New Jersey's Clean Energy Program™

Honeywell's Residential Energy Efficiency and Renewable Energy Program Plan Filing for 2011

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Honeywell's Residential Energy Efficiency and Renewable Energy Program Plan for 2011

Introduction

This Program Plan provides program descriptions, goals, marketing plans, and budgets for the four residential energy efficiency and two renewable energy programs to be managed and/or supported by Honeywell in 2011:

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®)

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, 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, while at the same time adapting program services to account for significant budget reductions.

The 2011 Program Plans presented here represent models which together will:

- Reduce non-incentive costs by approximately 36% compared to the most recent 2010 budget.
- Streamline, automate, and aggregate processes, in order to increase effectiveness and reduce program transaction costs.
- Hasten the transition to upstream incentives versus direct to consumer incentives.

- Transition program advertising to cooperative advertising incentives for contractors, retailers and program sponsors.
- Foster loan programs through interest rate buydowns to remove barriers to customer participation. Continue to provide services to all customer classes.
- Continue to place New Jersey as a national leader in forward facing initiatives that support new technologies and market transformation.

Furthermore, the 2011 program plans reflect the ongoing work to support the utilities' energy efficiency and economic programs. We also considered and planned for the American Recovery and Reinvestment Act of 2009 (ARRA) activities the State will enact in 2011, 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.

Following the program descriptions are three Appendices. **Appendix A** represents the 2011 residential energy efficiency and renewable energy Marketing Plan. **Appendix B** provides a summary of total revised 2011 program costs, broken down by cost category. **Appendix C** is the EPA's transition schedule for Version 3 of the ENERGY STAR New Homes program.

New Jersey's Clean Energy Program™

2011 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. The Market Managers will track the implementation of new construction code changes and will propose incentives modifications as appropriate.

The 2011 program will maintain and expand the open market structure for the provision of home energy ratings which debuted in 2010, and transition the qualifying efficiency requirements to keep alignment with EPA's ENERGY STAR New Homes standards as they move to Version 3. (See Appendix C for the published EPA implementation schedule.)

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;
4. Inability of consumers, lenders, appraisers and others to differentiate between efficient and standard homes;
5. The sharp impact of the economic downturn on the housing market;

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.

- Leverage national marketing campaign sponsored by ENERGY STAR to promote the transition to the new standard.
- Technical assistance to inform builders and their subcontractors on the transition plan and details of ENERGY STAR New Homes Version 3.
- Verification (inspections and testing) and program certification of previously enrolled qualifying homes, and the inspections and certifications provided by the open market for ratings services.

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 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."

New homes are not eligible for participation or incentives under the Residential Gas and Electric HVAC program (Cool Advantage/Warm Advantage).

Offerings and Incentives

To meet the qualifying level, a new home must:

1. Meet the EPA ENERGY STAR New Homes Standards in accordance with the published schedule[1] (see Attachment C) which may be subject to changes made by the EPA subsequent to the filing of this document. Multifamily buildings over three floors and up to six floors[2] may be required to demonstrate compliance through the EPA ENERGY STAR for High-Rise Multifamily Buildings Standard (buildings over six floors may participate in through the C&I Smart Start Buildings program);
2. Comply with the EPA-mandated checklists in accordance with the published schedule as applicable, (Note: new checklists are planned to phase in over the course of 2011);
3. Comply with all EPA mandatory additional requirements (including proper HVAC sizing and duct leakage limits), according to the schedule 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, as required by ASHRAE 62.2 compliance under v3;
7. Install ENERGY STAR labeled CFL bulbs in at least 60% of all light sockets (including exterior fixtures); or comply with the EPA Advanced Lighting Package (ALP) and
8. Install only direct or power vented space heating, water heating, and/or fireplace combustion appliances, when present (Note: Incorporated into Version 3).
9. Be built 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".

A limited number of "NJ Climate Choice Homes" (formerly 2010 Tier 3 "NJ Microload Home") projects will be approved in 2011.

[1] http://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh_2011_comments

[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"

Table 1: 2011 Financial Incentives per Unit

Building Type	2011 ENERGY STAR New Homes Version 2.5/3	2011 NJ Climate Choice Homes
Single Family	**$3,500**	**$10,000 to achieve 50 points, plus $800 per index point below 50 points (maximum incentive is $26,000/unit)**
Multiple Single Family ("Townhouse")	**$2,625**	**$7,000 to achieve 50 points, plus $500 per index point below 50 points (maximum incentive is $17,000/unit)**
Multiple-Family Building ("Multifamily")	**$1,750**	**$4,000 to achieve 50 points, plus $400 per index point below 50 points (maximum incentive is $12,000/unit)**

NJ Climate Choice Homes incentives will be updated upon review of the forthcoming EPA Concept Home guidelines.

Table 2 Climate Choice Homes Staged Incentive 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 Homes) 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) qualifying level requirements. In this circumstance, the Market Manager will generate a letter to the appropriate party requesting any monies due.

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. These efforts will work together with the EPA's plans for an aggressive national campaign to promote the new ENERGY STAR standard and will facilitate the program's efforts to maintain builder participation in the face of the broader economic downturn and increased requirements.

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

Planned Program Implementation Activities for 2011

Transition to ENERGY STAR New Homes Version 2.5/3

Beginning in January, 2011, or upon Board approval of program filing and contract modifications, the program will align completed home certification requirements in accordance with the published schedule as determined by EPA ENERGY STAR New Homes.

Single Family and Multi-Single Family building projects that are enrolled and permitted before January 1, 2011, and are completed within their enrolled commitment period, but after the EPA implementation date for ENERGY STAR Version 2.5—currently scheduled for July 1, 2011—must comply with the ENERGY STAR requirements in effect at the time of completion to be eligible to receive incentive payments. The incentives paid at completion will be in accordance with the program incentive table in effect, and will be reduced in accordance with any progress payments already received. Multi-Family building projects will likewise be held to the standards and incentive levels at the time of completion, but the current schedule indicates the new standards will not be implemented until January 1, 2012.

Expanded Open Market for HERS Ratings

The program will continue to support the ENERGY STAR for Multifamily Buildings (new construction) for eligible buildings over three floors (based on the ASHRAE 90.1 modeling methodology rather than the Home Energy Rating System). Beginning in 2011, implementation services (project review and verification) will be provided by the open market for rating services and certifications. The program will provide oversight through quality assurance activities within this program area. Incentives listed in table 1 apply.

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 in accordance with the value of services already provided to the project under the prior enrollment.

To maintain a robust rating marketplace, the Market Manager will perform quality control and oversight processes. Quality Assurance activities will continue to be performed by the Program, in proportion to the track records of raters and builders through program inspections.

Quality Control Provisions

Market-based delivery of ratings services and certifications requires an effective 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 higher and will decrease as they demonstrate proficiency in proper building techniques and the qualifying requirements of the Program.

Budget

A detailed budget for this program for 2011 is attached in Appendix B.

Only the direct incentive costs for units expected to be built in 2011, as well as the value of direct incentives for homes committed in 2011 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 2011 are as follows:

- 2,500 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) for projects that have committed to build to the NJ ENERGY STAR Homes program standard.
- 2,000 New Jersey Certificates of Occupancy for qualifying residential new construction types (single family, townhouse and multi-family) for projects that have been certified to the NJ ENERGY STAR Homes program standard in the current year.
- Maintain a sufficient number of HERS rating companies to actively 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™

2011 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;

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 and program support for quality heating equipment installation that optimizes operating efficiency at time of installation;
- Co-operative marketing assistance to trade allies in the direct promotion of high efficiency HVAC equipment;
- 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;

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. 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 2011, *WARM*Advantage will continue to pilot incentives for the purchase and installation of solar domestic water heating systems for electric water heating customers. NJ Residential Gas & Electric HVAC program will also, contingent upon availability of funds, continue to support the state's ARRA Appliance Program.

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.

Offerings and Incentives

*COOL*Advantage

*COOL*Advantage will discontinue direct to consumer incentives for equipment formerly eligible for incentives at the 2010 qualifying tiers 1 and 2. Direct to customer incentives will continue to be available at the 2010 Tier 3 qualifying level (>= SEER 16, and EER 13, & correct sizing) but at a reduced incentive amount. Equipment incentives will be paid directly to homeowners, or with written consent, assignable to contractors as summarized in Table 1 below.

Table 1: *COOL*Advantage Central A/C and Heat Pump Customer Incentives[3]

Eligible Equipment Requirements	Full Incentive Amount	Confirmation Documentation
≥ **SEER 16** ≥ **EER 13** **In the case of heat pumps:** ≥ **HSPF 8.5**	$500	• Compressor/ coil combination ratings[4] • Proper sizing and selection

*WARM*Advantage

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 boilers). direct to consumer incentives for efficient gas water heaters will be limited to equipment with an Energy Factor of at least 0.82 (this level is intended to include tankless water heating technologies.) Table 2, below, describes applicable efficiency levels and corresponding incentives for high efficiency gas equipment.

Table 2: *WARM*Advantage Direct to Customer 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	0.82 Energy Factor or greater	$300
Solar Domestic Hot Water	TBD and approved by staff through evaluation of pilot performance	$1,200 $1,200

Incentives will continue to be available for residential solar domestic water heating systems, through a limited number of rebates. Eligibility will 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, *WARM*Advantage 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.

[3] Note that ductless mini-split (DMS) systems are eligible to participate under the same requirements as central air conditioners or heat pumps.

[4] From CEE-ARI directory or equivalent ENERGY STAR listing.

*COOL*Advantage and *WARM*Advantage

In 2011 the program will begin to pilot upstream incentives in partnership with HVAC trade allies to support increased sales of efficient HVAC equipment. The pilot will review incentives for central space cooling and heating equipment, and water heating equipment.

All new program requirements, procedures and incentives will take effect after written notification to the HVAC industry. Any application for a purchase made after the 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. 2010) program.

