application and to

confirm that the rebate was received. For co-op marketing promotions with manufacturers, distributors and retailers, payments are made to the co-op participant when the required proof of performance is received, which may include copies of invoices, packing slips, photos or samples of product bearing buy-down program identification, copies of delivery receipts, etc.

In addition to the above, the Energy Efficient Product Program field representatives visit the participating storefronts to verify that Program products have been received and have been displayed properly according to program requirements. If necessary they will help unpack the products, and put them on display with the required program materials, as well as train sales staff about Program rebates and the energy savings a customer might expect from purchasing a Program product. Performance reports are provided to the program managers to assist in developing future promotions and selecting the most effective co-op marketing proposals.

Budget

A detailed budget for this program for 2010 is attached in Appendix B.

Goals and Energy Savings

Goals

Program goals are as follows:

- Achieve sales and distribution in excess of 7 million CFLs in NJ in 2010;
- Provide at least 30,000 rebates for clothes washers;
- Provide at least 10,000 mail-in or online rebates for room A/Cs (quantity also includes any units processed through the Appliance Early Retirement Program);
- Remove at least 20,000 old, inefficient refrigerators and freezers from NJ residential homes;
- Provide at least 200,000 rebates for high efficiency computers, LCD monitors, set top boxes and televisions; and
- 50% of retail store-fronts (i.e. at least 750 stores) participate in either co-op advertising or product incentive offerings.

Energy Savings

Energy savings will be calculated consistent with Board approved protocols.

New Jersey's Clean Energy Program™

2010 Existing Homes Program

NJ Home Performance with ENERGY STAR®

Program Description

Home Performance with ENERGY STAR (HPwES) is a national home performance improvement program developed by the Environmental Protection Agency (EPA) and the Department of Energy (DOE). HPwES helps qualified contractors offer comprehensive energy efficiency improvement packages for existing homes based on sound building science principles that produce predictable savings and improve energy efficiency, comfort, safety, and durability.

The New Jersey Home Performance with ENERGY STAR program (Program) was built on two parallel delivery strategies. Over the past several years, the Program has provided information, education, and incentives directly to customers to encourage them to undertake significant energy efficiency improvements to their homes. The Program also has provided contractors with the training and accreditation necessary to consistently achieve comprehensive energy savings in existing homes. The contractor recruitment and training element of the Program was designed to ensure an adequate supply of qualified contractors to meet the demand for program services created by the customer marketing and public education elements.

The Program encourages contractors (primarily insulation contractors, HVAC contractors, and remodelers) to pursue an integrated, whole house approach to energy efficiency and home improvement. Participating contractors must meet Building Performance Institute (BPI) accreditation requirements including a requirement that at least one staff member hold BPI certification and that at least two different certification types are held. BPI certifications are based on national standards that ensure that assessors have the skills required to identify and realize savings opportunities and that best practices are met.

The Governor's Energy Master Plan challenge to reduce energy consumption by 20% by the year 2020 presents a clear and compelling call for bold increases in Program activity. Experience to-date with HPwES in upstate New York and other areas suggests that existing implementation approaches require a long development period and a tremendous amount of support to contractors and customers to create a sustainable market for energy efficiency services for existing homes. In order to rapidly ramp up program activity to levels suggested by the Energy Master Plan, in 2009 the Program made several

significant changes to increase the number of customers, to accelerate the transformation of the market, and to support the delivery of market-based services. Additionally, as NJ Utility plans approved by the BPU in 2009 transition to full implementation, and as coordination challenges are resolved, Program participation levels should see significant increases in 2010.

No significant changes to the program structure are intended for 2010. Rather, the intent is to build upon the various changes already adopted and to work closely with individual utility programs to leverage each other's offerings.

Current Target Market / Eligibility

The Program is designed to serve existing New Jersey (NJ) households across all income categories, but particularly the broad market not eligible for low-income program services. The Program has targeted existing one, two, three and four-family homes; either attached or detached; and served by an investor-owned natural gas or electric utility. However, through the use of ARRA funding, in 2010 the Program will be made available to all residential customers in NJ, to now include oil, propane and municipal electric customers, as well as coordinate with the recently launched investor-owned utility funded programs.

The EPA has recently expanded the definition of buildings eligible to participate in HPwES programs nationally to include small multi-family buildings without elevators. NJ has many large developments consisting of low-rise multi-family buildings and some Program contractors already have demonstrated the skills and capacity to serve this market. Making small multi-family buildings without elevators eligible for participation in the Program could significantly increase participation (and savings).

In 2010, the Program intends to utilize R&D funds to develop a more streamlined approach to handle and report these multi-family projects which otherwise would require custom handling and strain program resources. We also will focus on training contractors to support the expansion of this portion of the Program.

Planned Program Implementation Activities

To initiate participation in the Program, a customer requests an assessment performed by a Building Performance Institute (BPI) accredited contractor. The assessment is offered to customers at a subsidized price and customers will also receive a coupon for up to 10 free compact fluorescent lamps (CFLs). Customers may order the CFLs through an online store, by phone or by mail. If the assessment finds no health and safety issues, and if the assessment also finds that air-sealing would be an effective energy efficiency

measure, at a minimum, the assessor encourages the customer to accept Tier 2 services (up to eight person hours of air-sealing and diagnostic services) which are available free-of-charge and delivered by BPI accredited contractors participating in the program. The assessment also includes recommendations for all other appropriate energy efficiency improvements relevant to the home and assessors are trained to promote the installation of comprehensive energy efficiency improvement measures to customers for these additional improvements, under the third Tier of the Program. This Tiered structure has been designed to optimize program costs and savings.

The original program design called for all program assessment and installation services to be provided by participating contractors. In late 2008, the Program was changed to allow a portion of the initial assessments to be performed by Program staff, as a way to help jump start program participation. As the number and sophistication of participating contractors increases in 2009, we have seen a significant uptake from participating contractors in performing audits for the program. Of the approximately 3,700 audits completed to date, about 2/3 have been done by contractors. Based on the positive response to this initiative, Program staff may continue to perform some Tier 1 assessments, but will aim to phase out this role in 2010 and move towards contractor mentoring and quality control roles to promote full transition of these services to the private sector, while at the same time ensuring quality of the service.

Participating contractors must employ properly trained staff, and must allow inspection of work performed by the Program to ensure that all measures are properly installed and safety precautions are observed. Only contractor firms which are accredited by BPI, which requires at least one employee with BPI certification and at least two different certifications, may participate in the program. These company accreditation and individual employee certification requirements provide assurance to both customers and the Program as to basic worker competence, that all cost-effective savings opportunities have been identified, and that any health and safety considerations are also included in the report of recommended actions. Participating contractors must guarantee all work, and participating contractor companies must agree to abide by BPI standards governing health and safety, work quality, insurance coverage, customer service, and complaint resolution.

Offerings, and Contractor and Customer Incentives

To strongly encouraged participation in the program, in 2010, the cost to the customer of the Tier 1 assessment will continue to be \$125 (of a \$345 per assessment actual cost) as in 2009 and the program will continue to offer up to \$1,000 of air-sealing at no charge to customers. In 2010, the program will engage NJ Shares to promote the home assessment at a reduced fee to income qualified participants. Provided that NJ Shares uses the same income guidelines as those currently used by the program, customers qualified by NJ

Shares will be charged only \$25 for the assessment. Income qualification must be demonstrated prior to scheduling the assessment.

The Program also will continue to actively recruit, train and qualify additional contractors specializing in delivering air sealing services and/or comprehensive home improvement services as needed to meet increasing overall demand for the Program. We expect to have about 100 BPI accredited firms and over 150 BPI certified technicians by the end of 2009 and about 50 new companies will have started the training and BPI accreditation process. As demand continues to grow for training, we believe that as many as 100 companies will register to join the program in 2010. The Program continues to be challenged by the need for training, but leveraging utility contributions and opening up Program funded training to other third party training entities should reduce any potential backlog issues. We also will support “green collar” job opportunities in NJ by coordinating with other existing green collar training initiatives and contractor training events in 2010, such as the Affordable Comfort, Inc. conference in Atlantic City in March, 2010.

Contractor Incentives

The Program offers a variety of incentives to participating contractors. Training is free, although participating contractors must pay a \$500 registration deposit for each training, reimbursable after BPI certification has been received. All fees directly assessed by BPI (certification, accreditation, and QA fees) are reimbursed by the Program at 75% of the cost to the contractor (based on a maximum amount of \$500 by certification). Contractors who receive BPI accreditation may also receive reimbursement for up to 50% of the cost of at least one set of new equipment needed participate in the program (blower door, duct blaster, various combustion safety testing devices, etc.). Additional equipment sets will be subsidized by the program for contractors demonstrating high quality work and substantial capacity for program delivery through multiple crews who have been suitably trained.

Incentives to contractors for installing measures identified during an assessment depend on the scope of the work done. The incentive structure is presented in Table 1 below:

Table 1: NJ HPwES Contractor Incentive Tiers and Requirements

INCENTIVE TIER	REQUIREMENTS	CONTRACTOR INCENTIVE
Tier 1	Contractor does initial assessment, reports it to the program, and provides a comprehensive work scope to the customer	\$175 for non-income qualified participants. \$275 for NJ Shares qualified participants (those households receiving a \$25 audit).
Tier 2	Contractor performs air sealing work, provides all materials, pre-post treatment blower door test results as well as combustion appliance testing if applicable.	Up to \$1000 (based on an hourly price, including labor, material and testing, negotiated in 2009)
Tier 3	Contractor performs additional work (insulation, HVAC, DHW and other eligible measures) as identified in the initial Comprehensive Home Assessment and recommended work scope.	\$200 minimum, or up to 10% of total work scope up to \$1,400.

During the first year after BPI accreditation, contractors advertising their participation in the Program will be eligible for reimbursement of 25% of the cost of approved marketing materials, up to a maximum of \$10,000 annually per contractor location (e.g., a larger contractor with two locations in the state would be eligible for up to \$20,000 in co-op marketing support). Contractors reporting a minimum of 10 jobs before their first anniversary of BPI accreditation will be eligible to receive the co-op marketing incentive during their second year of Program participation. Contractors who have a record of significantly exceeding this minimum may be given increased incentives to encourage and reward higher performance.

Contractors will also be offered financial incentives to help offset the cost of BPI accreditation and certification renewal fees. Contractors producing a minimum of 10 jobs in the year following their first anniversary will continue to receive at least 75% reimbursement for BPI accreditation and certification fees. NJ HPwES HVAC contractors will also be eligible to participate in (and receive incentives through) the 2010 air conditioner maintenance pilot under the *COOL*Advantage program (see HVAC program narrative).

A contractor not reporting at least 10 jobs during the first year, or otherwise not meeting program standards will be denied use of program marketing materials, including logos and program references, and will not receive incentives. A document clarifying the conditions under which a contractor may be placed on probation or terminated from the program has been drafted and currently is being circulated for comments.

Customer Incentives

The customer will not receive cash incentives for either Tier 1 or Tier 2 services, but the reduced cost of the assessment and the value of the air sealing work are intended to

respectively present very attractive incentives to save energy. A customer proceeding with additional work in Tier 3, such as insulation and/or HVAC upgrades, will also receive reimbursement for the \$125 Tier 1 assessment fee. In other words, the incentives are designed to build from the assessment to air sealing, towards the ultimate objective of educating the customer on the value of making a significant investment of his or her own money in Tier 3 measures, as shown in Table 2 below.

Because the costs of Tier 3 measures can be significant, additional cash incentives will be offered which range from of up to 50% of the value of the qualifying work for non income qualified households, to up to 75% for income qualified households, (maximum incentives are \$10,000 per household). To ensure cost-effectiveness and encourage comprehensiveness, only Tier 3 projects which, in combination with Tier 2 air sealing, achieve a projected 25% or greater savings of total energy consumption will be eligible for the highest incentive level. The 25% threshold was chosen to define a comprehensiveness target for contractors and customers to reach for in each job. The customer may elect to receive a lump sum cash rebate upon completion of the project or to roll the incentive into a project financing package. Reduced rate or 0% financing now offered through local utility companies, and NJCEP where no utility program exists, encourages contractors to join the HPwES network and to propose effective, comprehensive projects. The project financing products offered are currently initiated by the Energy Finance Solutions of Wisconsin Energy Conservation Corporation (EFSWECC), and the NJ Housing and Mortgage Finance Agency (HMFA), available in late 2009.

Table 2: NJ HPwES Customer Incentive Tiers and Requirements

INCENTIVE TIER	REQUIREMENTS	CUSTOMER INCENTIVE
Tier 1	Initial audit reimbursement (upon completion of at least \$2,000.00 of Tier 3 measures)	\$125 audit fee (a \$300 value)
Tier 1 Income Eligible	Qualified through NJ Shares, Income eligible program participants (household income between 225% and 400% of the New Jersey statewide poverty level)	\$25 audit fee (a \$300 value)
Tier 2	Install air sealing measures	A maximum \$1,000 value, fully subsidized by the program
Tier 3 Non- Income Eligible	Install insulation, HVAC, DHW and/or other eligible measures with combined savings greater than 5% and less than 25%	10% cash rebate ¹ , up to \$2,000 or low interest loan .
	Install insulation, HVAC, DHW and other eligible measures with combined savings greater than 25%	50% cash rebate ¹ , up to \$10,000 and zero interest loans ² .
Tier 3 Income Eligible	Income eligible program participants (household income between 225% and 400% of the New Jersey statewide poverty level) who install insulation, HVAC, DHW and/or other eligible measures with combined savings greater than 5% and less than 25%	50% cash rebate ¹ , up to \$10,000 and zero interest loans ² .
	Income eligible program participants (household income between 225% and 400% of the New Jersey statewide poverty level) who install insulation, HVAC, DHW and/or other eligible measures with combined savings greater than 25%	75% cash rebate ¹ , up to \$10,000 and zero interest loans ² .

1. Eligibility for cash rebates is determined by magnitude of projected savings, as a percentage of total energy consumption. In 2009, incentives were based on heating energy saving. The program will transition to savings based on total energy consumption in 2010. The work must achieve a minimum of 5% projected savings in order to be eligible for Program incentives and work scope approvals must be processed by December 31, 2010 or until incentive commitments reach budget limit.
2. The Market Manager has been advised that NJ utilities and HMFA will offer 0% interest loans to underwrite the non-rebated portion of the customer's cost for HPwES jobs in their service territories. NJCEP will offer 0% loans for HPwES work for any residential utility customers where a utility program is not in place.

3. In 2009 the Market Manager proposed the \$1,000.00 Tier 2 air sealing incentive and an increase in the maximum Tier 3 rebate at \$10,000.00 to stimulate the market. In 2010 we propose to maintain these increased incentives and to review their effect on the market, and will submit any recommended changes to the NJ Board of Public Utilities for approval by July 2010.

Multi-Family Buildings

The EPA has recently announced that multi-family (MF) buildings without elevators may participate in HPwES. Under the Program’s existing incentive structure, the owner of a qualifying MF building could receive up to \$10,000 per unit in incentives towards efficiency improvements. Since some qualifying MF buildings can contain more than 20 units, and a given MF development can have over 20 buildings, the effective cap for such a building could be more than \$4 million, which seems quite excessive, particularly considering the economies of scale which result in doing MF building work. The results from the proposed R&D work focusing on MF buildings also should provide data which can inform any decisions as to how such incentives may be capped without discouraging work in these building types. In addition to working with the OCE to develop more feasible incentive caps, the Program also will continue to investigate incentive structures that encourage landlords to share some of the benefits of incentives with tenants as a way to build acceptance of the Program.

Working with New Jersey Utility Programs

As noted, NJ utilities are in the process of filing, or are in some cases already rolling out, their own individual programs in parallel to the NJ HPwES program. The NJCEP is currently gearing up to meet the new demand generated by the utility programs in 2010. Coordination of program offerings, as well as marketing to contractors and consumers, will play an important role to ensure increased participation and consistency of messaging in the program.

Research and Development

In 2010 the Market Manager will undertake a cost effectiveness study of the Program to assure that program criteria, requirements, incentives and processes are delivering the expected results. This effort will also look at other whole house strategies that will prepare the HPwES Program for success in the coming years.

Pilot Protocols for New Technologies

It is incumbent upon the program to effectively evaluate new technologies as they become available. In 2010, the HPwES program will develop a written new measure evaluation protocol to make measure assessment more transparent. As new technologies pass this initial screen, the HPwES program will develop pilot applications as budget allows and as they fit into the overall program strategy.