Planned Program Implementation Activities for 2011

The following program implementation activities will be undertaken in 2011:

- Continue incentives for heating and cooling equipment;
- Continue the solar water heating as a *WARM*Advantage program measure.
- Pilot upstream incentives through negotiated agreements which leverage program incentives through coordinated partnerships with trade allies (manufacturers and distributors) for matching consumer discounts;
- Provide co-operative marketing incentives to support approved trade ally promotions of high efficiency space heating, cooling, and water heating equipment. The program will also pursue opportunities for enhancing cross-marketing with other programs, particularly the Utility approved enhanced incentive programs.
- Support the training of HVAC contractors and technicians on the proper calculation of heating and cooling loads, system design, installation techniques, and consumer benefits of high efficiency gas heating and cooling equipment and/or any other substantial form of training that is directly related to the promotion of energy efficiency and quality equipment installation.

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 and/or the eligible products list from ENERGY STAR. Each application and its information are entered into a database which checks for duplicate applicants through an equipment serial number comparison.

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 and/or the eligible products list from ENERGY STAR. 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, units from both electric and gas rebate applications are selected for an in-depth 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.

Budget

A detailed budget for this program for 2011 is attached in Appendix B

Goals and Energy Savings

Program goals are as follows:

- Process applications for more than 10,500 efficient central air conditioner and heat pump equipment installations statewide.
- Process more than 28,000 energy efficient gas space heating and/or water heating equipment incentive applications statewide.
- Process upstream incentives amounting to more than 2,400 heating and cooling equipment.
- Train at least 600 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™

2011 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. 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

In 2011 the program will continue to provide some targeted rebates/incentives to consumers for the purchase of selected energy efficient products. At the same time, the program will continue the transition towards greater upstream initiatives that leverage manufacturers, distributers and retailers incentives and marketing dollars. These initiatives will increase available funds for incentives and decrease program operating costs. The program will also offer marketing and training support to new retailers, manufacturers, contractors and other organizations while continuing to maintain existing partner relationships.

Offerings and Customer Incentives

In 2011 the Energy Efficient Products Program will continue to offer retail price incentives through upstream markdown promotions for qualified lighting products and , clothes washers on a year-round basis. These incentives will be supported with a variety of promotional approaches, including leveraging Environmental Protection Agency (EPA) national ENERGY STAR campaigns. We also plan to review existing Green New Jersey Resource Team (GNJRT) initiatives that distribute CFLs and educate New Jersians through community outreach and events. The 2011 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.

On-line Energy Audit

During 2011 the program will coordinate with utility sponsored audits, providing links from the NJCEP website and marketing NJCEP offerings to the extent possible.

Incentives for ENERGY STAR qualified lighting products

Compact Fluorescent Lamp (CFL) penetration studies completed in 2010 by the DOE indicate a significant remaining potential for energy savings in NJ homes from switching incandescent lamps to CFLs. In 2011 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 2011. 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 2010 initiatives and regional promotions for qualifying SSL fixtures,

the 2011 mark down incentives will be in the range of $0.60 - $0.75 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 2011, 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. Additionally, the program will look to pilot a market lift approach with select retailers in order to accelerate the market adoption of CFLs, SSL and other high efficiency lighting products.

Incentives for ENERGY STAR qualified appliances and equipment

The program will look for additional opportunities to shift away from direct to consumer mail in rebates through partnerships with New Jersey retailers for promotions of higher performance ENERGY STAR clothes washers and room air conditioners. The program will offer retailers a markdown promotion of $50 for energy and water efficient clothes washers at a minimum modified energy factor (MEF) of 2.2. The program will select participating retailers based on matching price reductions for promotional periods. The program will look for opportunities to offer the same promotional program to retailers on qualified room air conditioners and other ENERGY STAR appliances. While the Market Manager pilots these new upstream opportunities, the Program will continue to offer direct to consumer mail in rebates on clothes washers.

Appliance Early Retirement

In 2011 the Program will continue the 2010 initiative to offer a $50 incentive to New Jersey residents for turning in their working old, inefficient secondary refrigerators and freezers for recycling.

Creative Initiatives & Consumer Electronics

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 NJCEP. In 2011 the Program will limit this initiative to provide CFL distribution through community outreach events as well as corporate events aimed at employee distributions. The program will also support the expansion of participating New Jersey cable service providers within the set top box initiative. Incentives are negotiated with partners and will vary depending upon the type of product and the market segment targeted.

Planned Program Implementation Activities for 2011

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 2011:

General Activities

Maintain existing retailer base and recruit new retailers as needed. Starting in 2011, the Program will look to leverage retailer participation in developing and distributing

collateral and "point of purchase" (POP) materials for product groups, provide retail associate training. Promote the Program on an as needed basis at NJCEP sponsored events.

Change The World - Start With ENERGY STAR

The 2011 Change The World – Start With ENERGY STAR program will include a continued focus on strengthening diverse lighting promotions throughout the year, including CFL retail price markdowns with select retailers.

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 2011 continued 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. Additionally, a market lift approach will be piloted to allow for a cost-effective approach to accelerating the market adoption of CFLs and other high efficiency lighting products.

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 2011. The 2011 Green New Jersey Resource Team (GNJRT) initiatives will be focused primarily on community outreach and events support.

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 significantly in 2010. In 2011 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.

Appliance "Early Retirement" Program

In 2011 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 2011, the program will capitalize on the rapid advancements in set top box, and the participation of national and state level cable service companies to focus efforts on the dramatic increase of energy consumption of consumer electronics. The promotion will involve consumer marketing, local community organization and manufacturer partnering and service provider incentives. The Program will further investigate opportunities for cross-cutting NJCEP program promotion through ENERGY STAR qualified set top box service providers.

CFL Recycling

Following the voluntary initiation of an on-site CFL recycling program by a major NJ retailer in 2008, the Program's 2011 mark-down solicitation's proposal scoring system will continue to 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

During 2010, the program was successful in advancing a consortium of efficiency programs, manufacturers and the EPA on behalf of ENERGY STAR in the introduction of a super efficient clothes dryer in to the North American market. Although no new R&D initiatives will be introduced for energy efficient products in 2011, the program will look to continue its support for the Super Efficient Dryer Initiative (SEDI).

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.

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 2011 is attached in Appendix B.

Goals and Energy Savings

Goals

Program goals are as follows:

- Achieve sales and distribution in excess of 5.25 million CFLs in NJ in 2011;
- Provide at least 20,000 rebates for clothes washers;
- Remove at least 15,000 old, inefficient refrigerators and freezers from NJ residential homes;
- Provide at least 100,000 rebates for high efficiency set top boxes;
- Provide CFL distribution and customer outreach through creative partners

Energy Savings

Energy savings will be calculated consistent with Board approved protocols.

New Jersey's Clean Energy Program™

2011 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 Program has significantly ramped up activities since its inception in 2008, when it served less than 200 homes, to 2010 when approximately 5,000 households were served. In that time, the Program has supported the development of a qualified and robust contractor network, contributing to local job growth and boosting local economies. In 2011, the Program will maintain a similar pace of approximately 5,000 homes that will participate in the HPwES Program through a combination of:

- Changing the incentive structures for both customers and contractors;
- Streamlining and implementing automation of administrative processes in order to reduce Program support costs, and to simplify the Program for contractors and customers, including allowing contractors to self-evaluate the energy savings and

incentive qualifications for projects and to proceed with completing the work without a Work Scope Approval (Auto Proceed);

- No longer offering BPI training through the Program, but helping direct contractors to the appropriate organizations outside the Program that offer such trainings at market price;
- Continuing to offer contractor training on the Program's software, Real Home Analyzer (RHA), to ensure their ability to use the software to enter their project's data and perform savings evaluation;
- Implementing the Contractor Remediation Procedures to effectively manage contractors' performance to ensure customers receive agreed upon energy efficiency services based on BPI national standards;
- Reducing the percent of homes that require Quality Assurance inspections; and
- Continuing to effectively partner with NJ's investor owned utilities to leverage additional resources and offers.

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 targets existing one, two, three and four-family homes; either attached or detached, and served by an investor-owned utility. However, through the use of ARRA funding, in 2011 the Program will be available to all residential customers in NJ, including oil, propane and municipal electric customers, until that funding is expended. The Program will also continue to coordinate with the programs funded by investor-owned utilities.

Also, the EPA expanded the definition of buildings eligible to participate in HPwES programs nationally to include small multi-family buildings. In NJ, the target market for the multi-family component of the HPwES program is multi-family buildings less than three stories high. NJ has many large developments consisting of low-rise multi-family buildings and some Program contractors have demonstrated the skills and capacity to serve this market.

Program Implementation

To initiate participation in the Program, a customer requests an assessment performed by a NJ HPwES registered and Building Performance Institute (BPI) accredited and certified contractor. In addition to checking for health and safety issues, the assessment includes recommendations for appropriate energy efficiency improvements relevant to the home. Assessors are trained to promote the installation of comprehensive energy efficiency improvement measures, which may be eligible for Program rebates and financing

incentives based upon the total energy savings (TES) estimated for the work to be performed (see Offerings, and Contractor and Customer Incentives below).

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 abide by BPI standards governing health and safety, work quality, insurance coverage, customer service, and complaint resolution.

Program Incentives

Two types of incentives are offered by the NJ HPwES program to address both the demand and supply side of the Program participation equation:

- Incentives to encourage customer participation and promote energy savings
- Incentives to encourage contractor participation and promote energy savings

Further, incentives are structured to promote comprehensive savings with the highest incentive offered for the greatest energy savings, as well as to accommodate customers who participate in other NJ energy efficiency programs. For example, it is possible for a customer to participate in *WARMA*dvantage and receive a rebate for installing a high efficiency furnace from that program. Such a customer then can enroll in HPwES for additional efficiency savings through thermal envelope work, for example. Since customers are free to pick and choose among the comprehensive work scope recommendations provided by the participating program contractor, the incentive structure is intended to reward customers who pursue the highest possible savings, and to reward contractors for promoting a comprehensive set of recommendations.

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The following modifications to the existing incentive structure are intended to promote increased program participation. The specifics of the modifications are further described in the table which follows. The basic tiered structure has been maintained as below.