REIP Program

The Renewable Energy Incentive Program (REIP) will continue to encourage residential customers who install photovoltaic systems on homes to also consider energy efficiency measures by offering full solar rebates only to those customers who agree to have a home assessment done on their homes as well as the subsidized air sealing if there are opportunities and no health and safety issues are found. The REIP rebate will be reduced if no Program assessment and air sealing work are performed. As in the past, photovoltaic systems under the REIP program will not be eligible for incentives from the NJ Home Performance with ENERGY STAR program to help finance their solar installation but Home Performance incentives will be available to help them pay for Home Performance related work.

HVAC

Customers replacing heating and/or central cooling systems will be eligible for incentives on their new HVAC systems either under the NJCEP HPwES Program or the NJCEP HVAC program, but not both. In order to take advantage of the current high level of interest in renewable energy, solar domestic hot water installations may be covered by the HVAC program. A longer-term objective of the NJCEP is to combine all residential retrofit and equipment replacement efforts under a single Existing Homes umbrella program to allow customers and contractors alike single point of contact and more consistent and comprehensive services to all customers.

Marketing and Communications Plan

Target Audiences:

- Primary: Consumer – Owners of 1-4 family residences (either attached or detached) served by an investor-owned natural gas or electric utility that are 15+ years old; small multi-family buildings without elevators.
- Secondary: Business (Trade Allies) – Insulation, HVAC, solar, home improvement and remodeling contractors.

Program Goals and Objectives:

- Educate consumers about “whole house” solutions to reduce energy use, control energy costs, and mitigate climate change, as well as increase comfort, health and safety.
- Help meet New Jersey’s comprehensive Energy Master Plan goal to reduce energy usage 20% by 2020.

- Increase program activity, number of participating customers, comprehensive of each job in order to accelerate this market transformation initiative and support the delivery of market-based services.
- Support structured program delivery system that includes—Tier 1: low cost home assessment offered at \$125; coupon for up to 10 compact fluorescent bulbs to be purchased through an online store, by phone, or by mail; Tier 2: based on Tier 1 assessment and if no health and safety issues are found, up to eight hours of air sealing and diagnostic services to the customer free of charge, along with recommendation for other appropriate energy efficiency improvement services under Tier 3 of the program.
- Differentiate BPI accredited contractors to spur competition in marketplace and increase energy efficiency services in the home improvement market.
- Increase workforce development efforts to expand job opportunities in the energy efficiency industry.
- Have the BPU President and Commissioners be our champions in encouraging consumers to improve the energy efficiency of their homes through *Home Performance with ENERGY STAR*.
- Coordinate all marketing efforts with the investor-owned New Jersey gas and electric utilities, the Housing and Mortgage Finance Agency (HMFA) and Energy Finance Solutions (EFS) to provide consistent program messaging and offerings to New Jersey homeowners.

2009 Accomplishments & Lessons Learned

- As of 8/31/2009, 3,774 home assessments were entered into the program software, resulting in 367 projects completed.
- As of 8/31/09, 74 accredited companies (62 in process) and 123 (91 in process) contractors became BPI certified and were supporting the program.
- Program staff began offering in-home assessments in 2009 for \$125 per assessment, and to date has completed over 1,200 assessments.
- Several large contractors became accredited in 2009, supporting the program's credibility and increasing its reach.
- To increase program activity, new program changes initiated in 2009 include: 1) same low cost assessments offered at \$125 each; 2) up to \$1,000 of air sealing work for eligible homes at no charge; and 3) provision of comprehensive services with financial incentives of up to 50% (up to \$10,000) and a low interest loan for home energy improvements if a home's heating savings are 25% or greater; 4) greater incentives offered to low income customers, who are between 225% and 400% of the poverty line
- Response to marketing efforts, e.g., broadcast advertisements, promotion by the *Green New Jersey Resource Team*, and information found on

- NJCleanEnergy.com continues to generate awareness and interest among state residents, as evidenced by higher call volumes and web hits.
- Public relations and media outreach efforts, including, newspaper and radio interviews, media tours with BPU President and Commissioners, and press releases have increased visibility of the program and its value.
 - Customer satisfaction is high for services provided, with many customers agreeing to provide testimonials for success stories to be used in advertising efforts both print and online.
 - The *Green New Jersey Resource Team*, as well as the community partners, offers a powerful vehicle for introducing *Home Performance with ENERGY STAR* to town leaders and its residents to help secure greater participation at a local level by engaging an entire community.
 - Greater consumer awareness and education is needed to create demand and meet contractor expectations for increased sales leads, production and profits.
 - *Home Performance with ENERGY STAR* is a viable solution to meet the goals of New Jersey’s Energy Master Plan, combat rising energy prices, and help mitigate global warming.
 - The Affordable Comfort Inc. (ACI) New Jersey Home Performance Conference, which took place in 2008, proved to be successful in terms of event participation and attendance. The conference introduced the first awards program geared to contractors and builders.

2010 Marketing Strategies – Homeowners

- Promote revised program changes initiated in 2009: financial incentives for additional eligible measures, which include a 50% cash rebate, up to \$10,000 and a low interest loan if estimated heating savings are 25% or greater and greater incentives offered to low income customers, who are between 225% and 400% of the poverty line.
- Cross-promote with utilities offering home improvement programs, including zero interest loans and additional financial incentives; i.e., Elizabethtown Gas, New Jersey Natural Gas, and, South Jersey Gas where eligible.
- Coordinate proper messaging about EFS financial incentives.
- If needed, work with the New Jersey Housing and Mortgage Finance Agency (NJHMFA) to help promote their zero-interest loan to qualified customers, which is expected to be limited to 400 Home Performance completions.
- Attract media attention to relevant projects and associated savings realized by residents.
- Continue to build awareness of program and benefits through targeted advertising, including select print, broadcast, and online advertising in addition to radio spots through the Energy Minute Campaign.

- Complete Energy Makeovers in areas of low participation for use in marketing promotions.
- Leverage relationship with the *Green New Jersey Resource Team* to help educate residents on program and benefits.
- Explore new home owners (purchasers of existing homes) as a target segment, along with realtors.
- Introduce *Home Performance with ENERGY STAR* as an employee benefit/offering to businesses participating in the commercial/industrial programs.
- Enhance the information and tools of NJCleanEnergy.com web site to increase awareness and participation.

2010 Marketing Strategies – Contractors

- Increase financial incentives for co-operative advertising (up to \$20,000) for eligible advertising of larger contractors with two or more locations in the state. Also, offer the \$20,000 co-operative advertising incentive for contractors who follow the process and report a minimum of 100 program completions.
- Promote business-building tools; e.g., co-op advertising, training, offered by NJCEP to Home Performance contractors.
- Continue to build relationships with large contractor organizations and seek champions to lead and provide role models for other contractors; i.e., to help build a Green Workforce.
- Target solar contractors to become BPI-certified and trained to conduct Home Performance work.
- Promote benefits of BPI certification and Home Performance work to contractors' businesses, particularly in northern New Jersey, where the ratio of Home Performance contractors to targeted residents is lower.
- Showcase leading, participating contractors in public relations and media outreach.
- Explore ways of measuring Home Performance leads provided to contractors by NJCEP in order to concretely illustrate the financial value and winning business models of the Home Performance program to contractors.

Key Consumer Messages:

- Greater energy/money savings with whole-house solutions to combat rising energy prices
- Awareness of climate change solutions that can be made in every home
- Availability of significant financial incentives and low-interest financing to invest in home energy improvements

- Prevention of health/safety problems (threat of carbon monoxide poisoning in homes due to improperly installed/maintained fuel-burning equipment and appliances; excess moisture; loose asbestos materials, etc.)
- Greater peace of mind and confidence in knowing that services are provided by trained, certified Building Performance Institute accredited contractors

Key Contractor Messages:

- Competitive advantage; differentiation and distinction of BPI accreditation in marketplace in providing greater customer confidence
- Benefiting from being a part of a Green Workforce
- Platform for business and services expansion, offering technical training and support
- Financial incentives and marketing assistance

Tactics Rationale

Public Relations/Media Outreach. The program to date has benefited tremendously from outreach to the media. Through press releases, case studies, testimonials, story ideas for combating rising energy prices and climate change, and media events, focusing on homes undergoing a home energy makeover through *Home Performance with ENERGY STAR*. Based on past experience, as well as experience in other markets, these tactics provide the opportunity for wide-scale program awareness in a credible, cost-effective manner. In addition to reaching potentially large audiences, they provide specific examples of solutions for both contractors and home owners. Having the solutions presented by a third-party; e.g., journalist, also offers greater credibility to the program and the benefit of *New Jersey's Clean Energy Program*TM.

Advertising. Part of a market transformation program includes an integrated consumer education and awareness program that may include print, broadcast, and online advertising, as well as contractor co-op advertising. Given that *Home Performance with ENERGY STAR* is a relatively new service (the program launched as a pilot in 2005), both in New Jersey and nationally, strong, consistent customer education is necessary to help define what Home Performance service is, what is a BPI-certified contractor and what differentiates them from other contractors, and illustrate the financial, health, safety and environmental impacts of participation. Based on past experience, as well as experience in other consumer service categories, these tactics provide the opportunity for wide-scale program awareness and interest. The advertising in 2010 will be limited to select broadcast, online, print, or radio (Energy Minute Campaign) advertising to support

community outreach efforts made by the *Green New Jersey Resource Team* and *New Jersey's Clean Energy Program*.

Collateral. Collateral may include printed sales or educational literature, as well as promotional items. Collateral is used to educate the target audience on a program or service offering, and sales collateral may also drive response through toll-free number and online. Collateral typically provides more detailed program information, as compared with an advertisement. Given the changes proposed for 2010, updated sales collateral material will need to be created. It may include brochures, flyers, fact sheets, and promotional items. Each varies in the level of information provided. Based on past experience, collateral is essential to describe program availability and details on participating.

Web Promotion/Enhancements.

For the consumer, digital communications provide the ability to increase awareness and education of available services, showcase success stories, provide a visual tour of common household problems and recommended solutions, promote special offers and incentives, and link to other related products and services.

2010 Marketing Opportunities

- Convergence of significant economic and environmental concerns: rising energy prices, dependence on foreign energy sources, and climate change that can be remedied through energy efficiency.
- Increased awareness of sustainable living practices and their impact on carbon footprint reduction.
- Greater awareness of residential indoor air quality, health and safety issues for better living.
- Promotion of New Jersey's Energy Master Plan to reduce energy use 20% by 2020.
- Supporting the increased development of a green workforce by promoting green job training.
- Increased funding through ARRA to help support the program goals and incentives to consumers, who otherwise would not be eligible to participate in the program. These would be oil, propane and municipal customers or customers, who are not eligible to receive an EFS 0% interest loan.

2010 Marketing Challenges

- Elizabethtown Gas, New Jersey Natural Gas and South Jersey Gas will offer zero interest loans and in some cases additional incentives to eligible customers within their territories. Some of these utilities may also conduct home energy assessments to eligible customers. PSE&G is offering its own program within Urban Enterprise Zones (UEZ). However, Home Performance will offer services and incentives to customers outside of the PSE&G UEZs. This may result in some marketplace confusion. It will be critical to work jointly and closely with the utilities to help coordinate all marketing efforts.
- The New Jersey Housing and Mortgage Finance Agency (NJHMFA) will offer a zero interest loan to customers who do not meet EFS requirements for the zero percent interest loan. It will be important to explain the differences between the 2 types of loans (unsecured versus secured) and the application process. This offer should not be confused with Home Performance with ENERGY STAR's program incentives.
- The issue of prevailing wages may be a barrier to Home Performance contractor participation.
- The Marketing team is exploring more ways to track response to specific campaigns, such as extension numbers appended to 866-NJSMART and Internet landing pages.
- Due to resource constraints, the Marketing team will carefully evaluate events according to performance metrics, including but not limited to projected event attendance and cost, as compared with other events. Events that cannot be supported by the Market Manager team will be referred to the BPU Speaker's Bureau or the *Green New Jersey Resource Team* for review.

Home Performance with ENERGY STAR: Consumer Marketing Objectives, Strategies, and Tactics

<u>Marketing Objective</u>	<u>Strategy</u>	<u>Tactics</u>
Market Awareness, Lead Generation	Attract media attention to relevant projects and associated savings realized by residents.	<ul style="list-style-type: none"> • Case studies/ Energy Makeovers • Issue press releases following significant project completions in a community • Submit relevant energy saving/seasonal story ideas to relevant reporters/media
	Continue to build awareness of program and benefits through mass market advertising programs.	<ul style="list-style-type: none"> • Secure/utilize customer testimonials • Educational collateral • Promotional items • Web
Lead Generation	Leverage <i>Green New Jersey Resource Team</i> relationships to help educate residents on program and benefits.	<ul style="list-style-type: none"> • Event exhibits/materials, speaking opportunities • Educational collateral • Promotional items
	Working with utilities, focus marketing efforts on homes with high rates of energy consumption.	<ul style="list-style-type: none"> • Supplement utility direct mail/email campaigns • Web
	Promote financial incentives at all income levels.	<ul style="list-style-type: none"> • Collateral • Web
Market/Utility/Financing Coordination	Cross-promote utilities offering home improvement programs including zero interest loans and additional financial incentives. Coordinate proper messaging about EFS and HMFA financial incentives.	<ul style="list-style-type: none"> • Host a marketing training meeting between NJCEP, the utilities, EFS, and HMFA to ensure consistent program messaging.

Home Performance with ENERGY STAR: Contractor Marketing Objectives, Strategies, and Tactics

<u>Objective</u>	<u>Strategy</u>	<u>Tactics</u>
Expand overall supply & geographical representation of service availability	Continue to build relationships with large contractor organizations and target solar contractors to become BPI-certified and trained to conduct Home Performance work.	<ul style="list-style-type: none"> • Sponsor trade events and training workshops, including ACI • Continue to promote contractor co-op program

Quality Control Provisions

It is very important that the integrity of the HPwES brand be protected. The standards for becoming a HPwES contractor are quite demanding, even with the incentives provided. HPwES contractors must be able to offer service quality and comprehensiveness that unaccredited contractors cannot; otherwise contractors will not go through the training and quality assurance requirements of HPwES.

The Program will conduct Quality Assurance Inspections of at least 10% of all jobs completed. Typically, there is a 100% inspection rate for the first 10 jobs that each contractor performs, with the percentage dropping for subsequent jobs in inverse proportion to the level of contractor performance. These inspections guard against misuse of Program funds. If a job, or an important aspect of the job, fails, a *Follow-up Work Order* will be given to the contractor which details the necessary corrective action that must be taken. Once the corrective work is done, a *Declaration of Completion* must be signed by the contractor and customer and sent to the Program, which will schedule a re-inspection to ensure compliance. Similar QA/QC procedures are proposed for all Existing Homes work.

Budget

A detailed budget for this program is attached in Appendix B.

Goals and Energy Savings

Goals

Tier 1: Over 5,600 homes will receive home assessments audits by BPI certified contractors.

Tier 2: More than 2,800 homes will receive free air sealing.

Tier 3: More than 2,200 will receive additional measures, such as insulation and/or heating system replacements.

Energy Savings

Energy savings will be calculated consistent with Board approved protocols.

**New Jersey’s Clean Energy Program™
2010 Community Partners Initiative**

Program Description

More and more communities are looking to “green” their townships/counties and are seeking resources, programs and training to determine next steps and make them happen. New Jersey’s Clean Energy Programs (NJCEP) offer a portfolio of energy efficiency and renewable energy programs that can help communities that want to increase energy efficiency and reduce their carbon footprint. The purpose of the Community Partners Initiative (CPI) is to build a sustainable infrastructure that helps communities take advantage of all NJCEP opportunities. CPI accomplishes this by offering technical and financial support in order to educate and help enroll residents, businesses, and municipalities in NJCEP. The CPI supports community efforts to set clean energy goals, develop outreach plans, and educate residents about the economic and environmental benefits of clean energy, energy efficiency, and simple climate change solutions.

Current Target Market / Eligibility

All communities located within the State of New Jersey are eligible to participate in the CPI. To participate, communities must make a commitment to increasing energy efficiency and the use of renewable energy, and to actively pursue the goals of the state Energy Master Plan. The CPI is coordinating with Sustainable Jersey, a certification program offered by the NJ Sustainable State Institute at Rutgers University which helps communities develop strategies for promoting overall sustainability through energy efficiency and renewable energy, as well as other carbon reducing activities. To that end, communities reaching target participation levels in NJCEP can earn points towards Sustainable Jersey certification as well.

The CPI is committed to supporting deeper participation in NJCEP. To achieve maximum penetration the CPI recognizes other government organizations such as county and regional authorities, as well as social organizations that could benefit from participation in the initiative.