- Tier 1: Energy audit only and no incentives
- Tier 2: between 10-19.99% Total Energy Savings (TES)
- Tier 3, Level 1: between 20-24.99% Total Energy Savings (TES)
- Tier 3, Level 2: at least 25% Total Energy Savings (TES)

The TES estimates will be determined by use of the Real Home Analyzer software tool. Regardless of Tier, BPI Accreditation requirements will and must be enforced, including prohibiting air sealing without first addressing relevant health/safety issues such as failing spillage/back draft testing, and requiring mechanical ventilation to ensure adequate indoor air quality to meet ASHRAE and BPI ventilation requirements.

Table 1: NJ HPwES Incentives and Requirements

INCENTIVE TIER	REQUIREMENTS	CUSTOMER INCENTIVE	CONTRACTOR INCENTIVE
Tier 1	Energy audit only	no incentives	no incentives
Tier 2	Must install air sealing. May install insulation and may also install duct sealing and duct insulation measures. Participants may also include hot water heater measures from the Eligible Measures List. Estimated total energy savings from all work must total at least 10% but less than 20%.	$1,000 cash rebate, not to exceed 50% of the costs of the measures used to calculate TES and, for NJNG OBRP customers, 0% interest financing up to $10,000. [1] <u>Summer 2011 Promotion</u> Customers who enroll during the Summer 2011 Promotion Period[8] are eligible for a discount of $500.[9]	Upon satisfactory project completion, including meeting program guidelines for quality work and addressing health/safety issues, a $500 production incentive will be given.[7] <u>Summer 2011 Promotion</u> $500. Promotion Period discount reimbursed to the contractor.[10]
Tier 3	Level 1. Must install air sealing. May install insulation, HVAC, DHW and/or other measures from the Eligible Measures List. A minimum of two Level-1 measures must be installed. Estimated total energy savings from all work must total at least 20% but less than 25%.	$3,000 cash rebate, not to exceed 50% of the costs of the measures used to calculate TES, and 0% interest financing available up to $10,000. [1, 2] <u>Summer 2011 Promotion</u> Customers who enroll during the Summer 2011 Promotion Period[8] are eligible for a discount of $750.[9]	Upon satisfactory project completion, including meeting program guidelines for quality work and addressing health/safety issues, a $500 production incentive will be given.[7] <u>Summer 2011 Promotion</u> $750. Promotion Period discount reimbursed to the contractor.[10]
	Level 2. Must install air sealing. May install insulation, HVAC, DHW and/or other measures from the Eligible Measures List. A minimum of two Level-2 measures must be	$4,000 cash rebate, not to exceed 50% of the costs of the measures used to calculate TES, and 0% interest financing available up to $10,000. [1, 2] <u>Summer 2011 Promotion</u>	Upon satisfactory project completion, including meeting program guidelines for quality work and addressing health/safety issues, a $500 production incentive will be given.[7]

installed. Estimated total energy savings must total at least 25%.	Customers who enroll during the Summer 2011 Promotion Period[8] are eligible for a discount of $1000.[9]	Summer 2011 Promotion $1000. Promotion Period discount reimbursed to the contractor.[10]

Table 1: NJ HPwES Incentives and Requirements Notes:

1. The Market Manager has been advised that NJ utilities will offer 0% loans up to $10,000 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 loan program is not in place.
2. The Market Manager will coordinate with the Program Coordinator and the Office of Clean Energy to process and pay incentives from funds supplied by other sources as they may become available.
3. Appliances, lighting, doors, and windows are not measures eligible for Program incentives.
4. The measures used to calculate TES may also include health & safety measures and qualified accessories, as listed on the NJ HPwES Eligible Measures document, as a component to the installations of Eligible Measures.
5. Contractor support for cooperative advertising will continue to be available. The coop advertisement plans and incentive structure will be developed and administered by the Market Manager.
6. Projects will continue to have expiration dates. The contractor will need to re-submit projects to the program following the Auto Proceed process for projects not completed and submitted to the program prior to their expiration date, and will be eligible for the incentive levels available at the time of resubmittal.
7. This incentive will be reduced to $250 if the project fails an initial quality control inspection. If a second quality control inspection is a failure, no production incentive will be given and the contractor will be locked out of the Auto Proceed process. This penalty will not be applied to new contractors for their first ten inspections.
8. The Summer 2011 Promotion Period will be in effect following the signed Board Order and will continue through 9/30/2011. Projects with enrollments during this period as well as active projects enrolled in the Program since January 4, 2011 but not yet submitted as completed are eligible for Summer Promotion Discounts.
9. The Summer 2011 Promotion Period discount will be taken off of the total cost of eligible measures and will be applied before the cash rebate is calculated.
10. The limited time discount will be reimbursed to the contractor only upon satisfactory project completion
11. Subject to Board approval the summer promotion incentives will be funded with federal SEP funds.

Multi-Family Buildings

The EPA has determined that small multi-family (MF) building developments may participate in HPwES. The NJ HPwES program defines eligibility as buildings that are:

- less than three stories high,
- has single ownership,
- total building energy usage is accessible through individual metering of the units within the multifamily structure, or a master meter at the building (as opposed to sites with multiple buildings heated by a central heating plant),
- is made up of five or more units in a single building, or multiple buildings (each with five or more units), within a single geographic boundary and with a single property management structure.

Honeywell has coordinated with TRC, the C&I Market Manager so that Multi-family facilities that do not meet these criteria fall into the C&I Program for Energy Efficient measures. The Program will offer the following incentive structure for multifamily projects:

- Improvement packages showing a minimum of 10% but less than 20% estimated total building energy savings will receive a per unit incentive of $300 not to exceed 50% of the costs of the measures used to calculate TES.

- Improvement packages showing a minimum of 20% but less than 25% estimated total building energy savings will receive a per unit incentive of $900 not to exceed 50% of the costs of the measures used to calculate TES.

- Improvement packages showing 25% or greater estimated total building energy savings will receive a per unit incentive of $1200 not to exceed 50% of the costs of the measures used to calculate TES.

The total incentive amount for a multi-family project must not exceed 50% of the total costs of approved measures. If the total multi-family project incentive based on the above structure yields an amount greater than 50% of the costs of approved measures, the incentive amount offered will be lowered to the 50% maximum.

HPwES Program work scopes **must** consider a whole building approach to be approved. Individual units within a multi-family structure or development are not eligible for the program independently of the entire building or development; however, they may take advantage of other NJCEP offerings, such as the *WARM* and *COOL*Advantage programs.

Townhouses, as defined by the New Jersey Residential Code[5], are considered single family homes, and as such the same incentive levels given to single family homes will apply to townhouses.

The Program will work with the contractor of a multi-family project to ensure proper project assessment and approval process. Multi-family buildings are to be addressed in accordance with the BPI Multi-family Building Standards. The Program will only approve such projects for contractors that have at least one staff member holding BPI Multi-family certification.

Other

- As noted, some NJ utilities are coordinating with the New Jersey Home Performance with ENERGY STAR Program to fund the 0% interest loan. The Market Manager will continue to work with the NJ utilities to leverage these and any other applicable utility incentives in 2011.
- In 2011 the Market Manager will continue 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.
- It is incumbent upon the Program to effectively evaluate new technologies as they become available. In 2011, 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.
- Under Tier 3 of the Program, customers replacing heating and/or central cooling systems will be eligible for incentives on their new HVAC systems under the NJCEP HPwES Program; they may not apply for additional incentives from the NJCEP HVAC program. Under Tier 2 of the Program, customers may receive HPwES incentives only for eligible building envelope and duct system energy efficiency measures and eligible hot water heaters; they may not apply for or receive water heater incentives from the NJCEP HVAC program.

[5] NJ IRC R202: Townhouse: A single-family dwelling unit constructed in a group of three or more attached units in which each unit extends from foundation to roof and with open space on at least two sides

Quality Control Provisions

It is very important that the integrity of the HPwES brand be protected. The standards for becoming an HPwES contractor are quite demanding. 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 Quality Assurance Inspection Report will be given to the contractor which details the necessary corrective action that must be taken. Once the corrective work is done, a Quality Assurance Inspection Report must be signed by the contractor and customer and sent to the Program, which may schedule a re-inspection to ensure compliance. Similar QA/QC procedures are proposed for all Existing Homes work. Contractors that are not meeting Program standards will be subject to the Contractor Remediation Procedures which could include denial of access to Real Home Analyzer, removal from the Auto Proceed process and ultimately termination from the program. The Market Manager will continue to work with contractors to resolve inspection failures as quickly and reasonably as possible.

The program will continue to implement the "Contractor Remediation Procedures", which were approved on October 5, 2010, for all NJ Clean Energy Programs, and became effective on November 7, 2010.

As per the Board Order:

> ***The Board believes that the programs require a certain level of rigor such that customers participating in the program have the confidence that the contractor they select is not a significant or consistent violator of program procedures. Further, the Board believes that the programs require procedures for the Market Managers to address issues related to contractor non-performance or in extreme cases fraud or theft. Such procedures do not currently exist.***
>
> ***The proposed procedures set out distinguish between different levels of infractions and the recommended actions are appropriately related to the level of the infraction.***

The integration of these procedures, along with contractor incentives reductions for failed QA inspections, is expected to lower the overall percentage of projects that must receive an inspection from the Program, recognize and reward high performing contractors, and significantly reduce overall Program administration costs.

Budget

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

Goals and Energy Savings

Goals

Single Family

Tier 2: More than 850 customers will receive building envelope improvement packages that achieve at least 10% TES.

Tier 3, level 1: More than 2,550 customers will receive improvement packages , such as air sealing, insulation and/or heating system replacements, that achieve at least 20% TES.

Tier 3, level 2: More than 850 customers will receive improvement packages, such as air sealing, insulation and/or heating system replacements, that achieve at least 25% TES.

Multi-Family

Tier 2: More than 180 multi-family units will receive building envelope improvement packages that achieve at least 10% TES.

Tier 3, level 1: More than 350 multi-family units will receive improvement packages , such as air sealing, insulation and/or heating system replacements, that achieve at least 20% TES.