Offerings and Incentives

Participating communities are eligible for support from the CPI including:

- Personalized support for community efforts to increase participation in NJCEP;
- Individual support for community member enrollment in all other NJCEP offerings and in accessing associated financial incentives, technical support and energy savings;
- NJCEP representation at local events and meetings;
- Campaigns in local media and the development of newsletters, press releases and flyers for local community activities related to the NJCEP;
- Technical support including training sessions, campaign literature, and networking opportunities; and
- Recognition of meeting substantial energy and climate change goals through the Sustainable Jersey community certification process.
- Additionally, participating communities that also take part in Sustainable Jersey (SJ) are able to earn points and incentives as listed in the following table.

NJCEP Program	SJ Points	Community Participation	Community Incentive
Green New Jersey Resource Team Event	10	1 Event Completed	\$200.00
ENERGY STAR Products	10	50 Online Applications Referred	\$300.00
WARM & COOL Advantage	10	100 Applications Referred	\$200.00
Home Performance with ENERGY STAR	10	100 Audits Referred	\$800.00
Refrigerator Freezer Recycling Program	10	20 Units Referred	\$300.00
NJ ENERGY STAR Climate Choice House	10	One Building Permit Issued	\$1,000.00
Renewable Energy Investment Program	10	Wind Ordinance Passed	\$500.00
NJ ENERGY STAR Homes	10	10 Units Referred	\$300.00

In order to provide as broad coverage as possible, municipal incentives will be capped based on population (see the following table).

Population		Incentive Cap
From	To	
100,000	And Up	\$ 4,500
50,000	999,999	\$ 4,000
25,000	49,999	\$ 3,500
10,000	24,999	\$ 3,000
0	9,999	\$ 2,500

Participating communities may also be eligible to participate in the Whole Community Pilot, which is described in detail below.

Planned Program Implementation Activities for 2010

In 2010, the CPI will offer a comprehensive approach that integrates NJCEP opportunities, local governments, community organizations and networks, and other clean energy organizations. The CPI will offer a basic level of services, to be delivered in coordination with Sustainable Jersey, to all interested communities. The goals of the CPI are to increase NJCEP participation in all interested communities, and to learn about how best to serve all New Jersey communities.

Specific services provided by the CPI to all interested communities include:

- Account management services, focused on coordinating local community activities with NJCEP offerings;
- Resources to train trainers within communities;
- Co-incentive packages, that may can include financial or other incentives to communities in addition to individual NJCEP incentives to community members. Community co-incentives are designed to be flexible with an approach that will yield higher rewards for increased participation in the NJCEP;
- Information on community participation in NJCEP offerings, and assistance in measuring NJCEP impacts on communities;
- The Efficient Products Program’s “Change A Light, Change the World” Campaign, a national program through which Community Partners encourage their residents to join others across the state and the country by pledging to change the five most commonly used light bulbs in their home or office to ENERGY STAR® compact fluorescent light bulbs;

- Green New Jersey Resource Team initiatives that work with local schools, churches, employers and neighborhoods to bring energy efficient products, services, and information about the full range of NJCEP offerings to communities;
- The Home Performance with ENERGY STAR® (HPwES) program, which helps homeowners to make energy efficiency improvements to existing homes. HPwES performs technical analyses of home energy efficiency opportunities, offers incentives to help pay for improvements, and provides access to a certified contractor network to make the improvements happen; and
- A municipal energy audit that offers qualifying municipalities and other local government agencies incentives to reduce the cost of an energy audit of their facilities. CPI provides information and support for all Commercial & Industrial NJCEP offerings such as Smart Start, Pay For Performance and others.

Quality Control Provisions

Each community application for incentive is reviewed and approved. The incentive request is entered into a database for tracking and processing. In addition, the Outreach Coordinator visits participating municipalities to support enlistment activities and to verify program participation.

Whole Community Pilot

As the CPI enters its second year the Market Manager expands the offering in 2010. The CPI will initiate and execute a “whole community” pilot, in order to develop strategies to achieve deep energy savings and strategic energy planning at the community level.

While the details of the strategies to be employed in the pilot communities will be determined as part of the process of assessing and engaging the communities and key leaders within the communities, the following strategies are expected to be part of the pilot initiative:

- The development of aggressive community goals regarding reduction in use of traditional sources of energy through both efficiency and renewables – both long-term goals and goals for the term of the pilot will be developed (additional greenhouse gas reduction goals may also be developed in conjunction with broader Sustainable Jersey efforts);

- Technical assistance to the communities in developing strategies for meeting those goals, including development of a carbon footprint metric based on actual utility data;
- Identification of key community leaders, volunteers and others who can lead social marketing efforts to promote participation in existing NJ Clean Energy Programs as a means of achieving community goals;
- Coordination across all NJCEP residential and commercial/industrial offerings to support participation and energy savings in all sectors, including the development and Beta testing of searchable database of NJCEP offerings and other federal, state and county funding resources that filters and directs users to resources;
- Supplemental marketing resources to support social marketing initiatives;
- Limited additional financial resources to support community-specific initiatives that go beyond existing statewide NJCEP offerings (examples might include development of municipal staff resources, street lighting replacements, hiring of a contractor to conduct “neighborhood blitz” direct install campaigns, deep energy retrofit demonstration projects, a town energy fair, and/or training and equipping of volunteers who go “door to door” to promote the Home Performance with Energy Star program);
- Assistance in accessing additional financial resources (e.g. federal recovery funds) to the extent practical;
- Assistance with the development of local policies or legislation to support energy efficiency and renewable energy (examples might include a rental energy code or a more aggressive residential new construction code based on the federal Energy Star standard, as has been adopted by several Long Island communities); and
- A “reward” for achieving aggressive goals that will be negotiated with the communities in cooperation with the NJ Office of Clean Energy, and awarded based on the Office of Clean Energy’s approval.

A variety of other strategies may evolve as the pilots themselves develop. One additional option that will be explored is the development of a competitive solicitation for bulk procurement of PV, Home Performance and/or other services that may be promoted to residents of the pilot communities.

Budget

A detailed budget for the CPI is attached in Appendix B.

Goals and Energy Savings

Key program goals include:

- Continuing to develop communities as a channel to municipal, commercial and residential customers that can make use of NJCEP programs;
- Tailoring NJCEP incentives and setting local goals in ways that make the most sense, and are most effective, for communities;
- Providing a single point of contact through an account management approach to coordinate NJCEP program activities at the community level;
- Raising awareness and recognition of NJCEP Programs; and
- Supporting the Governor’s 20% energy and GHG reductions by 2020 goals.

The CPI will not generate energy savings independently, but will increase the savings generated by other NJCEP offerings in all market sectors as discussed above.

New Jersey's Clean Energy Program™

2010 Renewable Energy Incentive Program

Program Description

New Jersey's Clean Energy Program (NJCEP) offers incentives and market services to New Jersey electric utility customers investing in renewable electricity generation using solar photovoltaic (solar), wind, and sustainable biomass resources. There are two programs in the NJCEP renewable portfolio for 2010:

1) Renewable Energy Incentive Program (REIP): Offers rebates and registration for renewable energy certificates (RECs and SRECs) for customer-sited wind and bio power projects and for solar projects that are less than 50kW.

2) SREC Registration Program: Provides registration for solar renewable energy certificates (SRECs) for non-rebated solar projects, including direct grid-connected projects. This program is the successor program to the SREC-Only Pilot program which was renamed per the Board Notice dated 2/11/09.

The fundamental objective of the NJCEP Renewable Energy Programs is to support The New Jersey Energy Master Plan which calls for significant market development and adoption of renewable energy technologies, reaching an overall goal of more than 20% by 2020, as defined in the New Jersey's Renewable Energy Portfolio Standards (N.J.A.C. 14:4-8). The Energy Master Plan and pending rule changes may increase the Renewable Portfolio Standard (RPS) goals to 30% by 2020. Reaching these goals, which include specific targets for solar, on-shore wind and bio power technologies, will provide New Jersey with significant economic development, energy security and environmental benefits.

At the same time, there are a number of economic, technical and infrastructure barriers to the adoption of renewable technologies. Examples of these barriers include: lack of financing for renewable energy projects, high initial capital costs, limited consumer awareness and education on renewable technology options, and high transactions costs (in part due to permitting and siting issues) for on-site renewable generation. The NJCEP provides direct program support and strategies to reduce these barriers. It also complements and supports New Jersey's Energy Master Plan and The Governor's Economic Growth Strategy as they seek to establish clean energy industries and jobs in New Jersey's economy.

Through the Market Manager team services the NJCEP works on a daily basis to reduce and remove market barriers to the development of robust and self sustaining clean energy markets, by providing rebates for eligible systems that offset a portion of the initial capital cost, making on site renewable energy generation more affordable and accessible. The Market Manager also delivers a wide range of market development support services, including consumer education and outreach, technical training, inspections, the facilitation of registration for renewable energy credits, and incentives for renewable energy manufacturers located in New Jersey. The market facilitation activities include ‘upstream’ market outreach and communications to help lay the foundation for long term market growth, including promoting best practices, building the supply base and technical infrastructure, defining and removing structural obstacles to project development, and promoting effective business networks between site hosts, developers, manufacturers and financiers¹². These activities accelerate the development of projects compared to an approach that relies solely on rebates to induce market response.

Despite the challenging economic conditions, demand for the NJCEP Renewable Energy Programs has remained relatively robust over the past year. In 2010 the Clean Energy programs will continue to benefit from federal policy which is providing unprecedented support for clean energy projects. The federal tax support significantly improves customer economics, and helps to reduce the overall burden on state-based ratepayer funding. In addition, federal support for financing including loan guarantees, tax grants in lieu of investment tax credit (ITC) for commercial projects, and stimulus support including block grants and dramatically enhanced state energy program funding should also help support continued growth of market demand.

In response to stakeholder feedback, market conditions, and policy developments, the Market Manager proposes a number of enhancements and changes in the 2010 Program Plan. These include:

- ❖ Continued expansion of the New Jersey Renewable Energy Manufacturing Incentive – provides additional rebate support for qualifying clean energy equipment and systems manufactured in New Jersey. In 2010 the current program, which includes solar modules, inverters and racking systems will be expanded to incorporate eligible wind and bio power equipment;
- ❖ Expansion of the first REIP incentive capacity blocks from 10 MW to 20 MW. This change would extend the current standard rebates, which are

¹² Upstream market development activities included training and workshops (described in Section 4), technical assistance and “hand-holding” for potential customers, and outreach to industry through conferences, working groups, and individual contacts, to raise awareness of market opportunities in New Jersey and the NJCEP offerings.

\$1.75/Watt for residential and \$1.00/Watt for non-residential solar systems, to cover another 10 MW of new market approvals. This change is recommended in order to maintain the robust trends in application volumes and project development that the program has seen in 2009 despite challenging economic conditions. It is anticipated that standard rebates will decline (by \$0.20/Watt for residential, and \$0.10 per Watt for non-residential solar systems) when a total of 20 MW of new REIP approvals have been made in each of the two market sectors;

- ❖ Further integration of energy efficiency with the NJCEP Renewable Incentive Program. To be eligible for standard rebate levels all solar projects will need to document participation in NJCEP energy efficiency programs;
- ❖ Maintain funding cycles for solar rebates to insure that new program rebate funds are available with minimal or no interruptions throughout the calendar year;
- ❖ Provide direct financial assistance for feasibility studies, and increased market facilitation services to support qualified on-site wind and bio power projects;
- ❖ Refine and continue mandatory new installer training on program administrative procedures and processes;
- ❖ Develop and implement program procedures and modifications to the inspection fee structure to encourage participating installers to maintain good standing in the Quality Assurance component of the program.
- ❖ Develop an Innovative Wind Technology Incentive to encourage additional onshore wind development that can help meet the RPS, while still promoting good product design and adequate protection to the applicant.

REIP Target Markets and Eligibility

Three renewable energy technology types are eligible to participate in the REIP program:

1. **Solar:** Systems that utilize semi-conductor technologies to produce electricity directly from sunlight.
2. **Biopower:** Systems that use a sustainable and renewable supply of organic material to produce electricity.

3. **Wind:** Turbines that convert the kinetic energy of wind into electricity.

The NJCEP renewable energy programs serve residential, commercial, institutional and industrial market segments, and are available to private and public customers in all rate classes. To be eligible to receive a rebate, an applicant must be a ratepayer of a New Jersey Board of Public Utilities-regulated electric and/or natural gas utility paying the Societal Benefits Charge (SBC).

The REIP rebates are intended to support renewable electric systems that offset the customer's onsite electric consumption, but do not produce net excess generation from the site on an annual basis. The following eligibility criteria apply to REIP rebates:

- ❖ Solar electric systems up to 10 kW DC rated capacity for residential customers. Rebates for residential systems are capped at 10 kW with the exception of farms and residential tariff non-profits as discussed below. This 10kW is a lifetime cap, and includes any rebate paid for a residential project under the CORE program. Residential systems greater than 10 kW are eligible for a rebate on the first 10kW provided that Tier 3 energy efficiency incentives are installed and that total annual production is less than net annual consumption for the site.
- ❖ Solar electric systems up to 50 kW DC per meter for non-residential customers.
- ❖ Wind systems, where the rebate is based on the expected performance of the system, and is capped at \$51,200 for residential systems. Non-residential systems are capped at the estimated annual onsite electric use up 1,000,000 kWh of production. Wind projects are also eligible for Class 1 REC's.
- ❖ Bio power systems, where the system size must be less than estimated annual on site electric use and the rebate is capped at 1 MW AC of rated capacity. Bio power systems are also eligible for Class 1 REC's.
- ❖ New construction projects are eligible for enhanced REIP rebates, provided they can document that projected annual electric output from their renewable system will not produce more than 100% of their annual consumption, they participate in the NJ ENERGY STAR Homes program, and are in zones designated as in Smart Growth regions.

In addition, all systems must meet program requirements regarding equipment certification, proper installation practices and compliance with program procedures and processes as detailed in the Program Guidebook.

Entity Caps

In addition to the eligibility criteria identified above, the Program has adopted entity caps to help insure that program incentives provide broad market support and are not overly concentrated to assisting a small number of participants. For 2010 the REIP program has adopted a simplified set of entity caps. In 2010 the following entity cap will be in effect:

- 1) There will be a \$4 million entity cap for new non-residential REIP solar incentive approvals to a single customer in each program year. This annual cap will be reset to zero for each entity at the beginning of each program year (January 1st).
- 2) Rebates for residential systems are capped at 10 kW with the exception of farms and residential tariff non-profits. This 10kW is a lifetime cap, and includes any rebate paid for a residential project under the CORE and/or REIP program.

Solar Markets

Photovoltaic electric systems are well suited to any site with proper orientation, roof or land availability, and a minimum of shading obstacles. The technology is well established, and easy to install with almost no ongoing maintenance required. There are few siting challenges related to solar, since the technology is often viewed as aesthetically pleasing, and creates no noise, emissions or water use issues. A robust solar industry has developed globally, and there is significant research, development and investment underway to increase the scale of manufacturing, and to reduce costs across the supply chain. With its established and growing contractor base and innovative policy framework, New Jersey is well-positioned to continue as a national and global leader in the installation of customer-sited solar systems.

In 2009, despite one of the most challenging economic environments in decades, the residential market solar market in New Jersey remained robust, with the first two funding cycles being almost fully subscribed, representing 843 projects and nearly 7MW of capacity. The favorable residential markets are driven by declining panel prices, the removal of the \$2,000 cap on the residential ITC from the federal government – making residential customers eligible for the full 30% ITC, the availability and rapid approval turnarounds in rebates from the REIP program, and high SREC prices further supported by long term contracting programs such as the PSEG loan program.

The non-residential solar market, particularly larger residential projects greater than 50kW which are no longer supported by rebates, has made significant strides in 2009 despite challenging economic conditions for developing larger projects. While SREC market prices have risen significantly given supply shortages and as a direct result of the increase in the Solar Alternative Compliance Payment (SACP) that took effect in Energy Year 2008, the market had been waiting for a long term SREC contracting solution. Now

that the utility SREC-based financing programs and the PSE&G Solar Loan Program 1 and 2 are active, they are expected to provide further momentum in the installation of solar projects up to 500 kW in the SREC Registration Program.

On Shore Wind and Sustainable Bio Power Markets

In contrast to solar, onshore wind and biomass markets remain in earlier stages of market evolution, and have experienced only a fraction of participation relative to solar. Onshore wind markets are limited primarily by local siting and permitting issues (including “not in my backyard” or NIMBY opposition), which translate to delays in project development and approval. Bio power markets are highly fragmented depending on feedstock and technology, and require customized configurations of feedstock, and conversion technologies. In both wind and biomass markets there are many new unproven technologies, limited numbers of skilled installers, a lack of existing customer references, and many uncertainties in the project development process. The NJCEP continues to provide rebates for wind and biomass projects for all projects in which the system size is less than annual consumption, including projects greater than 2MW.

While the approval for wind projects continues to show a steady increase, and the biopower project pipeline continues to build, overall the state is not on track to meet its Energy Master Plan goals of 200MW of onshore wind and 900MW of biomass by 2020. In addition, the requirements and market for Class 1 Renewable Energy Certificates (REC’s) are being dominated by out of state resources, and the price of REC’s is volatile, and has fallen significantly below the \$50/MWh alternative compliance payment level.¹³ The target wind market in New Jersey is defined primarily by resource availability. Winds suitable to sustain positive economics are located mostly along the shore, and in the highlands. Experience to date suggests that small residential wind projects result in significant siting challenges, given the aesthetic issues with high towers and concerns about noise and vibration. This is less of an issue in sparsely populated areas of the state, on farms, municipal facilities and in industrial zones.

There has been growing Market Manager outreach and significant interest in wind development among coastal municipalities and municipal authorities (such as wastewater treatment facilities). The Market Manager will continue to target coastal and highland communities, farms, government buildings and industrial sites in these communities, to stimulate awareness and interest in developing projects. Combined with expedited permitting it is possible to envision significant growth in this market.

There are numerous technologies to convert biomass material into usable biofuels including anaerobic digestion, pyrolysis, and gasification which in turn provide the

¹³ Bid/Offer for NJ Class 1 2009 RECs, \$6.00-\$9.75; www.evomarkets.com, Sept 14, 2009

energy to generate power in technologies including gas turbines, reciprocating engines and fuel cells. In addition, in lieu of being converted into a biofuel, biomass material can also be directly combusted to generate electricity. In most biopower applications, raw biomass material must be scrubbed of impurities and moisture removed.

The biopower market can have both onsite applications where waste is generated and used to produce energy onsite, and is also amenable longer term to centralized collection and refining models where sustainable biofuels are transported for onsite use to customers.

Current research indicates that the best onsite biopower opportunities exist where there is an ongoing reliable supply of feedstock generated at the site, where onsite electricity needs are high, competition for alternative uses for feedstock is low, and is located in industrial zones. The landfill market has already been penetrated through the Environmental Protection Agency's (EPA's) landfill gas to methane program. The biopower market segments with the highest potential for onsite applications supported by feedstock produced onsite include wastewater treatment facilities, food manufacturing, supermarkets, universities, restaurants, and farms. In total, there may be 400-500 target prospects for onsite biopower, but market conditions and mechanisms are currently not functioning well enough to get projects developed.

Biopower applications also almost always provide an opportunity for combined heat and power (CHP) to capture waste heat from power generation for heating and cooling needs. In 2010 the Market Manager will partner with the NJCEP C&I programs to leverage efforts to reach prospects and provide combined incentives to help projects exceed internal hurdle rates.

The Market Manager envision a robust biopower market developing with the critical need for 2010 being to establish some demonstration projects in key vertical markets to increase market awareness and understanding, better define technology performance, and build confidence among market participants. In addition, the Market Manager will support the BPU and OCE in developing and implementing policies to improve the transparency and stability in the Class 1 REC market.

Offerings and Customer Incentives

The incentives offered by the renewable energy programs differ by technology and project size:

Technology	<= 50KW	>50KW
Solar	REIP Rebate, SREC, NJREMI	SREC, NJREMI
Wind	REIP Rebate, Class 1 RECs, NJREMI	
Biopower	REIP Rebate, Class 1 RECs, NJREMI	

Direct rebates and renewables energy credits continue to be a primary strategy for supporting the development of the renewable energy markets described above. In 2010 the REIP program will continue to support the following two budget categories for solar, and one each for wind and biomass projects.

2010 REIP Program - Budget Categories

Budget Category Name	Eligible Projects
Solar Residential:	All existing home residential projects less than or equal to 10 kW of rated capacity. A system may be larger than 10 kW, if it documents on-site consumption greater than annual expected output, and if it completes Tier III level of services from the Home Performance with ENERGY STAR program.
Solar Non-residential:	All non-residential projects less than or equal to 50 kW of rated capacity. This category includes residential new construction projects which must be in Smart Growth Areas, all commercial, public, and non-profit organizations (municipalities, other governments, public colleges and universities, public schools (K-12), affordable housing organizations, as well as housing sponsored by one system owner.
Wind and Bio power	All customer-sited wind and bio power projects up to and above the net metering limit

SOLAR

The 2010 REIP solar rebate budget and incentive levels for Residential projects are summarized in the following table.

2010 REIP Residential Solar Incentives

<u>Category</u>	<u>Standard Incentive Level¹</u>	<u>2010 Rebate Budget (million)</u>	<u>Anticipated kW</u>
Solar Residential: Less than or equal to 10 kW			
New Market Activity ² (Jan-Apr)	\$1.75	\$10.000	5,710
New Market Activity (May-Aug)	\$1.75	\$2.258	1,290
New Market Activity (May-Aug)	\$1.55 ³	\$7.742	4,990
New Market Activity (Sep-Dec)	\$1.55 ³	\$6.33	6,450
Residential Subtotal (cycle 1,2, and 3)		\$30.000	18,440
Notes:			
<ol style="list-style-type: none"> Standard rebates are reduced by \$0.20/Watt for residential projects that do not participate in the required components of the Home Performance with ENERGY STAR or Residential New Construction Programs. The capacity estimates listed in the table above are based on standard incentive payments. The actual average incentive levels may be lower if efficiency is not included or higher if NJREMI is utilized. The standard incentive level will decline to \$1.55/Watt once a total of 20 MW of REIP residential solar approvals (from program inception) is reached. This reduction is expected to occur during the second funding cycle. The actual timing of this capacity block incentive reduction may differ. Incentive levels for self installed REIP projects will not be subject to the 15% payment reduction as is the policy under the CORE Rebate Program. 			

Non-Residential Solar Incentives

The 2010 REIP solar rebate budget and incentive levels for Non-Residential projects are summarized in the following table. Builders are considered a commercial entity, and therefore residential new construction projects receive rebates from the non-residential budget category. In order to be eligible for any solar rebate new construction projects must be in designated Smart Growth areas.

2010 REIP Non-Residential Solar Incentives

<u>Category</u>	<u>Standard Incentive Level¹</u>	<u>2010 Rebate Budget (million)</u>	<u>Anticipated kW</u>
Solar Non- Residential:			
New Market Activity (Jan-Apr)	\$1.00	\$4.50	4,500
New Market Activity (May-Aug)	\$1.00	\$4.50	4,500
New Market Activity (Sep-Dec)	\$1.00	\$3.00	3,000
New Market Activity (Sep-Dec)	\$.90 ³	\$1.40	1,560
Non-Residential Subtotal (cycle 1,2, and 3)		\$13.40	13.56
Notes:			
1) Standard rebates are reduced by \$0.10/Watt for non-residential projects that do not participate in the required components of the NJCEP Commercial, Industrial and Local Government energy efficiency program offerings.			
2) Note the capacity estimates listed in the table above are based on standard incentive payments. The actual average incentive levels may be lower if efficiency is not included or higher if NJREMI is utilized.			
3) The standard incentive level will decline to \$.90/Watt once a total of 20 MW of REIP non-residential solar approvals (from program inception) is reached. This reduction is expected to occur during the third funding cycle. The actual timing of this capacity block incentive reduction may differ.			
4) To encourage greater market activity in the residential new construction market, the 2010 residential new construction rebate levels have been increased to \$1.25/\$1.50/\$1.75 per Watt for homes meeting the New Jersey ENERGY STAR Homes program's Tier I, II and III efficiency levels.			

Solar Funding Cycles and Capacity Blocks

Several important design objectives regarding customer incentives initiated in 2009 are incorporated into the 2010 solar incentive structure.

The 2010 program budget for new solar rebates is divided into three funding cycles of four months each. New approvals will be issued on a first come first served basis for the dollars available in the each funding cycle. The use of funding cycles protects against the

possibility of reserving the total annual budget early in the year – resulting in a long period (e.g. 6 months or more) where no new incentive approvals or sales can take place. In 2009, the 3 funding cycles matched very closely to market demand (particularly in the residential market), and with the exception of the end of the first funding cycle there were limited instances of deadline induced “rushes” on the program.

Continuing the methodology adopted in 2009, rebate levels in 2010 will be reduced as an administrative procedure when capacity-based block for each budget category are filled. The benefit of this approach is that incentive reductions are predictable, based on growth in the market.

After each capacity block is filled (by approving new rebate applications) the incentive level will ‘step down’ for the next capacity block. The incentive block step-downs are independent of the three annual funding cycles. The primary function of the funding cycles is to make funding availability and sales cycles more constant throughout the year. The primary function of the incentive blocks is to decrease incentive levels as the market continues to grow.

The Renewable Energy Market Manager has reviewed activity in the 2009 Renewable Energy Incentive Program (REIP) taking into account the current economic conditions, the availability of NJCEP incentive funds and the pace of applications received and approved in the solar residential budget category.

On the basis of this review, the Market Manager recommended in late September, 2009 that the current incentive levels for solar residential projects were appropriate and did not need to be reduced when the approved capacity reaches 10 MW as defined in the 2009 Compliance Filing approved in the Board Order dated 1/8/09. The Market Manager recommended that the first capacity block for the solar residential budget category be extended from 10 MW to 20 MW of approved projects. This recommendation was approved by the Board and memorialized in the order dated 10/19/09.

The Market Manager is also recommending that a capacity block of 20 MW be established for non-residential solar rebates. The standard incentive decline at the end of the 20 MW capacity block is \$0.20/Watt for residential projects, and \$0.10/Watt for non-residential projects. The residential capacity block reduction is expected to occur during the second funding cycle while the non-residential capacity block reduction is expected to occur during the third funding cycle.

The Market Manager will continue to provide regular reporting on funding cycle and block subscription levels with notifications provided as funding cycles end and rebate reductions become imminent.

Integrating Efficiency

The 2010 REIP program will continue the trend of increasing the linkage to NJCEP energy efficiency (EE) programs. In 2010, the level of EE commitment will be further extended in residential markets and be required for the first time in non-residential markets.

As part of the incentive structure, standard solar rebates are available to those customers who complete EE requirements. A reduced rebate (\$0.20/Watt less for residential, and \$0.10/Watt less for non-residential) is available for those who do not participate in the required EE program elements.

The EE standard rebate requirements for 2010 include:

- 1) Residential solar projects must complete Tier 2 of Home Performance with ENERGY STAR (HPwES) services. This involves taking advantage of the program offering to provide up to \$1,000 of blower door diagnostic guided air sealing. The Residential EE Market Manager indicates that sufficient market infrastructure is available to provide these services on a timely basis.
- 2) In limited cases a residential project of greater than 10 kW installed capacity may be eligible to participate in the REIP program. While rebates are capped at a lifetime capacity of 10kW for residential projects, any project in excess of 10kW must complete Tier 3 requirements of HPwES in order to qualify for the rebate.
- 3) Residential new homes in Smart Growth regions must be certified as Energy Star Homes. To encourage greater activity in the residential new construction market, the 2010 residential new construction REIP solar rebate levels have been increased to \$1.25/\$1.50/\$1.75 per Watt for homes meeting the New Jersey ENERGY STAR Homes program’s Tier I, II and III efficiency levels.
- 4) Non-residential projects, must participate in the NJCEP Direct Install and/or Pay for Performance Program to be eligible for the REIP standard solar rebate levels.

In all cases, evidence of EE completion will be based on certificates of completion issued by the appropriate EE program which must be provided with final paperwork prior to project expiration date.

New Jersey Renewable Energy Manufacturing Incentive (NJREMI)

The NJREMI offers rebates to residential and non-residential market segments that purchase solar panels, inverters, or racking systems manufactured and commercially available in New Jersey including AC modules which are integrated assemblies of these components.

The NJ REMI supplements the REIP rebates and to the existing portfolio of manufacturing programs offered by the New Jersey Economic Development Authority (EDA) to both recruit manufacturers to New Jersey, and to also help those businesses who have chosen to locate here to be successful in the local market.

To be eligible for the incentive, an applicant must submit an application to the REIP Program, and must be in compliance with all the requirements of this program. Both small and large projects up to the first 500kW of capacity will be eligible for an additional rebate under the NJREMI by indicating on the solar technical worksheet that they plan to purchase New Jersey manufactured equipment.

Proof of purchase documentation will need to be provided with the final application paperwork. Small, rebated projects will receive the NJREMI as part of their overall solar rebate payment. Large, non-rebated REIP projects will be paid the incentive subsequent to the date the project has been deemed eligible to earn SREC's.

Incentive delivery will be provided in the form of a rebate, supported with proof of purchase documentation of solar panels or inverters from a New Jersey manufacturer. The 2010 incentive rates for each of these equipment types are listed in the following two tables:

NJREMI: Solar Panel Incentives

Solar Panels	Incentive Rate (\$/Watt)	Maximum System Size (kW)	Maximum Manufacturing Adder
Residential	\$.25	10	\$2,500
Non- Residential	\$.14	50	\$7,000
Large Projects (a): 50-100kW	\$.12	100	\$12,000
100-500kW (b)	\$.08	500	\$40,000

NJREMI: Inverters or Racking Systems

Project Type	Incentive Rate (\$/Watt)	Maximum System Size (kW)	Maximum Rebate
Residential	\$.15	10	\$1,500
Non- Residential	\$.09	50	\$4,500
Large Projects (a): 50-100kW	\$.07	100	\$7,000
100-500kW(b)	\$.05	500	\$25,000

- (a) Large projects are projects greater than 50kW.
- (b) All solar projects regardless of size are eligible for the NJ REMI rebates; however, the rebate calculation for each item will be capped at 500 kW.

Customers who purchase any combination of panels, inverters and racking systems, either on a standalone basis or as an integrated product in the form of an AC Module from New Jersey manufacturers are eligible to receive all incentives. For example, a customer who purchases panels, an inverter and racking systems from NJ manufacturers will be eligible to receive a \$.55 per watt rebate overall which is comprised of \$.25 per watt for the panels, plus \$.15 per watt for the inverter plus \$.15 per watt for the racking system.

To qualify for NJREMI incentives, manufacturers must be certified as a “New Jersey Manufacturer” by meeting the following annual tests:

- 1) Products must be certified by a 3rd party professional engineer that they meet nationally recognized product standards.
- 2) Products must be deemed to be commercially available by providing two of the three following pieces of information:
 - a. a list of distributors or customers
 - b. a copy of product catalogs or distributors catalogs where the product is marketed
 - c. the address and content of the website where the product is marketed; if no website examples of offline marketing such as ads or yellow pages are acceptable
- 3) An independent certified accountant (CPA) must fill in and sign the New Jersey Manufacturing Cost worksheet detailing manufacturing costs, and proving that

50% percent of these costs are incurred in New Jersey.

In addition, a site visit will be performed by an NJCEP inspector with the manufacturer required to establish two of the following three items at the facility:

- ❖ The equipment dedicated solely to the manufacture of the in-state product
- ❖ The employees (payroll) dedicated solely to the manufacture of the in-state product
- ❖ Evidence of feedstock or work-in-progress purchased dedicated solely to the manufacture of the in-state product

In 2010, the Market Manager will coordinate a stakeholder process to recommend other renewable energy equipment types to be included in the program, and to review market participation levels and estimated budget impacts.

WIND

The 2010 rebate levels for wind projects remain the same as in 2009, and are based on the Expected Performance Based Buy Down (EPBB) methodology. The wind rebates are the same for private and public/non profit entities.

2010 REIP Wind Rebate Schedule

Wind Systems	
Estimated Annual Energy Production	Rebate Level
1-16,000 kWh	\$3.20/Annual kWh
16,000 – 1,000,000 kWh	\$.50/Annual kWh

The EPBB is designed to encourage wind installations at sites with a good, ~11+ MPH, average annual wind speed. The rebate is calculated according to the first year estimated annual output, providing greater incentives to systems expected to have higher energy output. The required inputs from new applicants include the site’s wind resource at fifty meters, the proposed hub height for the turbine, and power production ratings for the proposed turbine.