Tier 3, level 2: More than 350 multi-family units will receive improvement packages , such as air sealing, insulation and/or heating system replacements, that achieve at least 25% TES.

Energy Savings

Energy savings will be calculated consistent with Board approved protocols.

New Jersey's Clean Energy Program™

2011 Community Partners Program

Program Description

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.

Planned Program Implementation Activities

In 2011, the Market Manager will no longer support the Community Partners Program. It is the Market Manager understanding that community support for NJCEP Programs will be coordinated through Sustainable Jersey. The Honeywell Market Manager team will coordinate program participation issues with Sustainable Jersey personnel.

Offerings, and Contractor and Customer Incentives

There are no incentives for Community Partners in the 2011 Energy Efficiency Programs budget.

New Jersey's Clean Energy Program™

2011 Renewable Energy Programs

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 Energy portfolio for 2011. These include:

1) Renewable Energy Incentive Program (REIP): Offers incentives and registration for renewable energy certificates for customer-sited wind and bio power projects. In 2011 solar projects are no longer eligible for REIP upfront incentives.

2) SREC Registration Program (SRP): Provides registration for solar renewable energy certificates (SRECs) for non-rebated solar projects, including direct grid-connected projects connected to the New Jersey distribution system. Direct grid-connected projects registrants must work with their EDC or PJM to provide a document to verify that the generating facility is interconnected with an electric distribution system that supplies New Jersey.

A new incentive is available for SRP projects less than or equal to 50.0 kW that can prove acceptance in the JCP&L/ACE/ RECO SREC financing program. This incentive will be known as the EDC Solar Financing Incentive (ESFI) and will be discussed in the 2011 Program Changes and the Offerings and Customer Incentives sections of this document.

Additional Incentives Available For Solar Projects

In addition, the New Jersey Renewable Energy Manufacturing Incentive (NJREMI) continues to be available for solar projects which are supplied with panels, inverters or racking systems from New Jersey manufacturers. These incentives begin at $.15 per watt for racking system and inverters and up to $.25 per watt for panels. Additional details and the incentive schedule may be found in the NJ REMI section of this document.

During 2010 and early 2011, despite continuing sluggishness in the overall economy, the solar market in New Jersey remained robust for both residential and non-residential markets. New Jersey has recently passed 330 MW of installed capacity, representing approximately $2.3 billion in project investments (matched by 30% federal dollars), and seeding a clean tech growth industry which has resulted in several thousand jobs, and enhanced New Jersey's image as a market leader. There is over 329 MW of project capacity in the REIP, CORE and SRP pipelines, providing evidence that the market based SRECs are providing sufficient incentives to stimulate project development, with the

potential for future SREC pricing declines as market supply catches up with growing RPS demand. The SRP program is currently receiving over 600 applications per month, with over 2,400 applications received over the past four months compared to 284 applications for all of 2009.

There continues to be interest in wind and biopower projects however, the pace of project development for onsite projects remains slow due to issues with availability of onsite resource, slow permitting processes, and technology risks.

In 2011, the focus will be on sustaining the resilient growth of New Jersey's solar markets, continuing the market transformation from incentives to SRECs, and reducing SREC costs to ratepayers by encouraging long term SREC contracts. The Market Manager will also spend considerable effort in managing the carryover projects from the CORE Rebate Program, REIP and SRP Programs. In addition, the program will continue to support momentum in wind and bio-power markets.

The transition away from upfront incentives and the ongoing requirement that all SRP projects require a revenue grade meter to measure the system output will allow for a more streamlined and automated registration submittal and acceptance process and reduced inspection requirements in 2011. These changes will allow the program to manage the robust application volumes, while reducing costs and improving the experience of program participants.

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 incentives 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 certificates, 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 financiers.

2011 Program Changes

In response to stakeholder feedback, market conditions, and policy developments, the Market Manager proposes a number of enhancements and changes in the 2011 Program Plan. These include:

1) There will be no upfront rebates for solar projects. These will be replaced with an EDC Solar Financing Incentive for those projects which participate in the EDC Financing Program in which JCPL, ACE, and RECO establish long term SREC contract prices via the EDC SREC solicitation process. The budget will be $3.3 million.

2) To be eligible for the EDC Solar Financing Incentive (ESFI), residential projects less than or equal to 10.0 kW and public and non-profit projects less than or equal to 50.0 kW must document acceptance in the EDC SREC-Based Financing Program. Eligible residential projects include customer owned and financed systems, residential new construction in Smart Growth areas (for builders and homeowners), and residential systems using a leasing or power purchase agreement.

   An incentive of $0.50/Watt will be available to all eligible SRP projects that execute a Board-approved SREC Purchase and Sale Agreement with their EDC resulting from their participation in an EDC SREC solicitation occurring between January 1, 2011 and the June 2011 solicitation that is currently due June 10, 2011. The residential project incentive will be capped at 7.5 kW and the Public and Non-Profit project incentive will be capped at 30.0 kW. Upon acceptance by the Board of each round of solicitation results, the ESFI incentive will be reserved for each project so named for a period of one year.

3) Behind the meter wind or biopower projects will remain eligible for an REIP incentive using the guidelines in effect in 2010. However, effective on March 8, 2011 a temporary hold was placed on submitting new wind project applications. The hold was imposed following two safety-related incidents that occurred earlier this year involving wind energy systems. The decision on how and when to proceed with lifting the temporary hold on new project applications will be contingent upon a satisfactory understanding of the safety of each wind turbine that is installed for any project that participates in the NJ Clean Energy Program. Updates on this process will be posted on the NJCEP Renewable Energy website.

   Incentives will also be provided to support project feasibility studies for wind and bio-power projects larger than 100 kW. The incentive level will match 50% of the cost of the feasibility study, capped at a maximum of $50K. Also, the wind program will be expanded to include financial support for turbines not currently on the approved list including Vertical Axis Wind Turbines. This incentive will be paid for actual production of installation of those technologies during 12 months of energy production. The total budget for these non-solar projects will be $5.0 million.

4) The New Jersey Renewable Energy Manufacturing Incentive (NJREMI) will remain intact for solar panels, inverters and racking systems, with a budget of $1.0 million.

5) Continue to process the growing volume of SREC Registration applications, using automation to reduce administrative fees associated with project applications and increasing reliance on revenue grade output meters to reduce the need and cost associated with project inspections. New registrations in the SRP will be required to be submitted via the online application procedure which will be developed by the Market Manager. The online application portal will be utilized by a limited number of installers during the initial stages and then will be expanded to include all registrants. The Market Managers will implement remediation procedures utilizing the process established in the recent Board Order if installers violate program rules.

6) The SREC Registration Program will no longer require projects to achieve a minimum system output to be eligible to generate SREC's. Details regarding each project installation will be provided to PJM GATS to ensure the proper treatment of SREC generation.

7) As noted in the NJ RPS rules, solar generating facilities are eligible to generate NJ SRECs beginning on the date on which the facility was interconnected to the local electric distribution system. Prior to receiving a NJ Certification number all solar generating facilities that participate in the NJ Clean Energy Program will be required to provide the EDC Notification of interconnection completion that establishes the date that the final interconnection has been completed and the system owner has permission to operate the system. Please refer to the Final Paperwork section of this document for additional details.

8) To reduce administrative fees and improve the speed of project completions, a number of program requirements will be eliminated or re-engineered. Those are highlighted in this document.

9) The extension policy for CORE and REIP solar projects is modified to reduce the number of extensions granted and to reduce the length of the approved extensions. Please refer to the section entitled "Extension Policy for CORE and REIP Solar Projects".

Renewable Energy Target Markets and Eligibility

Three renewable energy technology types are eligible to participate in the Renewable Energy Programs:

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.

All systems must meet program requirements regarding equipment certification, proper installation practices and compliance with program procedures and processes. Each of these technologies and markets is reviewed below:

Solar Markets and Programs

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.

All solar PV systems connected to the New Jersey distribution system can participate in New Jersey's SRP Program. All projects, including those that do not receive an REIP incentive must establish an SREC account. The target market for the program is composed of sellers, buyers, aggregators and brokers of SRECs. 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.

After extensive stakeholder input, it has been determined that rebates are no longer required for solar projects of any size. The combination of declining panel prices, more efficient installation techniques, federal tax incentives such as the Federal Investment Tax Credit (ITC) and depreciation, and the SREC market provide sufficient incentives to support solar project economics. Transitioning the solar industry from rebates to SRECs as an incentive delivery mechanism has been a stated policy goal of the BPU.

As part of this transition, and in an effort to reduce the cost of SREC compliance to ratepayers, in 2011 the ESFI incentive will be established to encourage solar market participants to enter into long term contracts to sell SRECs. The ESFI incentive will

respect the overall lifetime incentive cap of 10 kW with the exception of farms and residential tariff non-profits.

On Shore Wind and Bio Power Markets and Programs

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. While the approval for wind and biopower projects continues to show a steady increase, 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 2011 the NJCEP will continue to offer incentives under the REIP program for onsite wind and biopower projects. The wind and biopower incentives 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. In 2011, the wind and biopower program will also include an incentive to support project feasibility studies and wind projects will include enhancements to the program to support turbines not on the approved list, for example, Vertical Axis Wind Turbines. To be eligible, an applicant must be a ratepayer of a NJBPU regulated utility and pay into the Societal Benefits Charge.

To be eligible for an REIP incentive, wind and biopower systems also must respect the following caps:

- Wind systems, where the incentive 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 RECs.

- Bio power systems, where the system size must be less than estimated annual on site electric use and the incentive is capped at 1 MW AC of rated capacity. Bio power systems are also eligible for Class 1 RECs.

Offerings and Customer Incentives

The incentives offered by the Renewable Energy Programs differ by technology and project size:

Technology	<= 50KW	>50KW
Solar	ESFI Incentive (for eligible residential and public/non-profit projects), SREC, NJREMI	SREC, NJREMI
Wind & Biopower	Feasibility Study Incentive, REIP Incentive, Class 1 RECs	

The incentives provided for each technology are discussed below.