The philosophy in incentive design in the wind market is to continue to provide more accommodative incentives to address obstacles to project development related to resource assessment, permitting, turbine availability, and to support projects which are sized to

maximize the wind resource and not be limited by the onsite load. Therefore the following program enhancements are proposed for 2010:

- ❖ Extend the maximum expected annual production limit for the EPBB calculation from 750,000 kWh to 1,000,000 kWh. This increases the potential maximum rebate level for wind projects from \$418,500 to \$543,000.
- ❖ Wind project completion deadlines will be extended from 12 to 18 months for all projects. This will provide greater flexibility for project development timelines, including permitting and siting issues.
- ❖ The program will provide a direct incentive to help defray the cost of feasibility studies for wind projects which are >100kW. The incentive will provide up to \$50,000 per project, with the NJCEP paying 50% of the cost for a wind resource assessment, including a wind resource analysis, site assessment, review of permitting needs, soil assessment (for tower), and project economics. Program procedures and guidelines on the requirements for feasibility study contents and participation will be developed. While providing for some confidential and proprietary safeguards, it will be required that some of the information contained in the feasibility studies be made available for public distribution. Half of the NJCEP match will be paid upon completion of the study, with the remainder paid along with the EPBB rebate. Projects which do not move forward beyond the feasibility phase will forfeit the remaining half of the NJCEP match. Up to \$500,000 of the 2010 wind rebate budget may be used to support feasibility studies. These funds are available to support, but not strictly reserved for feasibility studies. If strong demand for rebates is realized, less than \$500,000 may be available to support feasibility studies.
- ❖ On September 8, 2009, the New Jersey Department of Environmental Protection proposed rules clarifying the permit requirements for various size wind energy generating systems constructed in Coastal Zone of New Jersey as defined at N.J.A.C. 7:7E. The DEP proposed a tiered approach to permitting of small wind systems with General Permit requirements for certain classifications of construction including post-construction monitoring for bird and bat mortality. The NJDEP has proposed specific requirements for the first fifteen completed installations and estimated costs of compliance at \$25,000 per installation. The REIP program will provide a direct incentive to help defray the cost of post-construction monitoring up to \$25,000 per project. Program procedures and guidelines on the requirements for this incentive will be developed during 2010. Up to \$375,000 of the 2010 wind rebate budget may be used to support these studies.

- ❖ For 2010 the Market Manager team will require potential wind applicants to use two wind resource estimates for the EPBB, and require an annual wind rose directional analysis for projects with obstacles within 500 ft of the tower.
- ❖ Within the rebate structure defined above, allow wind projects that are expected to produce power in excess of onsite load to receive rebates provided that all other program and interconnection requirements are met. This will enable sites with good wind resource to size projects to the resource, and not to the onsite consumption. This approach is consistent with rebates provided to the Atlantic County Utility Authority to support their wind turbines under the CORE program.
- ❖ The Market Manager will work with the small wind working group (SWG), and the Economic Development Authority (EDA) to add wind equipment to the New Jersey Renewable Manufacturing Incentive (NJREMI) program. This working group will evaluate equipment requirements and eligibility, and recommend appropriate incentive enhancements, consistent with the approach adopted for solar markets.
- ❖ The Small Wind Working Group has been developing an incentive design and eligibility criteria for projects that do not meet all of the program's current clearance requirements. If adopted, for specific projects, this incentive structure would provide a production based incentive payment, to the manufacturer or installer, throughout the first full year of operation. The payments will be based upon an analysis of the metered production data (ANSI C-12) as compared to actual wind speed data. The working group intends to finalize the eligibility and other process requirements for this alternative incentive design in time for implementation during the 2010 program year.

Finally, the Market Manager will continue to support the NJCEP and the BPU in analyzing the Class I REC market, and in making and implementing recommendations to increase the sustainable development of New Jersey's on shore wind markets.

BIO POWER

In 2010 a number of incentive modifications are proposed to address continuing obstacles to market development and enhance biopower economics. The bio power market is comprised of many market segments and niches. Projects can be supported with feedstock containing organic material (complex hydrocarbons) contained in waste material, or from specific bio-crops which can be harvested to produce high energy content. New Jersey's Renewable Energy Portfolio Standards N.J.A.C 14:8-2.5 clearly defines what materials are considered to be Class 1 biomass materials; those materials

which are not deemed Class 1 must go through sustainability determination by New Jersey Department of Environmental Protection (NJDEP) to qualify.

Biofuels derived from sustainable biomass sources can be used to generate power from a number of prime mover technologies including gas turbines, reciprocating engines, fluidized bed reactors, and fuel cells. The NJCEP is technology agnostic when it comes to the prime movers selected by customers. Therefore, fuel cells powered from hydrogen derived from sustainable biomass sources (likely to be from methane gas from a sustainable source) are eligible to receive the biopower incentives

As with wind projects, biopower projects are excluded from entity caps. In addition, biopower equipment will be added to the NJREMI. In 2010, working with the EDA and industry, the Market Manager will evaluate which equipment to add, and will recommend and implement incentive enhancements.

Bio Power Incentive Schedules

In 2010, the tiered incentive structure implemented in 2009 will be maintained, with the minor modification that the 2nd tier of capacity for 10-100kw will be increased from \$2 per watt to \$3 per watt. The net effect of this change is to increase the rebate for this tier by \$90,000. The resulting incentive structure is as follows:

2010 REIP Bio Power Rebate Schedule

Power Only Incentives	
Watts	\$ Per Watt
0-10,000	\$4.00
10,000-99,999	\$3.00
100,000-499,999	\$1.50
500,000-1,000,000	\$.15

The maximum rebate will continue to be capped at the lesser of 30% of installed costs or the rebate calculated according to schedule above. Installed costs include all documented capital costs to supply and operate the system including feedstock collection, fuel conversion technology, storage, refining, power generation, and monitoring systems. It should be noted that the above schedule applies only to projects which seek to generate onsite power. Projects which seek to generate heat and power (CHP) will be eligible for an additional incentive defined in the section below.

Bio Power and CHP

Many bio power projects present an opportunity to economically recover waste heat from power generation and to use this heat for hot water, heating, process, or cooling needs. To facilitate greater market development, the Market Manager proposes that customers be eligible to access both the biopower and CHP incentives eligible from the NJCEP C&I program. Accordingly, in 2010 the following additional incentives will be available to biopower projects that leverage both heat and power opportunities:

2010 REIP Bio Power Rebate Schedule

Heat & Power Incentive	
Watts	Heat & Power
0-10,000	\$5.00
10,000-99,999	\$3.75
100,000-499,999	\$2.00
500,000-1,000,000	\$.65

For heat and power projects overall rebates will be capped at lesser of 40% of project costs or the rebate calculated according the schedule above. The incremental costs associated with heat recovery will be eligible for inclusion in the calculation.

Any biopower project applying for heat and power incentives must be all eligibility requirements as defined by the NJCEP for a CHP program, as administered by the C&I Market Manager team.

Support for Feasibility Assessments

More than any other renewable technology, biomass projects requires extensive engineering feasibility analysis to analyze feedstock, conversion technologies, prime movers, emissions impacts (air and water). Similar to wind projects, in 2010 the Market Manager proposes that matching funds be used to support feasibility assessments. Costs will be capped based on project size, and the Market Manager will develop requirements for what information the feasibility study must contain, and rules which define how projects will be approved, and funds disbursed. While providing for some confidential and proprietary safeguards, it will be required that some of the information contained in the feasibility studies be made available for public distribution. Half of the NJCEP match will be paid upon completion of the study, with the remainder paid along with REIP rebate. Projects which do not move forward beyond the feasibility phase will forfeit the remaining half of the NJCEP match. Up to \$500,000 of the 2010 bio power rebate budget will be available to support feasibility studies. These funds are available to support, but not strictly reserved for feasibility studies. If strong demand for rebates is realized, less than \$500,000 may be available to support feasibility studies.

Bio Power and Custom Incentives

In working with biopower project developers, the Market Manager has discovered that flexibility in how incentives are delivered can often be the difference between a project moving forward or stalling. For example, a project with a 6 year payback that does not meet internal hurdle rates can move forward if the payback can be reduced by 1 year. Or, an approved rebate that can be partially accelerated during construction can provide bridge financing or support equipment purchase. While not all ideas are worthy, the Market Manager proposes being able to work directly with the OCE staff to approve up to \$500,000 of the total bio power rebate budget for customized incentives. Guidelines and working rules between OCE staff and the Market Manager will be established to provide flexibility to innovate with the accountability required to the ratepayer.

Other Program Services

In addition to incentives, REIP will offer the following additional services to stimulate interest in renewable energy projects, improve the technical quality and performance associated with installations, improve market transparency, build the NJ renewable community, support the development of new policies which facilitate long term growth, and promote New Jersey and its clean energy efforts to broader national audiences.

1. Provide inbound call center to educate market on the New Jersey market and programs, and to provide customer support to installers and project owners on project status, and issues troubleshooting.
2. Facilitate industry workgroups, including the Renewable Energy Committee meeting, the small wind working group, the solar technical workgroup, and re-start the biopower working groups.
3. Support BPU marketing efforts in providing quick response to support media inquiries, and ad hoc requests for market statistics.
4. Support outreach efforts to promote renewable energy and the NJCEP programs, including speaking engagement and presentations, at local and national industry events.
5. Monitor policy development processes and inform the market of key outstanding questions and decisions (e.g. new RPS levels, net metering, Community Energy) and translate new policies into program operational procedures as required.

Planned Program Implementation Activities for 2010

Program year 2010 represents a continuation of the solar market transition. While maintaining strong participation levels, fast approval turnarounds and an outstanding customer experience and for rebate projects, there will be additional focus on driving greater MW activity in larger projects through the SREC Registration program, and in more aggressive market development activities in the wind and biopower markets. In addition, we will continue to work towards integrating energy efficiency and solar, facilitate improvements in technical best practices and reduce the number of inspections while increasing the reliability of system performance data.

Program Priorities

The NJCEP will have the following areas of focus in 2010:

1. Support the transition to the new solar market structure in New Jersey with particular focus on large, SREC Registration projects now that utility financing programs are in place and grid supply projects are approved to participate.
2. Prioritize market and project development activities in the wind and biopower markets.
3. Continue efforts to increase the level of integration between the renewable energy and energy efficiency components of the New Jersey Clean Energy Program portfolio. This includes tiered incentives based on whether facilities have received an efficiency audit.
4. Expand the NJREMI incentives in support of EDA efforts to attract clean tech manufacturing to the state.
5. Continue to implement QA/QC protocol driving towards an inspection ratio of 50% or less while continuing to improve the technical quality of solar installations.
6. Provide additional account management support, advisory services and tools to underserved and under-resourced market segments including non-profits and municipalities.

Implementation Activities

To meet these priorities, the Market Manager will support the following program implementation activities in 2010:

1. Provide new funding approval for projects continuing the 2 to 3 week turnaround time for rebated projects and 1-2 weeks for SREC projects. Provide ongoing communications on rebate reductions and funding cycle position to minimize surges in applications and maintain steady state in application approval turnaround and industry activity.
2. In 2010 the Market Manager will have authority to grant 1st extensions for projects less than or equal to 10 kW and second extensions for projects greater than 10 kW. Previously the Market Manager could only grant 1st extensions for projects greater than 10 kW.
3. Conduct 35 training/technical workshops designed to address most critical training needs based on market conditions and inspection results. Topics for 2010 are expected to include:

a) Solar Technical and Administrative Training for Installers

Technical Training is mandatory to participate in the program as a certified trade ally. Technical Training is offered periodically throughout the course of the year, and will be geared to particular stakeholder groups or to a particular solar technology.

The REIP is planning two types of technical and administrative training for all installers in 2010. There are eight solar technical and administrative refresher training sessions scheduled for 2010, to provide detailed instructions and examples of administration and technical program changes and to review the new program forms and the application process and requirements.

New for 2010 is mandatory training for all new installers. Over the past year there have been over 150 new entrants into the solar market. Most of these installers have not been trained in the program requirements and have been raising numerous questions about the rules and Board Orders of the REIP from their clients. Based on the vast amount of misinformation being promulgated in the market place the Market Manager recommends instituting a training requirement for all new installers entering the PV market. This requirement would be a prerequisite for submitting an application and receiving a rebate. The REIP will be conducting 12 new installer administrative and technical training events throughout the year with a majority of them in the first six months of the year.

b) Wind Technical Training for Wind Site Assessors

Technical Training is provided to inform and instruct program stakeholders, and will be offered periodically throughout the course of the year. Trainings will be geared to particular stakeholder groups or to a particular renewable energy technology.

The Market Manager will conduct one 5 day wind site assessor technical training session scheduled for 2010. This training session will be dedicated to further developing the wind site assessor community. As a result of this training the certified wind site assessor will be able to perform feasibility studies for wind projects in New Jersey, which are now being incentivized through the program

c) Biomass Technical Training

Technical Training is provided to inform and increase awareness of biomass

technologies. Target markets for the trainings include onsite waste generators such as wastewater treatment facilities, farms, industrial sites, and food establishments like supermarkets and restaurants. Given the many new technologies being developed and the complexity of these projects, trainings will focus on connecting waste generators, engineers, and technology providers in an effort to increase market awareness and knowledge and drive towards demonstration projects.

d) Financial and Other Service Market Trainings

Over the past year the Market Manager has seen a drop off in the available of funding sources for renewable energy project development. Evidence has shown that part of the reason is that financial institutions are unfamiliar with finance models associated with the various renewable energy technologies. The REIP plans on four training sessions for interested stakeholders in the financial markets to raise the awareness of the financial opportunities available in renewable energy.

4. Provide greater account management support to underserved and under-resourced municipal and non-profit sectors to facilitate more rapid project development. Develop offerings to provide tools and advisory services to help this sector define strategy, review power purchase agreements (PPA’s), develop request for proposals (RFP’s), review technical proposals, evaluate financing and funding sources, and keep abreast of new policies and programs.
5. Actively promote and support development of wind and biopower projects. Prioritize industry vertical market segments for biopower and geographic and vertical markets for wind, lead outreach efforts with industry associations and working groups, introduce new technologies to waste generators, promulgate best practices via multimedia approach, facilitate interagency approval team to support rapid removal of project obstacles, provide dedicated account management support to project sponsors.
6. Rollout new EE requirements to the non-residential sector, linking incentives to the Direct Install program. In addition, implement a Tier 2 requirement in the residential market, and develop tools to increase enforcement of SmartGrowth requirements for new construction.
7. Lead stakeholder process to add new equipment types to NJREMI. Develop recommendations and rollout new program.

8. Continue support for information system enhancements that:
 - a. Enable electronic application forms for the rebate program.
 - b. Provide frequent program status tracking for program participants and contractors.
 - c. Provide a platform for enhanced market reporting on installations and new solar generation for both the REIP and REC programs.
 - d. Provide web-based market data (e.g. installed costs, manufacturer market shares; geographic portrait of installation activity).
9. Implement mechanisms and requirements to encourage installers to minimize the need for program inspections and thereby enable the Market Manager to realize the goal of approximately than a 50% inspection ratio for non-utility financed projects.

Marketing and Communications

The Renewable Energy Program marketing and communications plan is designed to support the accelerated development of renewable energy markets, with a particular focus on wind and bio power technologies. The principal challenge will be to engage focused target markets upstream of project development in order to reduce market, technical, and regulatory barriers that slow or discourage project development.

In 2010, the Market Manager will focus their marketing and communication efforts on the wind and bio power markets, with an account management framework. The Market Manager team will provide educational support and promotion to the people likely to become project owners or hosts, and upstream out reach and promotion to project developer, engineering, financing, and manufacturing firms.

Wind - the key target markets include municipalities, agriculture, and shore residents and businesses that have the space, resources and interest in installing wind systems.

Bio power - a key target market in 2010 is municipalities that have waste water treatment plants or that can aggregate organic waste from other local sources: i.e. food processors; wood manufacturers; universities and other schools; and niche markets like theme parks, zoos, or horse farmers.

Solar - in this mature market, a key target audience includes entities that are interested in developing solar, but which are experiencing significant market barriers to getting projects built. This may include affordable housing entities, non-profits, public entities and small business.

General Marketing Strategies:

- Focus on target markets (which can differ by technology), while supporting the technical team’s account management activity for key markets
- Continue to build upon New Jersey’s position as a national leader in the renewable energy market by leveraging our status as second in the nation in grid connected installed solar PV capacity and highlighting our innovative SREC-based solar financing structure. Acknowledge success in the marketplace through media outreach, national and regional event participation, awards submission, case studies, and press release development.
- Provide proactive consumer education through ongoing training and community events, web site updates and enhancements, press releases and media relations, collateral and literature development.
- Initiate increased public presence through the speakers’ bureau, commissioner champions, community events and ribbon cuttings/ ground breakings at successful projects.
- Provide communications and marketing materials in support of the increased level of integration between the renewable energy and energy efficiency components of *New Jersey Clean Energy Program™* portfolio.
- Strengthen continuing growth in New Jersey’s green-collar job market by supporting technical team’s activities to encourage renewable energy manufacturers, installers, and contractors to (re)locate a facility, widen their range of service offerings to include renewables, or expand their operations to meet the growing market demand.