SOLAR

In 2011, there will be no upfront rebates available for solar projects. However, all solar generating facilities that are interconnected with an electric distribution system that supplies New Jersey will continue to be eligible for NJ SRECs by registering in the SREC Registration Program (SRP).

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 (SRP) 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.

In 2011, the Market Manager will streamline and automate parts of the SREC registration process. A full listing of program administrative changes is detailed in the Planned Program Implementation section below.

EDC Solar Financing Incentive (ESFI)

To encourage participation in the EDC SREC-Based Financing Program, incentives will be available to those SRP projects which enter into a long term contract to sell SRECs to either JCP&L, ACE or RECO. PSEG solar loan projects, and any other bi-lateral

contracts negotiated between SREC buyers and sellers which are not the result of participation in the EDC SREC solicitations, are not eligible for participation in the ESFI.

The total 2011 budget for ESFI is $3.3 million. An incentive of $0.50/Watt will be available to all eligible SRP projects that execute a Board-approved SREC Purchase and Sale Agreement with their EDC resulting from their participation in an EDC SREC solicitation occurring between January 1, 2011 and the June 2011 solicitation that is currently due June 10, 2011.

2011 ESFI Incentive - Eligibility

Project Type	Eligible Projects
Solar Residential:	All residential projects less than or equal to 10.0 kW of rated capacity. Eligible residential projects include customer owned and financed systems, residential new construction in Smart Growth areas (for builders and homeowners), and residential systems using a leasing or power purchase agreement. Only the first 7.5 kW of capacity is eligible for an incentive – with a maximum payment amount of $3,750. The lifetime residential payment cap of 10.0 kW will apply.
Solar Public and Non-Profit:	All public and non-profit projects that are a) less than or equal to 50.0 kW of rated capacity, and b) not using a power purchase agreement or other tax advantaged financing are eligible for the ESFI. Only the first 30.0 kW of capacity is eligible for an incentive – with a maximum payment amount of $15,000. This project type includes public and non-profit organizations (municipalities, other governments, public colleges and universities, public schools (K-12), and affordable housing.

Applicants may indicate their intent to participate in ESFI at the time they file their SRP application. However, the standard SRP registration acceptance letter will be issued without any commitment for the ESFI. Projects that are eligible for this incentive will receive a commitment at a later time as described in the process below.

Upon execution of a Board-approved SREC Purchase and Sale Agreement with their EDC resulting from their participation in an EDC SREC solicitation occurring between January 1, 2011 and the June 2011 solicitation, the ESFI commitment will be made for a period of 12 months from the date of the fully executed Purchase and Sale Agreement and the SRP project expiration date will be extended to match the expiration date of the ESFI commitment. Thus the fully executed Purchase and Sale Agreement will be the document which will modify the terms of the original SRP registration acceptance letter to commit the ESFI funds and extend the project expiration date. The extension of the SRP project expiration date will be subject to change to ensure consistency with the governing SRP project extension language contained in the rule re-adoption once the rule re-adoption is enacted.

When submitting the final as-built paper work with the ESFI payment request, the applicant must provide a copy of page 1 (to provide the Effective Date), page 5 (to provide the Signature Date) and Appendix B ("Seller's Project") of the fully executed Purchase and Sale Agreement. The incentive payment will be processed after all NJCEP installation requirements have been met including documentation by their EDC of the approval to interconnect and operate the system.

The Market Manager will track the ESFI payments and will post a report on the NJCEP website showing the remaining funds available so that market participants can gauge the availability of funds. As has been the case with REIP incentives, self installed solar projects will not be subject to the 15% payment reduction as had been the policy under the CORE Rebate Program.

New Jersey Renewable Energy Manufacturing Incentive (NJREMI)

The NJREMI offers incentives 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 NJREMI supplements the REIP incentives and 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 SRP 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 incentive 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. The 2011 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 Incentive
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 incentives; however, the incentive 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 incentive 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

WIND AND BIOPOWER

Wind and biopower projects will remain eligible for incentives under the REIP program for behind the meter projects where annual consumption equals or exceeds expected system output.

Both technologies will also be eligible for incentives for feasibility studies as defined below.

WIND

The 2011 incentive levels for wind projects remain the same as in 2010, and are based on the Expected Performance Based Buy Down (EPBB) methodology. Non-residential projects include private, public and non profit entities.

Project Type	Incentive Rate ($/kWh)	Maximum annual kWh	Maximum Incentive
Residential	$3.20	16,000	$51,200
Non- Residential	$.50/kWh starting at 16,001 kWh + $51,200	1,000,000	$543,000

The EPBB is designed to encourage wind installations at sites with a good, ~11+ MPH, average annual wind speed. The incentive 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 using new technologies.

Accordingly in 2011, wind project completion deadlines will remain at 18 months for all projects. This will provide greater flexibility for project development timelines, including permitting and siting issues. Existing approved but not completed REIP wind projects will be granted an automatic extension to December 31, 2011. REIP wind projects that have an existing expiration date that is after December 31, 2011 will retain that expiration date. Existing approved but not completed CORE wind projects, all of which are public projects, will be able to petition for first and second extensions in accordance with existing program rules.

In addition, incentives will be available to applicants using wind turbines that do not conform to the current program requirements. This would include non-listed horizontal axis turbines, listed horizontal axis turbines that will not be installed to conform to current program requirements, vertical axis wind turbines (VAWT) and other new technology turbines. Applicants using these technologies will be eligible to earn an

incentive under the Innovative Wind Technology Incentive (IWTI) methodology. If approved for the IWTI, the incentive payment will be paid based on actual performance of the turbine versus the current estimated production based incentive which uses the EPBB methodology.

To be eligible for IWTI, an applicant must submit an application to the REIP Program, and must be in compliance with all the current requirements of this program. The Technical Worksheet – Wind Equipment and the Pre-Application – Wind Equipment will be updated to include a line item indicating that the applicant is requesting approval under the Innovative Wind Technology Incentive (IWTI) program. The Wind Alternative Calculation Method (WACM) spreadsheet will no longer be required with the application. The maximum incentive will be calculated based upon the EPBB methodology, however the incentive payments will be paid quarterly for one year based upon actual production of the turbine. In order to calculate the maximum incentive using the EPBB methodology, the application must include a 3rd party certified power curve for the turbine with the application. To record actual production, all projects will install an ANSI C12 revenue grade meter and an anemometer to correlate production to the wind speed data.

Also to minimize the risk to the applicant, the incentive recipient must be the installer, distributor or manufacturer. The Market Manager will use the manufacturer's power curves, existing tools and current processes to determine the estimated production of the turbine. If a program inspection is required, the REIP inspectors will include in their protocol verification that the system is installed to manufacturer specifications and the ANSI C12 meter and anemometer is installed and working properly.

The project will be eligible to generate renewable energy credits RECs. To pay the quarterly incentives, the Market Manager will request confirmation on actual production. The actual incentive paid over the four quarters will not exceed the original approved incentive amount.

This production data will become public information. The NJCEP will institute a wind technical work group made up of interested stakeholders that would do the review of the turbine production and anemometer data.

BIO POWER

In 2011, the biopower incentive structure implemented in 2010 will be maintained as follows:

2011 REIP Bio Power Incentive Schedule

Power Only Incentives	
Watts	**$ Per Watt**
0-10,000	$4.00
10,001-99,999	$3.00
100,000-499,999	$1.50
500,000-1,000,000	$.15

The maximum incentive will continue to be capped at the lesser of 30% of installed costs or the incentive 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.

2011 REIP Bio Power Incentive Schedule

Heat & Power Incentive	
Watts	**Heat & Power**
0-10,000	$5.00
10,001-99,999	$3.75
100,000-499,999	$2.00
500,000-1,000,000	$.65

For heat and power projects overall incentives will be capped at lesser of 40% of project costs or the incentive 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.

WIND & BIOPOWER FEASIBILITY STUDIES

The Feasibility Study Incentive is designed to promote development of customer sited wind energy and sustainable biopower projects by offering an incentive during the

feasibility phase of the project. A feasibility study is a compilation of analytical tools and assessments that assist in determining the viability of a project. The incentive will provide financial support for sound engineering, financial, and legal analysis of projects to help improve the likelihood of the systems being built. It will also provide an opportunity for companies interested in pursuing projects with wind and biopower technologies to evaluate the feasibility of the projects without incurring all the financial burden. The study shall entail a comprehensive analysis that provides the necessary information to determine if a development project is technically, economically, and legally viable to allow the customer to make an informed "Go" or "No-Go" decision. A detailed outline of data required in the study has been developed to ensure consistency of formats and thoroughness of the study documentation.

The Feasibility Study Incentive is available to all New Jersey non-residential market segments that contribute to the Societal Benefit Charge (SBC) through the utility bill. Only behind the meter / net metered projects are eligible. The system(s) proposed must satisfy the current technical and program requirements as defined by the existing REIP program for wind or biopower equipment. The anticipated system size must be greater than or equal to 100 kW as justified through current 12 months historical energy consumption. All feasibility studies must be stamped by a licensed professional engineer. For wind systems, studies performed by a certified wind site assessor will also be acceptable. The size of the incentive awards will be determined by the expected size of the project. The NJCEP will pay up to 50% of the cost of the feasibility study not to exceed $50,000. The incentive payment will be paid in two equal installments. The first incentive payment will occur after completion of the feasibility study, and the second incentive payment will only occur if the wind or biopower project that was studied is completed, and will be paid after the installation is complete.

The size of the incentive awards will be determined by the expected size of the project as shown below:

Expected Project Size (kW)	**Incentive Award Range**
100 kW – 249.9 kW	50% of the cost of the feasibility study or $10,000, which ever is less.
250 kW – 499.9 kW	50% of the cost of the feasibility study or $25,000, which ever is less.
=> 500 Kw	50% of the cost of the feasibility study or $50,000, which ever is less.

To be eligible for the incentive, an applicant must submit an application packet to the REIP Program to request approval for a Feasibility Study Incentive. This packet will include the following:

i. **Current REIP Application Form**

ii. **Applicant Prequalification**: All applicants must demonstrate that the customer has been prequalified and informed about the steps that are involved in developing a wind energy or sustainable biopower project. Prequalification may include:
   - **a.** A statement of the Applicant's goals for the project
   - **b.** Standard financial underwriting requirements such as a credit check, borrowing capacity, budgeting and cash flow analysis.
   - **c.** Annual energy usage and how this matches up with the typical turbine or biopower generator's energy output.
   - **d.** Expectations on the customer's involvement in permitting, installation and maintenance.
   - **e.** For biopower projects, the anticipated sustainable fuel source or feedstock

iii. **Site Prequalification**: All applicants must demonstrate that the site has been prequalified by identifying basic information about:
   - **a.** The property's size and distances to abutters
   - **b.** The site's orientation
   - **c.** The utility territory
   - **d.** For wind systems, the average annual wind speed (Per REIP wind program requirements, sites must demonstrate a wind resource that is at least 11 MPH annual average at 50 meters according to existing wind resource maps)
   - **e.** For biopower systems – indicate roadway or rail access for feedstock delivery and demonstrate whether traffic impact studies may be required; indicate whether the New Jersey Department of Environmental Protection Air Quality Permitting Program testing and/or permitting may be required and included in the study.
   - **f.** Known zoning requirements

iv. **Letter of Commitment**: This letter should be signed by both the customer and the prime contractor who will be completing the feasibility study, and include the following:

- **a.** The price of the study
- **b.** An outline of the deliverables included in the price
  - **a.** This will need to match the Feasibility Study Outline document published on the feasibility study pages on www.njcleanenergy.com
- **c.** A timetable that shows the feasibility study will be completed within six months

v. **Team Qualifications:** Each application must include the qualifications of the development and feasibility study team

Applications that meet threshold eligibility requirements will qualify for the Feasibility Study Incentives. However if demand for studies exceeds the funding available, applications will be subject to a review by an evaluation committee. The projects will be ranked by a committee of experts, without conflict. Final awards will be determined based on indicators including, but not limited to;

- Scored reviews by the evaluation committee
- Funding availability
- Committee rankings
- Award recipient diversity (individual, non profit, profit, etc)
- Total amount of disbursement

Once the project is approved, a letter stating this and the terms and conditions will be mailed to the applicant and the installer. The completed feasibility study will need to be submitted to the NJCEP market manager within six months of the date of the approval letter. Upon acceptance by the NJCEP, if the study is deemed complete, the processing team will set up payment for the first half of the incentive, and the completed studied will be posted on the NJCEP website.

The second half of the feasibility study incentive will be added to the incentive for the renewable system project only if the NJCEP approves the incentive for the studied system. This portion of the incentive will be paid upon completion of the project.

The feasibility study data will become public information. The NJCEP will institute a wind technical work group and a biopower technical working made up of interested stakeholders that would review of the results of the studies to provide input and justification for future program changes and enhancements.

Other Program Services

In addition to incentives, the Market Managers will continue to 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. Selective outreach efforts to promote wind and biopower markets, including speaking engagement and presentations.

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.

6. 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 incentive 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.

7. Provide industry training to increase awareness of renewable technologies and promote best practices. Focus in person trainings on market development in the financial services industry, and for wind and biopower projects. In-person new installer trainings will be replaced with webinar trainings which discuss program rules and procedures.

Planned Program Implementation Activities for 2011

Program Priorities

The Renewable Energy Programs will have the following areas of focus in 2011:

a. Sustain the resilient growth of New Jersey's solar markets, continuing the market transformation from rebates to SRECs, and reducing SREC costs to ratepayers by encouraging long term SREC contracts. Launch ESFI program to incent market participation in long term contract programs.

b. Wind down all rebate programs by managing the carryover projects from the CORE and REIP.

c. Continue to support momentum and market development in onshore wind and bio-power markets. Launch wind and biopower feasibility study incentives and ITWI methodology in wind.

d. Manage the increased volumes of SRP projects by automating the application process, and increasing reliance on revenue grade meters to reduce program inspection and final paperwork requirements.

e. Continue to implement QA/QC protocol driving towards an inspection rate of 10% for non-incentivized projects and 20% for incentivized projects while continuing to improve the technical quality of solar installations.

f. To reduce administrative costs, improve program participant experience, and Improve turnaround time, in 2011 program requirements will be streamlined and automated. In 2011 the Market Manager will implement and launch these changes which are summarized below:

For New SRP Applications Received Beginning January 1, 2011

No Longer Required	Required
• Copy of the contract • 10 year certification document (only currently applicable to incentive programs) • 12 months of utility bills • PV Watts – ideal and designed • Site Map	• SRP Registration Form • Technical worksheet (with checkbox added for ESFI and NJ REMI)

At the time of application review and acceptance, the Market Manager will no longer review the estimated annual system production versus historical annual consumption for consistency with net metering purposes. Since the electric utilities have always performed a review of the customer's interconnection application to ensure compliance with the NJ Net Metering and Interconnection Standards, the Market Manager will no longer perform this task in order to avoid duplication of effort. In addition, the review of the ideal system output versus the system design is no longer necessary since the minimum system output is no longer required for SRP projects in 2011. Applicants are reminded that the SRP project acceptance letter does not constitute net metering and interconnection approval, and that they may be at risk of proceeding with a project that the utility refuses to interconnect based on the utility review of the system output and historical consumption.

In 2011, the Market Manager will develop and launch a web based application portal that enables program participants in the SRP program to automate applications, document submissions, and to provide project status tracking.

Final Paperwork for all SRP Projects Beginning on January 1, 2011

The following table defines the changes to any SRP project which has not been issued a GATS certification number by the Market Manager as of January 1, 2011. To improve processing efficiency and reduce administrative costs, in 2011 it is preferred that the final paperwork should be submitted as one complete package, rather than the current approach of submitting the As-Built package first, and then the remaining paperwork after the program inspection (or waiver).

No Longer Required	Required

• UCC (to utility only)
• Interconnection application (to utility only)
	• As-Built Package
	  ○ Technical Worksheet
	  ○ PV Watts actual and ideal estimated annual output including shading analysis
	  ○ Site Photos (inverter, meter)
	  ○ Meter worksheet
	• "New in 2011" EDC Notification of interconnection completion signed by the utilities (For level 1 this is Part II – Certificate of Completion signed by the utility with the interconnection date and for Level II and III this is Attachment B-Certificate of Completion signed by the utility with the interconnection date
	• Document the existence of a revenue grade meter for the system output (include photos)
	• If participating in the ESFI, provide a copy of page 1 (Effective Date), page 5 (Signature Date) and Appendix B (Seller's Project) of the fully executed Purchase and Sale Agreement.

For Paperwork for all Approved REIP and CORE Rebate Projects Beginning on January 1, 2011

To improve processing efficiency and reduce administrative costs, in 2011 it is preferred that the final paperwork should be submitted as one complete package, rather than the current approach of submitting the As-Built package first, and then the remaining paperwork after the program inspection (or waiver).

No Longer Required	Required

• UCC (provided to utility only)
• Interconnection application (provided to utility only)
	• As-Built Package
	  ○ Technical Worksheet
	  ○ PV Watts actual and ideal estimated annual output including shading analysis
	  ○ Site Photos (inverter, meter)
	  ○ Meter worksheet
	• "New in 2011" EDC Notification of interconnection completion signed by the utilities (For level 1 this is Part II – Certificate of Completion signed by the utility with the interconnection date and for Level II and III this is Attachment B-Certificate of Completion signed by the utility with the interconnection date
	• Document the existence of a revenue grade meter for the system output (include photos)
	• Incentive Confirmation and Final Application Sheet
	• If non-profit or commercial (NJREMI only), tax clearance certificate
	• Documentation to meet the requirements for NJ REMI incentive if applicable.

The Energy Efficiency (EE) add-on incentive was eliminated in funding cycle 3 of 2010. Any project approved with an EE add-on that is submitted for completion prior to the expiration date will be processed with proof of EE measures completion.

Program requirements for wind and biopower incentives under REIP in 2011 will continue to be processed according to program requirements in effect in 2010. New application materials and documentation will be implemented in 2011 to support the ITWI incentive and feasibility studies.

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.

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 compliments the direct inspection QC process to ensure program compliance.

In 2011, the Market Manager will continue to work towards reducing inspection rates and increasing the reliance on QA. The migration to QA is feasible given the migration from a rebate, which is paid up-front and is not performance based, to a performance based SREC incentive in which the system output can be metered, and the risk of poor system performance is borne by the applicant, not the ratepayer. In addition, with increased reliance on contractor self-reporting, the Board recently granted the Market Managers with the authority to implement remediation procedures against contractors who willingly and consistently violate program rules or misrepresent information.

In 2011 the onsite inspection percentages will be reduced and the Market Manager will continue to refine the QA process to encourage all installers to qualify for this designation. The overall target will be 20% inspections for rebated projects and 10% verifications for non-rebated projects. To meet this requirement, one major change is that utility financed projects and self install projects will no longer be subject to 100% inspection, but may be sampled at a higher rate than other SRP projects.

To reduce administrative costs, the work scope for inspections will also be re-defined. Inspections will be limited for incentivized projects only, and will include the following steps:

- Collect solar panel make and model information
- Collect inverter make and model information
- Verify inverter operation & record output reading
- Verify the existence of a revenue grade meter for the system output & obtain a reading
- Verify panel tilt and orientation
- Perform rooftop inspection

Inspections will no longer require calculating estimated annual production, evaluating manufacturers specifications, performing on-site shading evaluation, and performing string sizing evaluation.

For non-incentivized projects, inspections will be redefined as verifications, and involve a more limited scope of work including collecting inverter make and model information, verifying inverter operation & record output reading, and verifying the revenue grade meter & obtain a reading. Verifications will also involve an estimation approach to panel tilt and orientation versus a more precise measurement approach currently used.

The Market Manager staff will randomly select and review 25% of the projects that receive an inspection waiver to perform a more in depth paperwork review (review of "As Built" information, including PV watts, shading analysis, photos, etc.) while all other applications will be reviewed only for panel count and manufacturers information.