Solar-specific Marketing Strategies

- Support policy development, implementation, and communication, and provide strategic consulting in key areas affecting program outcomes, including community solar and community energy, net metering, solar transition, financing and securitization, net metering, the Energy Master Plan, the Renewable Portfolio Standard, and other important issues.
- Continue to educate the market about the SREC financing structure and Solar Renewable Energy Certificates (SRECs). Focus on encouraging large-scale solar projects and developers to continue to participate in NJCEP’s programs as projects develop. This will ensure solar projections and reporting statistics remain viable.

- Continue to provide clear, consistent messaging around the two renewable energy incentive programs: *REIP* and *SREC Registration Program*. Work to defuse market confusion around eligibility requirements and project enrollment procedures.
- Promote the newly implemented *Renewable Energy Manufacturing Incentive (REMI)* that offers increased rebates to New Jersey residents, businesses, local governments, and non-profit organizations that purchase and install solar panels, inverters, and racking systems manufactured in New Jersey.
- Promote workshops for key market segments, industry, and trade allies including Solar 101 and REIP Trade Ally Training.
- Facilitate renewable integration with energy efficiency by cross promoting to customers and communicating the message that the standard/higher solar rebate offer requires participation in NJCEP energy efficiency activities.

Wind-specific Marketing Strategies

- Work through existing trade associations and non-profits, such as the American Wind Energy Association, the World Wind Energy Association, and the Midwest Renewable Energy Association, to reach the target audience and upstream market segments.
- Support local permitting and zoning processes with the Small Wind Model Ordinance and the Small Wind Working Group.
- Support technical team in targeting shore municipalities and the Highlands communities with an Account Manager approach. Develop leave-behinds focusing on “next steps” and “getting started.”

The market managers also plan to develop different approaches for the two major types of wind projects – those under 100 kW and those over 1 MW. For small wind, the key activities include customer awareness building through program workshops, web site content, and successful project implementation promotion, i.e. case studies, ribbon cuttings, and press releases.

For large wind, regulatory adjustments are needed to allow community energy projects to move forward. While regulations are under development, the market managers will work to evolve a coalition of communities interested in installing large turbines.

Bio power-specific Marketing Strategies

Bio power projects are the most complex technically, but are operating in the least developed market infrastructure. The 2010 strategy is to target short term, low hanging fruit, while we fill the long term pipeline with projects that have longer development cycles.

An Account Manager will work with the marketing team to refine market segmentations and prioritize industry verticals in the bio power market sector. Using direct marketing and leveraging industry associations, we will create conferences and networking events to introduce new technologies to waste generators and promote best practices. We will target vertical markets likely to include wastewater treatment plants, supermarkets, food manufacturers, universities, restaurants, farms, and municipalities.

Key Messaging:

The messages that drive renewable development will appeal to innovators and early adopters, and will highlight the differentiators for these audiences:

- New Jersey is a national leader in the renewable energy market. Second only to California in both number of installations and installed capacity, New Jersey has installed the largest number of solar installations per capita and per square mile in the country.
- New Jersey’s innovative financing model is the first in the world to adopt the use of Solar Renewable Energy Certificates (SRECs) to help finance solar projects on a broad scale and clearly identifies a path that promotes the greatest amount of solar at the least financial impact on ratepayers.
- Renewable energy provides a hedge against future fuel price increases – there are no fuel costs for these systems once they are installed.
- Renewable energy is reliable, sustainable and creates energy pollution-free and is a major solution in addressing climate change.
- In particular applications, particularly bio power, renewable energy is an efficient and effective way to deal with natural resources that might otherwise ‘go to waste.’
- Renewable energy is the second step for those who want to go beyond efficiency, who want to step up and do all they can, and who are willing to put their resources at play to do so – people who believe they can make a difference in the world.

- Renewable energy aligns with broader state, regional and national goals, including the Energy Master Plan (30% by 2020), the Regional Greenhouse Gas Initiative, and the U.S. Conference of Mayors Climate Protection Agreement.

Tactics Rationale

1. **Web Strategy/Communications:** Provide an enhanced level of customer service and market information through continued improvement of the renewable energy pages on NJCleanEnergy.com. Continue to implement new web site map and rework messaging to make the programs easy to understand by a consumer. Actively cross-market appropriate energy efficiency programs, i.e., Home Performance with ENERGY STAR®.
2. **Special Trainings & Workshops:** Promote technical team meetings, workshops, and trainings with key market players, including project hosts, developers, technical specialists and financiers. Trainings will be promoted by e-mail, direct mail, web postings, and trade association networking.
3. **Collateral/Educational literature:** Develop fact sheets and case studies for REIP, the SREC registration program, and REMI to include rebate and incentive information, project economics and environmental benefits. Develop additional literature for each of the three technologies and include information on how to get started now.
4. **Direct Mail Outreach:** Conduct direct mail outreach to specific key target markets, including municipalities, providing information regarding opportunities to participate in the renewable energy programs.
5. **Public Relations/Media Outreach:** Facilitate “ribbon cutting” events for high-profile installations, commissioner champions, including development of press release, talking points, and press kit to showcase project and explain current market offerings. Continue to highlight New Jersey’s position as a national leader in the renewable energy market by leveraging our status as the #2 solar provider in the country and highlighting our innovate SREC-based solar financing structure.
6. **Cross-marketing:** Promotion of residential and commercial/industrial energy efficiency services and programs to leverage program awareness and increase participation in other programs offered by NJCEP.

Marketing Challenges for 2010

- As was the case in 2009, the 2010 Renewable Energy budget and plan include incentive and rebate decrease mechanisms to continue building momentum towards a market that does not require ongoing direct financial incentives. It is expected that non-residential rebates will have a capacity block decrease during 2010. The Market Manager team will provide proactive messages to the market to support this planned administrative decline in rebate levels as part of an orderly transition to a sustainable market. The addition of the NJREMI also requires clear and consistent proactive communications with market actors.
- As the solar market continues to move towards the SREC-based financing model, there is some confusion around the Solar Renewable Energy Certificates (SRECs) mechanisms and the SREC tracking system. Although much of this confusion was alleviated in 2009, the securitization of this program continues to cause market concern. The addition of utility financing programs may serve to decrease this concern, but may cause additional confusion if marketing activities aren't coordinated appropriately. In addition, developers of large-scale solar projects must be encouraged to participate in the SREC Registration Process so that renewable installation projections and reporting statistics maintain integrity and validity. Continuous improvements must be made to market data to provide participants with transparent pricing and supply and demand balance of SRECs.
- While many economic sectors are facing challenging times, the renewable energy market continues to grow with rapid growth of new market entrants and potential employment opportunities. During program year 2009 there was a significant increase in the number of renewable energy contractors and installers. We anticipate that 2010 will see that same. Continued efforts will need to be made to support this increased work force and to maintain the quality of service.
- Numerous multiple rulemakings and policy revisions in process like adjustments to the Renewable Portfolio Standards, Net Metering, Community Renewable program development, the Prevailing Wage Act, etc. place a premium on timely, accurate communications.

Renewable Energy Program Marketing Goals

Objective	Strategy	Tactics
Approve and complete the highest possible volume of renewable energy projects subject to available budget.	Support policy development, implementation, and offer ongoing communication and education to the market to the market.	<ul style="list-style-type: none"> ▪ Continually update web site to provide current information. ▪ Promote Workshops and training sessions for key market segments. ▪ Promote successful installations and project completions through ribbon cuttings, case studies and events. ▪ Develop and refine technology specific literature with a clear “how to get started” message.
Continue to support the new solar market-based financing structure, or SREC system, in New Jersey.	Continue to educate the market about the SREC financing structure and Solar Renewable Energy Certificates (SRECs).	<ul style="list-style-type: none"> ▪ Continually update web site to provide current information and reporting statistics. ▪ Provide transparent SREC pricing information and tracking through frequently updated reports. ▪ Promote successful SREC-financed projects through ribbon cuttings, case studies, events, and press releases. ▪ Cross-promote with utility financing programs where appropriate. ▪ Increase presence at industry and community events, especially when Commissioners are able to champion.
Enhance market development activities designed to increase wind and bio power participation.	Work through existing trade associations and non-profits and support local permitting and zoning processes with the Small Wind Model Ordinance and the Small Wind Working Group.	<ul style="list-style-type: none"> ▪ Support the Account Manager approach to customer outreach and enhanced project development. ▪ Develop and refine technology specific literature, including direct mail, with a clear “how to get started” message. Include technology specific ROI. ▪ Increase presence at industry and community events, especially when Commissioners are able to champion. ▪ Promote educational events throughout the year.

Objective	Strategy	Tactics
Continue efforts to increase the level of integration between the renewable energy and energy efficiency components of <i>New Jersey Clean Energy Program</i> portfolio.	Facilitate integration with efficiency by cross promoting opportunity to customers and participating installers. Continue communication on the requirement that projects include EE to be eligible for standard/higher rebate levels.	<ul style="list-style-type: none"> ▪ Communicate on EE requirements for standard rebate levels through web site copy, newsletter, and literature. ▪ Showcase successful projects that have completed both EE and RE and highlight their increased ROI, both monetary and environmentally.
Leverage position as #2 in the country in number of solar installations, #1 in number of solar installations per capita and per square mile.	Continue to build upon New Jersey’s reputation as an industry leader. Acknowledge success in the marketplace, including Awards, Case Studies, and Media Coverage.	<ul style="list-style-type: none"> ▪ Attend region and national renewable energy conferences and trade shows, pursue a speaking role where appropriate. ▪ Continue to promote successful projects and installations to regional media, other third party expert where appropriate. ▪ Increase presence at industry and community events, especially when Commissioners are able to champion.
Increase the green-collar job market in New Jersey.	Encourage renewable energy manufacturers, installers, and contractors to (re)locate a facility, expand businesses, widen their range of service offerings to include renewable energy, to meet the growing market demand.	<ul style="list-style-type: none"> ▪ Promote green-job training and education seminars on the web site. ▪ Increase presence at industry and community events, especially when Commissioners are able to champion. ▪ Provide easy access to additional state programs through the web site, i.e. link to EDA, etc.

Quality Control / Quality Assurance Provisions

All renewable energy systems facilitated through the REIP program must be installed in accordance with program equipment requirements, program performance requirements, manufacturer specifications, and provisions of the National Electrical Code. In 2010, the program will require an on-site program inspection to insure program requirements have been met and that the installed system matches the system proposed on the application for:

- ❖ Every self installed project,
- ❖ Projects with installers that have not achieved and maintained Quality Assurance (QA) qualifications, and
- ❖ Utility financed projects

Quality Control (QC) serves as a check to ensure specific parameters of a renewable energy installation have been achieved, including:

- Installer registration process, including three demonstrated successful installations and an Home Improvement Contractor (HIC) license for residential applications
- Inspection Process, where all installed RE systems require an inspection and a PASS status

During 2009, the Quality Control process began a transition to a Quality Assurance process. Quality Assurance (QA) defines processes that ensure quality standards using efficient and cost effective mechanisms, including:

- Certification process, which required program and technical training and certain insurance requirements
- Inspection process, in which there was a migration of system inspections from 100% to random selection of <50%
- Monitoring and evaluation processes, including customer feedback and direct observation leading to actionable measures to improve installation quality.

The QA protocol requires greater diligence on the part of the “in-office” processing team to ensure the “As Built” project information submitted as part of the final application paperwork is complete, correct and in compliance with all program requirements. This review process is critical for the success of the QA program, which replaces the direct inspection QC process to ensure program compliance.

There are several customer types that will be inspected regardless of the QA protocol, which include self installations and projects being financed through the Utility SREC finance programs. These projects may likely add several hundred inspections to the QA process adding pressure to ensure installers are involved in the QA process. These

inspections required by the program and may lead to total inspection ratios higher than the overall total of 50%.

The 2010 QA program has specific goals for significantly reducing the number of inspections. As the number of new entrants into the market continues to grow it becomes imperative that new installers achieve QA status as quickly as possible in order for the number of inspections to be reduced. Based on feedback from the program inspectors and staff the installer community has relied on the program to ensure compliance with Program Rules and Requirements. The burden must be shifted to the installers in order to achieve the reduced number inspections projected in the 2010 Program Plan and budget. Two specific proposals are offered to encourage more contractors to maintain their QA status:

- 1) A \$200 inspection fee will be charged to contractors for every additional inspection required beyond the first inspection – this amount will be subtracted from the final rebate payment.
- 2) Remove suppliers who are not in the QA program from the New Jersey Clean Energy website list of New Jersey Trade Allies.

Both of these enhancements are expected to provide greater incentive for installers to pass their inspections, maintain QA status, and thereby help the program to reduce the overall inspection rate.

Budget

The total Market Manager REIP budget is \$83.449 million. This includes rebate funding, marketing services, REIP administration for 2010, and administrative expenses and program services associated with the SREC Registration Program. The detailed 2010 budget is attached in Appendix B.

The REIP rebate budget amount included in the above referenced budget is \$78.702 million for 2010. This consists of \$64.6 million in funding available for new commitments plus \$14.102 million in anticipated carry over commitments. Please note the estimate of carry over commitments has been revised downward since the preparation of the 7&5 report. The 2010 budget includes three funding cycles for new solar rebates.

2010 REIP Rebate Budget Summary

<u>Budget Category</u>	<u>Total Available For New Commitments</u>	<u>Carry Over Commitments</u>	<u>Total REIP Rebate Budget</u>
Solar - Residential	\$30,000,000	\$8,282,149	\$38,282,149
Solar – Non-Residential	\$13,400,000	\$2,819,851	\$16,219,851
Wind	\$9,950,000	\$2,100,000	\$12,050,000
Bio Power	\$11,250,000	\$900,000	\$12,150,000
Sub Totals	\$64,600,000	\$14,102,000	\$78,702,000

2010 REIP Rebate Funds Available For New Commitments

<u>New Commitments By Technology</u>	<u>(\$Million)</u>	<u>Estimated MW (new approvals)</u>
Solar - Residential	\$30.000	18.44 (a)
Solar – Non-Residential	\$13.400	13.56 (a)
Wind – Rebates	\$9.950	7.0 (b)
Bio Power – Rebates	\$11.250	3.4 (c)
Total Available For New Commitments	\$64.600	45.2

(a) Based on standard incentives – NJREMI incentives not included in calculation

(b) Assumes 250kW per wind project average, \$500,000 for feasibility studies, and \$375,000 available for post construction monitoring studies.

(c) Assumes 200kW per biopower project average, and \$500,000 for feasibility studies

Goals and Renewable Generation

The REIP program supports the goals outlined in the New Jersey Energy Master Plan, which defines the following installed capacity goals for 2021 for renewable technologies:

- 2,120 MW solar

- 200 MW onsite wind
- 900 MW Biomass

In 2010, the NJCEP renewable energy programs support the goals outlined in New Jersey’s Renewable Energy Portfolio Standards (N.J.A.C. 14:4-8):

RPS Percentage Requirements for 2010

Energy Year	Solar Electric	Class I Renewable Energy	Class II Renewable Energy	Total Renewable Energy
June 1, 2009-May 31, 2010	.22%	4.685%	2.5%	7.406%
June 1, 2010-May 31, 2011	.305%	5.492%	2.5%	8.297%

Based on estimated outstanding rebates for projects approved under the CORE program and REIP in 2009, plus the projected number of 2010 new approvals that will be completed in the 2010 program year, the Market Manager estimates roughly 1,600 total projects will be completed in 2010.

These projects will result in the production of approximately 28,000 new SREC’s which is equivalent to approximately 16% of the total SREC requirements for the Energy Year starting June 1, 2009. Roughly 25,000 new Class I RECs are expected to be produced by completed wind and biomass projects that have received CORE or REIP rebates that are completed in 2010.

Program Goals

The following are program goals for 2010:

- The completion of wind and bio power projects with an estimated first year annual production greater than or equal to 21,079 MWh. Completion includes all CORE and REIP projects which receive a rebate check and/or submit a final rebate request during the 2010 calendar year. Projects that submitted a final rebate request at the end of the 2009, and that were counted towards the non-solar completion goals in 2009 will not be counted towards the 2010 goal.
- The approval of wind and bio power projects with an estimated first year annual production greater than or equal to 31,666 MWh. This includes all new REIP rebate approvals for wind and bio power projects issued during the 2010 calendar year.
- The completion of 8 or more feasibility studies for potential wind or bio power projects eligible for REIP rebate support. The Market Manager will define the requirements for a complete feasibility study. For the purposes of this goal, a

feasibility study can be deemed complete and still be in the process of collecting data on wind or biomass feedstock resource and annual supplies.