In putting greater reliance on the QA model, reduced onsite inspections, and more reliance on an honor system in the industry, it should be recognized however, that a layer of consumer protection may be sacrificed, and that despite best efforts, the chances of incorrect installation data may increase. Negative publicity which may result from the lack of oversight, may ultimately damage the reputation of stakeholders in the industry.

Extension Policy for CORE and REIP Solar Projects

In 2010, the Market Manager was authorized to grant 1st extensions for projects less than or equal to 10.0 kW and second extensions for public projects greater than 10.0 kW if certain conditions are met. Previously, the Market Manager could only grant 1st extensions for projects greater than 10 kW. Additional extensions require the applicant to petition the Board for a waiver or exception to the Board-approved extension policy.

Current economic conditions for solar projects are such that many new projects from all market segments have been financed and constructed without a rebate. The Market Manager and OCE Staff believe that the current state of the SREC market in which current SREC prices result in reasonable paybacks to projects without a rebate, results in a windfall for projects that received rebate approvals based on economic conditions and installation costs that existed several years ago when SREC prices were lower. In addition, there are other factors affecting project installations that have improved during the past two years such as the abundant supply of equipment, lower installed cost, and many more active installers to choose from.

Therefore, after discussion at the May 10, 2011 Renewable Energy Committee meeting and providing public notice on May 18, 2011 with a request for comments, the current extension policy for all solar projects is modified as described below. The extension policy change will apply to a project based upon how many extensions the project has been granted as of the effective date of the Board Order approving this Compliance Filing.

1. Projects that have NOT received an extension may be eligible for only one extension and must provide documentation to demonstrate the following items:
    a. Engineering and design work has been completed.
    b. Construction permits have been approved by the authority having jurisdiction (where applicable).
    c. Project materials including the panels, inverters and mounting system are on site.

Projects that meet all 1st extension requirements will be granted one extension from the original project expiration date as determined by the total system size of the project. Projects less than or equal to 10.0 kW will be eligible for a 4 month extension while projects greater than 10.0 kW will be eligible for a 6 month extension. If the project is not completed within this 1st extension period, NO additional extensions will be granted.

2. Public projects with a system size greater than 10.0 kW that have already received one extension may be eligible for only one additional extension and must provide documentation to demonstrate the following items:
    a. Engineering and design work has been completed.
    b. Construction permits have been approved by the authority having jurisdiction (where applicable).
    c. Project materials including the panels, inverters and mounting system are on site.
    d. The system must be substantially installed and awaiting final interconnection approval or in the startup and testing phase.

Public projects that meet all 2nd extension requirements will be granted a final extension for a period of 6 months from the current project expiration date. If the project is not completed within this 2nd extension period, NO additional extensions will be granted. Private sector projects and public projects less than 10.0 kW are not eligible for a 2nd extension through the Market Manager.

Market Manager Extension Review Process

The Market Manager will consider extension requests in the two cases described above only if significant progress has been made toward completion of the project, and where the delay was unavoidable and unforeseeable at the time of the rebate application. Approval of any extension will depend on the totality of circumstances related to reasonable progress toward each of the items listed above and the reason why the delay was unavoidable and unforeseeable as demonstrated through documentation provided with the extension request. Extension requests must be received before 5:00 PM on the expiration date of the initial acceptance letter, and must include detailed documentation regarding the reasons for the delay. Progressive documentation of project issues to the Market Manager as they occur throughout the project will significantly improve the case for a project extension.

Projects that have been denied a rebate extension will be eligible to transfer their project to the SREC Registration Program in order to be eligible to generate NJ SRECs.

Budget

The total Honeywell Renewable Energy budget for 2011 is $64.68 Million. This includes $9.3 million of new incentive funds. In addition, $3.7 million will be administrative fees to the Market Manager, down from almost $5 million expected in 2010. These reduces fees reflect the reduction in program requirements, streamlined processes and benefits of automation. A detailed budget for the 2011 Honeywell Renewable Energy programs is attached in Appendix B.

The allocation of the new incentive funding available for 2011 is shown in the table below.

2011 REIP - New Incentive Funding Summary

Description	**($Million)**
Wind & Bio Power – Incentives	$5.0
Solar – ESFI	$3.3
NJ REMI	$1.0
Total	**$9.3**

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 2011, the NJCEP renewable energy programs support the goals outlined in New Jersey's Renewable Energy Portfolio Standards (N.J.A.C. 14:8-2):

RPS Requirements for 2011

Energy Year	Solar Electric	Class I Renewable Energy	Class II Renewable Energy
June 1, 2010-May 31, 2011	306GWH	5.492%	2.5%
June 1, 2011-May 31, 2012	442GWH	6.320%	2.5%

Appendix A - 2011 Residential and Renewable Marketing Plan

Executive Summary

The Honeywell Market Manager Team has accounted for significant reductions in the 2011 plan to address current budgets that will reduce overhead and administrative costs overall. Key actions in this plan include:

- Significant reduction of previously printed materials; maintaining quantities of key program pieces such as the NJCEP overview, and reduced print quantities of all other program brochures and materials.

- Utilization of the NJCEP website for program updates, information, and materials.

- Moving to a self-serve approach for material requests; utilizing the NJCEP literature library to disburse program information for interested parties.

- Restructuring the marketing team and subcontracted support to reflect the current demands and marketing needs of the program.

To support *New Jersey's Clean Energy Program* (NJCEP), the program staff is planning a 2011 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. 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.
5. 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.
6. 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.*
7. Help increase workforce development and economic growth opportunities in the energy efficiency and renewable energy industries.

8. Demonstrate the value of *New Jersey's Clean Energy Program* to combat rising energy prices and to help mitigate climate change.

Key Creative and Communications Elements

1. Continue to identify and enlist New Jersey residents that are successfully participating in the programs.
2. Further engage BPU commissioners to promote *New Jersey's Clean Energy Program*. Promote each of the commissioners as experts and champions for the different programs by engaging them in events and community opportunities to increase program participation.
3. 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.
4. Leverage utility communications with New Jersey residents through newsletters, bill messaging, web linkage, and other community outreach.
5. Continue to enhance the web site with relevant content, including success stories and resources that encourage action by New Jersey residents and businesses.
6. 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

- Energy Minute Radio; proceed with new media buy and creative to revitalize campaign
- Shift to Co-op advertising across energy efficiency programs (HVAC, RNC, and HPwES)
- Plan development to promote programs served by Honeywell Market Manager team
- 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

As part of the planning process, specific tactics and deliverables have been accounted for in the 2011 budget. Details of these plans are broken out by program:

Energy Efficiency

New Jersey Energy Star Homes (RNC)

- Updates to brochures; consumer, contractor
- Summary program detail in updated NJCEP overview piece
- Updating existing fact sheet
- Shared cost in re-printing of program folders
- Shared cost in updating both summer & winter tips cards
- Updating one existing case study/ white paper
- Updates to existing signage (lawn signs & museum boards)
- Update/ maintenance of form (TBD)
- Small variable reserve allocated for program presentation/ event materials
- Small variable reserve allocated for educational workshops
- Minor variable spend allocated for public relations, trade display & equipment maintenance, and awards & photography
- Small reserve allocated in variable budget for contingency/ special requests

Home Performance with Energy Star (HPWES)

- Web banner
- Updates to brochures; consumer, contractor, Spanish
- Summary program detail in updated NJCEP overview piece
- Updating two existing fact sheets
- Shared cost in re-printing of program folders
- Shared cost in updating both summer & winter tips cards
- Creation of one new case study/ white paper
- Minor variable spend allocated for public relations, trade display & equipment maintenance, and awards & photography
- Small reserve allocated in variable budget for contingency/ special requests

Energy Star Products

- Web banner
- Updates to brochure
- Summary program detail in updated NJCEP overview piece
- Shared cost in re-printing of program folders
- Shared cost in updating both summer & winter tips cards
- Signage
- Point of purchase displays
- Minor variable spend allocated for public relations, and trade display & equipment maintenance
- Updates to clothes washer brochure & stuffer bag

- Small reserve allocated in variable budget for contingency/ special requests

HVAC

- Web banners (two)
- Updates to brochures; *Cool*Advantage, *Warm*Advantage (home heating and water heating)
- Shared cost in re-printing of program folders
- Shared cost in updating both summer & winter tips cards
- Updates to Warm/ Cool Advantage applications (five total)
- Minor variable spend allocated for public relations, trade display & equipment maintenance, and awards & photography
- Small reserve allocated in variable budget for contingency/ special requests
- ARRA funding - continued outreach to engage oil and propane customers in program

Renewable Energy

Renewable Energy Incentive Program (REIP)

- Web banner
- Updates to brochures; solar, wind, bio-power, renewables
- Summary program detail in updated NJCEP overview piece
- Shared cost in re-printing of program folders
- Creation of one new case study/ white paper
- Updating three existing fact sheets
- Minor variable spend allocated for public relations, trade display & equipment maintenance, and awards & photography
- Small reserve allocated in variable budget for contingency/ special requests

Event Management & Support

The Market Manager team will continue to define and prioritize events in cooperation with the BPU. With a significantly reduced marketing budget for 2011, event management and support will be dramatically scaled back. The implementation and use of stock presentations including an overview deck, renewables presentation, remarks and talking points will be updated quarterly for Commissioners and aids to tailor to their specific speaking needs. For 2011 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.

- Events and media support will be focused on generating program participation
- Focus resources on key agreed upon events

- Select conferences and speaking engagements based on program participation levels
- Partner with BPU staff and program team to ensure event and speaking engagement attendance is in sync with program goals
- Utilization of stock presentations; to be updated quarterly
- Press releases for program specific announcements and updates
- Limited press engagements; eliminating ceremonial events, ribbon cuttings, etc. that do not effectively promote the program
- Reduced media outreach
- All costs related to approved trade shows/events and sponsorships specifically identified in the following table for the 2011 Marketing Plan are included in the fixed marketing budget. (See events summary.)