New Jersey's Clean Energy Program™

2010 Solar Renewable Energy Certificate (SREC) Registration Program

Program Description

This program provides registration for solar renewable energy certificates (SRECs) for non-rebated solar projects, including direct grid-connected projects. It is the successor program to the SREC-Only Pilot program which was renamed per the Board Notice dated 2/11/09.

New Jersey's Renewable Energy Portfolio Standards (N.J.A.C. 14:4-8) implement provisions of the New Jersey Electric Discount and Competition Act. The RPS rules require each electric power supplier or basic generation service provider that sells electricity to retail customers in New Jersey to include a percentage of its portfolio from renewable energy sources. In 2010, the following RPS percentage targets are listed in Table 1.

Table 1: RPS Percentage Requirements for 2010

Energy Year	Solar Electric	Class I Renewable Energy	Class II Renewable Energy	Total Renewable Energy
June 1, 2009-May 31, 2010	0.221%	4.685%	2.5%	7.406%
June 1, 2010-May 31, 2011	0.305%	5.492%	2.5%	8.297%

Based on estimated annual retail sales of approximately 80,000 GWh, the requirements for the June 09 to May 10 energy year are expected to be more that 176,000 SRECs and more than 5.9 million total RECs. Market conditions will establish the price for the SRECs and RECs that are used to meet these requirements. The solar alternative compliance payments (SACP) which establishes a ceiling price that an obligated entity needs to pay for an SREC are \$693 for SRECs in Energy Year 2010, declining to \$675 in 2011. The alternative compliance payment (ACP) for is \$50 per MWh for Class I RECs.

SREC stands for Solar Renewable Energy Certificate and is a tradable certificate that represents all the clean energy benefits of electricity generated from a solar electric system. Each time a solar electric system generates 1,000kWh (1MWh) of electricity, an SREC is issued which can then be sold or traded separately from the power. The revenues from SREC generation can make it easier for individuals and businesses to finance and invest in clean, emission free solar power.

The New Jersey SREC Registration Program provides a means for SRECs to be created and verified. The Generation Attribute System (GATS) operated by PJM Environmental Information Services is used for the tracking and trading of SRECs and Class I and Class II RECs.

Through innovative policies, programs and commitment, the Board of Public Utilities (BPU) and OCE have achieved remarkable success in establishing the New Jersey as one of the leading global markets for onsite solar electric systems, and created a foundation for future growth. Recent policies developed by the Board in 2009 which help reinforce the Solar Market Transition include:

- a. Under the special adopted amendments published in the New Jersey Register on June 16, 2008, solar electric generation facilities connected to an electric distribution system in New Jersey are eligible to generate solar RECs regardless of whether they use net metering or are located on a customer-generator's premises.
- b. Elimination of the 2 MW entity cap in effect under the SREC-Only Pilot Program.
- c. Utility finance programs which provide long term SREC contracting options for project developers for solar projects up to 500 kW of installed capacity.

Target Markets and Eligibility

The energy types that are eligible as renewable energy sources are defined in the New Jersey Renewable Energy Portfolio Standards (N.J.A.C. 14:4-8.5 and 14:4-8.6).

Table 2: Classification of Resources for Renewable Energy Certificates

Solar Renewable Energy Certificates	Class I Renewable Energy Certificates	Class II Renewable Energy Certificates
All solar electric systems - including those greater than 2 MW of capacity - connected to New Jersey Distribution System	<ul style="list-style-type: none"> ▪ Solar electric generation ▪ Electricity derived from wind ▪ Electricity derived from wave or tidal action ▪ Electricity derived from geothermal energy as defined in NJAC 14:4-8.2 ▪ Electricity generated by combustion of methane gas captured from a landfill ▪ Electricity generated by a fuel cell powered by methanol, ethanol, landfill gas, digester gas, biomass gas, or other renewable fuel ▪ Electricity generated by the combustion of gas from the anaerobic digestion of food waste and sewage sludge ▪ Electricity generated through a Class I renewable energy project funded by the societal benefits charge as defined at NJAC 14:4-8.2 ▪ Electricity generated through a project funded by the Board's Clean Energy Program ▪ Electricity produced from combustion of sustainable biomass (must meet NJDEP criteria for determination of sustainability) 	<p>All Class I renewable resources</p> <p>Electricity generated by a hydro-electric facility with a rated capacity of 30 MW or less</p> <p>Electricity generated by a resource recovery facility located in New Jersey, covered by all NJDEP approvals and in compliance with all NJ environmental laws.</p>

The following are not eligible to qualify as Class I Renewable Energy resources: Combustion of treated, painted or chemically coated wood; municipal solid waste; tires, sewage sludge, wood waste (including demolition waste and construction waste); old growth timber, and wood harvested from a standing forest except for a forest that is part of a bio-energy plantation.

The target market for the program is composed of sellers, buyers, aggregators and brokers of SRECs and RECs. This includes projects and market actors located inside New Jersey and from other states in the PJM service territory. The market participants also include utility scale/grid supply projects that use a qualified resource, and distributed renewable generation projects that are installed on the customer's side of the utility

meter. Providers in voluntary market (e.g. New Jersey’s Clean Power Choice Program) may also be active in the SREC and REC markets.

All solar system owners in New Jersey with grid-connected generators can participate in New Jersey's SREC Program. All projects, including those that do not receive an REIP rebate must establish an SREC account. A customer or a third party (for example a solar installer, or an SREC aggregator or broker) can establish an account. Other than completed REIP projects, all solar projects desiring SREC’s must register their project in the SREC Registration program before these projects begin construction.

Program Services

The program will create and maintain the SREC Registration section on the NJ Clean Energy Program website, clearly delineating the SREC Registration program as a stand-alone process for projects that do not receive REIP rebates. For those that participate in the REIP a SREC registration process is included as part of the final application processing. The SREC Registration Program will have its own application forms, Guidebook, reporting and market statistics, and supporting information materials.

The Market Manager will also provide timely and accurate market information on past, current, and projected renewable energy project development with respect to the fulfillment of New Jersey RPS obligations: number of projected REC and SREC requirements in each year, number of new certificates created and traded, and retired over time, REC and SREC trading prices and volumes, and the project pipeline based on SREC registrations and rebate applications and approvals.. Ongoing analysis and regular reporting on market activity and trends will enhance market transparency, and ready access to data will help create an efficient market for Renewable Energy Certificates and should lower the ultimate costs for compliance with the RPS requirements.

SREC Verification Audits

In addition the Market Manager team supports the GATS administrator by conducting a sample based audit of solar systems to verify system performance in the generation of SRECs. This audit function is becoming increasingly imperative. As the number of new market entrants continues to flow in the renewable energy arena and fewer on-site inspections are conducted as part of the REIP rebate program the importance of these audits for the SREC market transparency and stability remains high.

A portion of the audit sample is selected randomly, with a portion selected because they are either showing much greater or less production than expected based on system parameters. These audits consist of site visits in which verification of system generation is recorded and compared to reported generation numbers. The data are passed to the

PJM-EIS-GATS SREC administrator for analysis, and may be used to true up production estimates for those systems.

Marketing and Communications

New Jersey is seen as a leader in the development of the SREC financing model. Program marketing communications and outreach seek to leverage this position and assist current and potential market actors clearly understand the process, procedures, and market mechanisms that underlie this component of the NJCEP. Marketing and communications activities for the SREC registration are coordinated and consistent with the REIP marketing plan presented earlier. At the same time it is a priority to clearly identify the SREC Registration program as a stand-alone process, particularly for non-rebated solar projects.

General Marketing Strategies:

- ❖ Continue to build upon New Jersey’s position as a national leader in the renewable energy market by leveraging our status as second in the nation in grid connected installed solar PV capacity and highlighting our innovative SREC-based solar financing structure. Acknowledge success in the marketplace through media outreach, national and regional event participation, awards submission, case studies, and press release development.
- ❖ Continue to educate the market about the SREC financing structure and Solar Renewable Energy Certificates (SRECs). Focus on encouraging large-scale solar projects and developers to continue to participate in NJCEP’s programs as projects develop. This will ensure solar projections and reporting statistics remain viable.
- ❖ Continue to provide clear, consistent messaging around the two renewable energy incentive programs: *REIP* and *SREC Registration Program*. Work to defuse market confusion around eligibility requirements and project enrollment procedures.
- ❖ Coordinate messaging with solar financing initiatives offered through the electric distribution companies. This includes PSE&G’s Solar Loan Program, and the SREC based financing program offered by ACE, JCP&L, and RECO.

Key Messaging and Market Challenges:

- ❖ New Jersey’s innovative financing model is the first in the world to adopt the use of Solar Renewable Energy Certificates (SRECs) to help finance solar projects on a broad scale and clearly identifies a path that promotes the greatest amount of

solar at the least financial impact on ratepayers.

- ❖ As the solar market continues to move towards the SREC-based financing model, there is some confusion around the Solar Renewable Energy Certificates (SRECs) mechanisms and the SREC tracking system. Although much of this confusion was alleviated in 2009, the securitization of this program continues to cause market concern. The addition of utility financing programs may serve to decrease this concern, but may cause additional confusion if marketing activities aren't coordinated appropriately. In addition, developers of large-scale solar projects must be encouraged to participate in the SREC Registration Process so that renewable installation projections and reporting statistics maintain integrity and validity. Continuous improvements must be made to market data to provide participants with transparent pricing and supply and demand balance of SRECs.

SREC Program Marketing and Communications Goals

Objective	Strategy	Tactics
Continue to support the new solar market-based financing structure, or SREC system, in New Jersey.	Continue to educate the market about the SREC financing structure and Solar Renewable Energy Certificates (SRECs).	<ul style="list-style-type: none"> ▪ Continually update web site to provide current information and reporting statistics. ▪ Provide transparent SREC pricing information and tracking through frequently updated reports. ▪ Promote successful SREC-financed projects through ribbon cuttings, case studies, events, and press releases. ▪ Cross-promote with utility financing programs where appropriate. ▪ Increase presence at industry and community events, especially when Commissioners are able to champion.

Budget

The administrative budget for the SREC registration program is included and presented as part of the REIP budget.

Appendix A - 2010 Residential and Renewable Marketing Plan

Executive Summary

To support *New Jersey's Clean Energy Program* (NJCEP) and reach the goals of New Jersey's comprehensive Energy Master Plan to reduce energy use 20% and increase renewable energy 30% by 2020, the program staff is planning a 2010 marketing and communications program to:

1. Maximize energy savings in the residential sector for new and existing homes.
2. Integrate and cross-promote residential energy efficiency and renewable energy services, as well as C&I services (working with TRC), offered by *New Jersey's Clean Energy Program* and the New Jersey Board of Public Utilities.
3. Increase awareness and participation by New Jersey residents in current and future energy efficiency and renewable energy offerings.
4. Leverage opportunities presented by New Jersey Community Partners, *Green New Jersey Resource Team*, and local and state government leaders to increase grassroots community involvement in available services.
5. Use an integrated communications program that includes broad based customer education and public relations to effectively communicate a "whole house" approach to maximize energy savings.
6. Work with utilities, regional and national agencies; e.g., EPA, DOE, local and national stakeholders, and trade allies, including manufacturers and distributors, to cross-promote and market services where applicable.
7. Expand on successful "testimonials" campaign in advertising and public relations outreach to showcase New Jersey residents and businesses that are benefiting and prospering from *New Jersey's Clean Energy Program*.
8. Help increase workforce development and economic growth opportunities in the energy efficiency and renewable energy industries.
9. Demonstrate the value of *New Jersey's Clean Energy Program* to combat rising energy prices and to help mitigate climate change and meet the Energy Master Plan goals.

Key Creative and Communications Elements

1. Continue to identify and enlist New Jersey residents that are successfully participating in the programs. Other potential spokespeople include New Jersey Board of Public Utilities commissioners, local community leaders, such as

- mayors, legislators, and county freeholders, and *New Jersey's Clean Energy Program* award recipients.
2. Further engage BPU commissioners to promote *New Jersey's Clean Energy Program*, as well as New Jersey's comprehensive Energy Master Plan theme of *20% by 2020*. Promote each of the commissioners as experts and champions for the different programs by more deeply involving them in events and community opportunities to increase program participation.
 3. Leverage the growing influence of the community partners and the *Green New Jersey Resource Team* to increase participation in energy efficiency and renewable energy programs at a grassroots level.
 4. Revitalize retail stores with *New Jersey's Clean Energy Program* information, positioning the state as a consumer resource for greater savings through energy efficiency and renewable programs.
 5. Leverage utility communications with New Jersey residents through advertising, bill inserts, newsletters, bill messaging, web linkage, and other community outreach and joint program promotions.
 6. Continue to enhance the web site with relevant content, including success stories and resources that encourage action by New Jersey residents and businesses.
 7. Leverage call center activities to increase awareness and participation.

Summary of Scope of Work

Below are the expectations of New Jersey's Board of Public Utilities for the Honeywell Market Manager marketing and communications team to conduct and produce as part of the marketing and communications program.

Marketing/Advertising Campaigns

- Campaign development to promote programs served by Honeywell Market Manager team
- Creative concepts developed and presented to client
- Inclusion of media buy recommendation and placements
- Development and production of print and broadcast advertisements
- Technical review with Honeywell Market Manager team prior to review and approval by BPU
- Inclusion of NJCEP and BPU brands in all materials
- Inclusion of utility-managed *Comfort Partners* program offering as part of a larger message on energy efficiency for low-income residents, incorporating the utilities' approval of proper messaging.

Event Management

The Market Manager team will continue to define and prioritize events in cooperation with the BPU. There are two types of events: 1) newsworthy media events that will help increase awareness and participation in the programs, and 2) local community or trade organization requests for participation in speaking engagements or tabling. The process for selection will continue to evolve with the BPU based on mutually agreed upon criteria for cost efficiency and the best use of BPU personnel and Market Manager resources.

A. Media Events

Event Selection and Implementation

- Select opportunities to plan events in conjunction with program managers and BPU to highlight program accomplishments, e.g., *SREC Registration Program* projects over 1.5 MW in capacity.
- Once opportunities are selected and approved by BPU, contact relevant organizations to initiate planning of events.
- Coordinate with BPU to select appropriate Commissioner or BPU representative.
- Develop talking points for commissioners for speaking engagements, along with briefing memos which include event logistics, such as event agenda, driving directions, project information, more.
- Conduct media outreach to ensure press coverage of programs, utilizing the Commissioners as an additional hook (BPU will confirm when media outreach for specific events will be conducted by the BPU Public Information Officer).
- Attend program press events with Commissioner to ensure coverage of program and Commissioner.

Given the continued growth of event requests anticipated in 2010, the Honeywell Market Manager team will work with the BPU to prioritize events initiated and managed by the team. Suggestions for these events should be presented to the BPU Marketing Administrator and the PR team for evaluation as far in advance as possible.

There are other events or speaking engagements where the BPU is requested to participate, initiated either through a website request or other method. These event requests are evaluated on the weekly public relations call. The Honeywell Market Manager team will also assist and support the BPU for these events with planning, preparation, or execution based on discussion and agreement with BPU at the outset of each event.

A defined list of trade shows is outlined in this marketing plan. For those trade shows/events, support may include preparation of program information, media outreach,

as well as participation and presence at the event. Before the start of any event, the Honeywell Market Manager team will clarify its deliverables for each event with the agreement and cooperation of the BPU. The Honeywell Market Manager team will assist the BPU with criteria for selecting newsworthy media and public events that warrant the attendance and participation of Commissioners.

B. Public/Community Events

Event Reviews (process for when events are proposed to Market Managers/BPU)

- Review audience composition and size, sponsor mission, historical data, logistics, and other criteria to determine whether or not the event will offer a worthwhile opportunity for promoting *New Jersey's Clean Energy Program*.
- Based on the above, determine the level of support that will maximize benefit to the program of the event. Work with the *Green New Jersey Resource Team* and the BPU speakers bureau to ensure appropriate coverage and speakers.
- If no speaker is available, printed materials, such as the summer/winter tip cards may be supplied by the Market Manager.
- Continue to work with the BPU to be selective regarding participation at public events to help use time and personnel resources efficiently to support greater awareness and participation in the programs.

Media Relations

- Identify opportunities to promote programs through news media.
- Write press releases and media pitches, conducting technical review before BPU receives draft copy.
- Maintain media lists; identify press outreach lists used by BPU.
- Conduct thorough media outreach to help secure placement. Confirm with BPU regarding its media outreach to ensure that efforts are not duplicated.
- Provide the BPU with an annual program public relations proposal with topics to be promoted throughout the year.
- A final copy of any program-related press releases distributed will be provided by the BPU.

An integral part of the marketing program is an agreed upon calendar for promotion of programs on a monthly basis to best meet timely, seasonal, and opportunistic needs year-long.

Written Materials

- Develop talking points and briefing memos. These will include statistics on specific project, as well as overall program progress to date.
- Conduct all technical review before providing to BPU for review.
- Work with Program Coordinator to store all updated program fact sheets in the press room of the NJCleanEnergy.com web site for easy posting and access.

Educational and Promotional Materials

- Create brochures, public service announcements, pamphlets that contain a larger message of how residents can take steps to be more energy efficient and/or invest in renewable energy.
- Conduct all technical review before providing to BPU.

Educational materials are an integral part of the marketing plan. The 2010 plan includes reprints of the residential, overview, and renewable energy brochures that promote all of the programs. The plan also includes updates and reprints of tip cards, indicating low-cost, no-cost “tips” while promoting the specific programs. A contingency budget for 2010 has been included to accommodate special communications requests or campaigns that the BPU would like to develop and execute that have not been specifically included in the plan.

The Honeywell Market Manager team recommends continuation of the completion of a one-page Project Information Form (PIF) with appropriate BPU staff at the start of each project. This outline will help define the subject, audience, key messages, tone, goals, call-to-action, media specifications, and timeline to help understand and meet BPU expectations at the outset of each project.

Co-op Advertising Program

- Implementation of co-op advertising program for Home Performance contractors and *New Jersey ENERGY STAR Homes* builders. The marketing team is also recommending that a similar co-op advertising program be developed for HVAC contractors.
- Processing of co-op advertising incentive applications, based upon eligibility requirements. The payments to the vendors for approved projects will be processed from the programs’ incentives budgets.
- Assistance to participating contractors and builders with advertising and sales tools.
- Application and participation in EPA’s co-op advertising program.

Direct Mail Program

- Implementation and execution of direct mail program for consumers. Direct mail has proven effective in promoting the *Home Performance with ENERGY STAR* program, and it is expected to be effective for promoting the *COOLAdvantage* program, as well as training programs held by the residential new construction and renewable energy programs.
- Assistance with program communications to trade allies regarding program announcements.
- Recruitment for trade ally events and conferences.

Digital Communications—Web

- Updating program information and trade ally database.
- Developing web banners for promotions.
- Creating web enhancements; e.g., virtual tours for *Home Performance with ENERGY STAR* and *New Jersey ENERGY STAR Homes*.
- Creating case studies and testimonials to be used on the website.
- Participating in web strategy development and enhancements as part of weekly web meetings.

Industry Conferences and Trade Ally Events

- Pursue development and implementation of NJ-based ACI Conference, including training sessions for home improvement, new construction, and solar contractors. Include awards program for Home Performance contractors and *New Jersey ENERGY STAR Homes* builders.
- Support trade ally recruitment events, training meetings and conferences for Home Performance contractors, HVAC contractors, builders, and solar installers.
- Preparation of materials and presentation of programs for community partner meetings and trainings.
- Support to New Jersey's Clean Energy Conference, including but not limited to speaker recommendations, leadership award review, etc.
- Participation in national and regional EPA, NEEP, and DOE campaigns.
- Preparation of applications for industry awards.

Development of Retail Point-of-Purchase and Sales/Educational Materials

- Production of retailer educational materials and in-store point-of-purchase materials for *ENERGY STAR Products*, HVAC, Home Performance, *New Jersey*

ENERGY STAR Homes. Includes incentive information, rebate applications, store signage, bag stuffers, qualifying products list, educational brochures and fact sheets.

- Support 2010 roll out of new program enhancements; e.g., new consumer electronics incentives, with full retail support materials.

Market Manager Meetings

- Hosting and preparation of weekly Public Relations calls.
- Meetings as needed with Market Manager program staff to support program marketing needs.
- Call center communications and support.
- Internal traffic meetings to review work plan and deliverables.
- Attendance in person or by phone of monthly Marketing and Communications, Energy Efficiency, and Renewably Energy committee meetings.
- Coordination with utilities on joint promotions, i.e., New Jersey Natural Gas and *Home Performance with ENERGY STAR*.
- Attendance at additional meetings as needed.

Reporting

- Monthly billing, budget and activity reporting
- Response to requests for program statistics or inquiries
- Annual recap books of all marketing materials produced
- Work with call center and web team to assess results of promotional campaigns

Marketing Plan Development and Management

- Strategic planning and development of annual program marketing plans and filings
- Preparation of annual program marketing and contract modification budgets

The Honeywell Market Manager team will work with BPU to develop an annual tactical marketing plan and calendar. . This will provide the opportunity for the BPU to help plan a year-long schedule with appropriate themes and messaging to help leverage all communications activities.

Utility Coordination

The Honeywell Market Manager team will make every effort to coordinate with new program pilots or launches by New Jersey's electric and gas utilities. Similarly, the team will also work with relevant organizations to maximize incoming ARRA funding.

Invoicing Process

The Market Managers will be required to submit one invoice for fixed marketing and another for variable marketing for the residential and renewable energy programs, effective January 2009. Variable marketing invoices will include written expense preapprovals as well as approval of relevant creative concepts.

Account Management

- Program Marketing Management and Oversight
- Communication with BPU/PC/utilities/other agencies via meetings or conference calls
- Facilitation of marketing programs and interaction with the Green NJ Resource Team members
- Financial administration
- Reporting
- General office administration
- Office space expenses, including phones, computers, fax, copying, etc.
- Office supplies, including program stationery, forms, envelopes, etc.
- Program apparel ordering
- Preparation and submission of award nominations, including materials, copying, and mailing costs.
- Postage for regular business operations
- Travel

Strategic Direction

- Strategic Planning
- Marketing Plan Development and Execution

Call Center

- Call center briefings on marketing initiatives, including FAQs, current campaign information, and training as required.

- The call center provides an important link between potential program participants and the Market Manager team. Providing information about program requirements, the call center acts as a clearinghouse for program literature and an important point of entry to New Jersey's Clean Energy Programs. Based on nearly three years of performance data, in 2010 the call center staff will be re-allocated from late evening hours to peak day time hours for maximum efficiency. Customers calling Monday through Friday from 9:00 am to 7:00 pm will be handled by customer service representatives.

Website

- Support of external sites, such as the Aclara (Nexus) energy audit tool, and the online application forms for *ENERGY STAR Products*. If there is direction from the BPU to make changes to those sites, such as the header or footer, those costs may be submitted as variable expenses.
- Use of external sources for web enhancements, including web consultants, web designers, web programmers, web production, as well as paid market research and search optimization consultants may be submitted as variable expenses, based on prior written approval by BPU Marketing Administrator.
- Banner ad development
- Copy development and organization of respective sections of the website. This includes input and support for direction and content of the site.
- Provide quarterly newsletter content.

Public Relations

- Media outreach and follow-up
- Media Events (press events, ribbon cuttings, check presentations, etc). This includes planning, coordination, execution, development of press kits, talking points, etc., for internal staff or BPU staff.
- Press Release development and distribution to appropriate lists
- Media hit reporting
- Media buying and tracking (Media Management)
- Demonstration Home/Open House Events
- Outreach and Education
- Promotional Contest development, management, and prizes, when prize fulfillment is provided by Market Manager; e.g., Home Performance audit.

Event Support

- All costs related to larger trade shows/events and sponsorships specifically identified in 2010 Marketing Plan. Expenses for additional events identified by the BPU will be covered under variable.
- Marketing support and staff for speaking engagements, press events, open houses, stakeholder meetings, trade ally meetings,

Creative Services

- Creative development of all marketing materials and program identity pieces, including but not limited to program stationery, labels, easel backs, POP displays, forms, case studies, testimonials, customer or trade ally materials, fact sheets, direct mail, brochures, promotional materials, video, event signage, lawn signs, trade show booths, banners, and banner stands.
- Administration of co-op marketing program, including management of guidelines, approval of submissions, and monitoring of contractor adherence to co-op guidelines.

Variable Costs

The variable marketing budget is intended to cover out-of-pocket costs that vary directly with the program goals and marketing production needs. There will also be a contingency component to accommodate opportunities not identifiable at this time. There will be no markup on variable marketing expenses. Examples of appropriate variable marketing expense include:

- Paid Media (print/broadcast/on-line). Media invoices will be required to attach a proof of performance, such as broadcast affidavit and copies of media invoices.
- Overnight Delivery Costs or Other Delivery Costs. These extra costs will be utilized prudently and when necessary.
- Actual printing or production costs for marketing materials, including trade show displays, banners, signage, bill inserts, applications, brochures, forms, any printed materials supporting the programs.
- Other production expenses, such as video production, photography, both from stock/subscription sites and specific sites/subjects, when such services are provided by external consultant or production company.
- Direct mail campaigns, including list purchase, postage, mail-house costs and printing.
- Public relations expenses must be approved by BPU Marketing Administrator prior to the event.

- Event expenses, such as onsite photographer, special equipment rental/purchase, such as microphones or tents, podiums, tables, chairs, easels, and sound systems, may be submitted under variable with prior approval from the BPU Marketing Administrator.
- Promotional items. Promotional items should be approved in writing by the BPU Marketing Administrator prior to purchase. This includes home show give-aways, specialty advertising items, and premiums, as well as recognition awards for BPU-sponsored awards programs, such as trophies and plaques.
- Website Projects. These projects should be approved in writing by the BPU Marketing Administrator prior to commencement.

Recognizing that there may be unanticipated requests from the BPU throughout the year that were not accounted for in the budget planning process, a contingency budget of \$50,000 has been established for renewable energy and energy efficiency programs. Such requests must be approved in writing by the BPU Marketing Administrator or other senior BPU staff member.

Billable costs associated with additional work product under the contingency budget may include BPU-approved expenditures for sponsorships, trade show exhibits and materials, media placements, materials, and advertising production expenses. Labor, coordination, and attendance expenses will be budgeted and reviewed with BPU to review and prioritize against existing work schedule and deliverables. Based on mutual agreement, additional resources may be needed to meet the BPU needs and these labor costs and associated expenses may be billed under variable expenses.

Marketing Plan--Events Summary

The following organizations sponsor trade shows and/or monthly meetings that the Market Manager expects to support in 2010 with all costs covered within the fixed marketing budget. The exception is the sponsorship cost for the ACI Conference which is not included in the 2010 marketing budget, as approval was received to fund the 2010 conference from budget that was allocated for 2009.

Events of equivalent cost may be supported in exchange for any of these events. Additional event requests will be approved in advance by the BPU and funded through the contingency portion of the variable marketing budget. Promotional items distributed at these events and costs for displays will also be a variable marketing cost.

Event	Sponsor	Program(s)
PV America	SEIA	RE
PSEG GreenFest	PSEG, Star Ledger	All
NJ Clean Energy Conference		All
Governor's Conference on Housing and Development	Governor, NJHMFA, NJDCA	RNC
New Jersey League of Municipalities	NJLM	RE, CPI
Atlantic Builders Convention	Atlantic Builders Convention	RNC
ACI	ACI	All
Congressman Adler Energy Expos (2 events)	Congressman Adler	All EE
Assemblywoman Handlin Energy Forum	Assemblywoman Handlin	All EE
Assemblyman Diegnan Energy Conference	Assemblyman Diegnan	All EE
AEA Utility Management Conference	AEA (Association of Environmental Authorities)	All
Sustainable Lawrence Green Building Expo	Sustainable Lawrence	All
Covered Bridge Seniors		All EE
World Energy Congress	AEE	RE
GlobalCon	AEE	RE
Solar and Wind Expo		RE
NJ Association of Counties	NJAC	RE, CPI
Association of New Jersey Environmental Commission	ANJEC	All
Green Buildings Tour	NESEA	RNC/All

Appendix B – 2010 Residential Efficiency and Renewable Budgets

2010 Residential Energy Efficiency Budget

2010 Honeywell Residential Efficiency Programs Budget

Program	Total	Administration, IT and Program Development	Sales & Marketing	Training	Rebates, Grants, and Other Direct Incentives	Rebate Processing, Inspections and Other Quality Control	Performance Incentives	Evaluation and Related Research
Residential HVAC - Electric & Gas	\$20,187,081.93	\$1,494,768.00	\$0.00	\$837,884.40	\$14,219,822.40	\$2,973,737.23	\$104,669.90	\$556,200.00
Residential New Construction	\$31,453,881.12	\$1,633,392.00	\$0.00	\$31,888.80	\$26,298,031.72	\$3,020,766.70	\$104,669.90	\$365,132.00
ENERGY STAR Products	\$28,653,608.08	\$1,412,132.84	\$0.00	\$0.00	\$24,976,350.00	\$1,995,323.34	\$104,669.90	\$165,132.00
Home Performance with Energy Star	\$42,124,569.88	\$1,154,421.08	\$0.00	\$642,410.70	\$37,278,086.16	\$2,797,440.04	\$104,669.90	\$147,542.00
Community Initiative	\$1,952,494.00	\$1,052,494.00	\$0.00	\$0.00	\$900,000.00	\$0.00	\$0.00	\$0.00
Sales and Marketing	\$4,675,834.75	\$0.00	\$4,675,834.75	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Sub Total Residential Programs	\$129,047,469.76	\$6,747,207.92	\$4,675,834.75	\$1,512,183.90	\$103,672,290.28	\$10,787,267.31	\$418,679.61	\$1,234,006.00

2010 Renewable Energy Budget

2010 Honeywell Renewable Energy Programs Budget

Program	Total	Administration, IT and Program Development	Sales & Marketing	Training	Rebates, Grants, and Other Direct Incentives	Rebate Processing, Inspections and Other Quality Control	Performance Incentives	Evaluation and Related Research
CORE Program (Rebates Only)	\$46,883,993.67	\$0.00	\$0.00	\$0.00	\$46,883,993.67	\$0.00	\$0.00	\$0.00
Renewable Energy Incentive Program	\$83,449,003.45	\$1,740,866.04	\$0.00	\$290,202.50	\$78,702,000.00	\$2,399,312.91	\$316,622.00	\$0.00
Sales and Marketing	\$701,764.50	\$0.00	\$701,764.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Sub Total Renewable Programs	\$131,034,761.62	\$1,740,866.04	\$701,764.50	\$290,202.50	\$125,585,993.67	\$2,399,312.91	\$316,622.00	\$0.00

Appendix C – Performance Incentives

Overview

The Market Manager RFP made clear that the winning bidders would be eligible to earn modest financial incentives for good performance. However, the specific goals articulated in the RFP were only appropriate in the program context in which they were developed (i.e. for the programs as they existed in 2005). As such, a revised set of goals and performance incentives are needed to match up with the 2010 New Jersey Clean Energy Program Plan filed by Honeywell. This document presents the proposed process for development of performance incentives for the 2010 NJCEP Residential Efficiency and Renewable Program Plans.

Incentive Levels

As part of the process to extend Honeywell's Market Manager contract through 2009, Treasury requested and Honeywell agreed to modify the amount of performance incentive funds available should certain goals be achieved. In 2010, the Honeywell Market Manager team will propose to maintain the same level of incentive funds as in 2009.

Incentive Structure

Consistent with the 2009 Plan, for 2010, Honeywell will propose that both the residential efficiency and renewable energy sectors' goals are sector based only.

For the residential efficiency programs, all of the incentive dollars will be allocated across program goals related to electricity savings (MWh) and gas savings (DTh) to which all programs contribute.

For the renewable sector, all performance incentives will be associated with the Renewable Energy Incentive Program (REIP). The RE sector incentives will be tied to increasing customer sited wind and bio power project approvals, completions and market development through completion of wind and bio power feasibility studies.

Defining Goal Achievement

All goals will be expressed as 2010 calendar year goals. Thus, all savings, generation and participants occurring between January 1, 2010 and December 31, 2010 will count toward goal achievement. Goals will be set with that period in mind. The goals for efficiency and renewable programs will be based largely on past program experience in

New Jersey, market trends, and experience in other leading states, with adjustments made to account for significant changes in either market conditions or program design.

Efficiency savings, estimated renewable generation from non-solar completions and participants will be counted towards goals only for projects that are processed by the relevant programs during the 2010 calendar year.

Efficiency savings and renewable energy generation goals will be based on algorithms contained in protocols that are governed by the BPU.

Specific Goals

Specific residential efficiency program goals and the performance incentives associated with them will be implemented by way of a contract modification, and subject to review and approval by the NJ Office of Clean Energy and the Board of Public Utilities.