Media Events

Event Selection and Implementation

- Select opportunities to plan events in conjunction with program managers and BPU to highlight significant program accomplishments.
- 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, etc.
- Partner with BPU for 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 2011, 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 Marketing/Communications 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.

Industry Conferences & Trade Ally Events

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.

- Support trade ally recruitment events, training meetings and conferences for Home Performance contractors, HVAC contractors, builders, and solar installers as needed.
- Preparation of applications for industry awards.

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 team to ensure appropriate coverage and speakers if deemed appropriate; if not direct requestor to the NJCEP website for downloadable program materials.
- 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.

Ongoing Public & Media Relations

- Identify opportunities to promote programs through news media.
- Write press releases and media pitches, conducting technical review before BPU receives draft copy.
- Utilize BPU lists and outreach for distribution of press releases.
- Confirm with BPU media outreach to ensure that efforts are not duplicated.
- A final copy of any program-related press release distributed will be provided by the BPU.

Written Materials

- Develop talking points and briefing memos. These will include statistics on specific project, as well as overall program progress to date.
- Conduct complete 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.
- Promote usage of NJCEP website and online literature library for printed material requests.

Educational materials are an integral part of the marketing plan. The 2011 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.

The Honeywell Market Manager team recommends reinstating 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

- Administration and management of co-op advertising for *New Jersey ENERGY STAR Homes (RNC),* Home Performance with Energy Star, and HVAC programs.
- Processing of co-op advertising incentive applications, based upon eligibility requirements. The payments to the vendors for approved projects will be processed from the program's 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

- For the 2011 plan, direct mail will not be utilized to support mass outreach or program participation.
- If needed, direct mail may be utilized for assistance with program communications to trade allies regarding program announcements, or recruitment for trade ally events and conferences.

Digital Communications

The NJCEP website will be utilized as the core medium for promoting program information and updates. The site's program literature library will continue to be used as a central repository for updated and printable materials.

- Utilize new web banners to promote consumer interest for program specific promotions and changes.
- Updating program information and trade ally database.
- Creating web enhancements for greater consumer ease and navigation.
- Participating in web strategy development and enhancements as part of ongoing web meetings with BPU and program coordinator as needed.
- 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.
- Copy development and organization of respective sections of the website. This includes input and support for direction and content of the site.
- Provide newsletter content as needed.
- Maintenance of program frequently asked questions.

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 2011 roll out of program enhancements and modifications with materials as needed.

Market Manager Meetings

- Hosting and preparation of weekly Marketing status 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
- Work with program managers to provide 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

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

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

A separate media plan detailing tactics for the Refrigerator-Freezer Recycling Program (Energy Star Products) will be developed and shared with the Marketing Administrator and Program Coordinator Prior to implementation. All marketing tactics for this program are funded directly through the program budget based on marketing allowable per unit collected and program goals.

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.

Account Management

- Program Marketing Management and Oversight
- Communication with BPU/PC/utilities/other agencies via meetings or conference calls
- 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
- Preparation and submission of award nominations, including materials, copying, and mailing costs.
- Postage for regular business operations
- Travel

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 Program*
- Customers calling Monday through Friday from 9:00 AM to 7:00 PM will be handled by customer service representatives.

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 be no markup on variable marketing expenses. All expenses will be approved by the BPU Marketing Administrator prior to project commencement. Examples of appropriate variable marketing expenses include:

- 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, if utilized; including list purchase, postage, mail-house costs and printing.
- Public relations expenses
- 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
- Promotional items are not accounted for in the 2011 plan, however such items if utilized may include 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

Events Summary

The following organizations sponsor trade shows and/or monthly meetings that the Market Manager expects to support in 2011 with all costs covered within the fixed marketing budget. Events of equivalent cost and scope may be supported in exchange or in place of any of these events.

Event	Sponsor	Program(s)
Governor's Conference on Housing and Development	Governor, NJHMFA, NJDCA	RNC
New Jersey League of Municipalities	NJLM	All
Atlantic Builders Convention	Atlantic Builders Convention	RNC
AEA Utility Management Conference	AEA (Association of Environmental Authorities)	All
NJ Association of Counties	NJAC	All
Association of New Jersey Environmental Commission	ANJEC	All
New Jersey Conference of Mayors	New Jersey Conference of Mayors	All

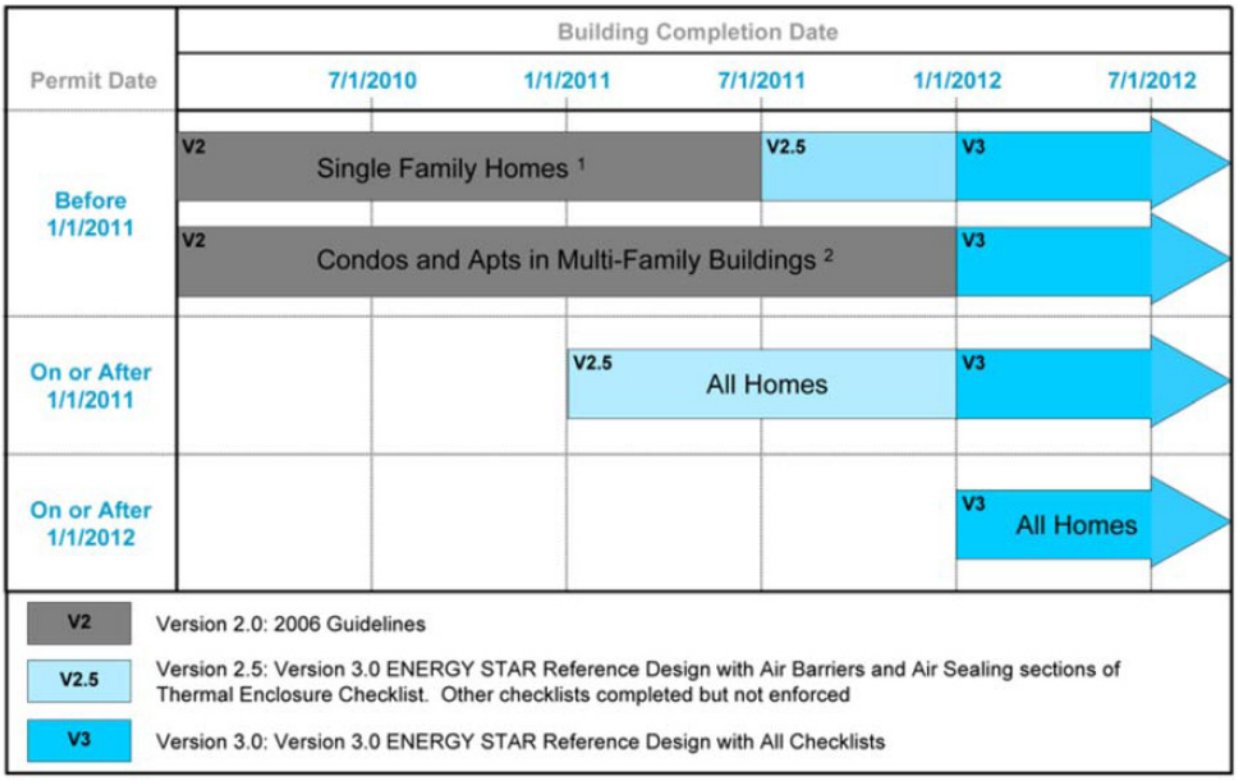
Appendix B – 2011 Residential Energy Efficiency and Renewable Programs Budgets

Table 1: 2011 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	$23,068,674.18	$0.00	$0.00	$0.00	$23,068,674.18	$0.00	$0.00	$0.00
REIP	$41,612,455.10	$1,376,206.92	$0.00	$0.00	$37,910,582.13	$2,325,666.05	$0.00	$0.00
Marketing	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Sub Total RE Programs	$64,681,129.28	$1,376,206.92	$0.00	$0.00	$60,979,256.31	$2,325,666.05	$0.00	$0.00

Table 2: 2011 Residential Efficiency 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	$19,786,157.98	$1,306,764.00	$0.00	$354,001.80	$15,172,918.52	$2,820,231.26	$0.00	$132,242.40
Residential New Construction	$19,943,969.50	$1,249,392.00	$0.00	$0.00	$16,497,157.80	$1,951,092.50	$0.00	$246,327.20
ENERGY STAR Products	$16,006,633.80	$1,655,032.84	$0.00	$0.00	$13,446,343.30	$746,421.96	$0.00	$158,835.70
Home Performance with Energy Star	$34,885,329.29	$1,044,421.08	$0.00	$0.00	$31,117,858.22	$2,723,049.99	$0.00	$0.00
Marketing	$1,309,984.00	$0.00	$1,309,984.00	$0.00	$0.00	$0.00	$0.00	
Sub Total Residential Programs	$91,932,074.57	$5,255,609.92	$1,309,984.00	$354,001.80	$76,234,277.84	$8,240,795.71	$0.00	$537,405.30

Appendix C – ENERGY STAR New Homes Version 3 Implementation Schedule

ENERGY STAR New Homes Version 3 Implementation Schedule



1. Single-family homes include detached homes, townhomes, rowhomes, duplexes, and triplexes.
2. Only condos and apartments in multi-family buildings may use this extended implementation schedule. Further, all multi-family homes financed through low-income housing agencies and permitted prior to January 1, 2011 many earn the ENERGY STAR under the last iteration of the guidelines, Version 2.0, until January 1, 2013.

Appendix D –Energy Savings Table

Efficiency Savings By Program and Category	Measures	100% of Budgeted Goal Annual kWh	Annual Therms	Lifetime MWh	Lifetime DTh
All Programs		**290,716,991**	**5,001,816**		
Efficient Products	5,444,636	275,633,222	30,240	*1,782,769*	*60,480*
Residential New Construction	18,350	7,191,594	2,676,024	*100,039*	*3,586,658*
Heating, Ventilation and Air Conditioning	31,062	7,892,175	2,295,552	*276,472*	*4,456,653*
Home Performance with ENERGY STAR	6,592	2,307,200	1,120,640	*46,144*	*2,241,280*

Total 2011 NJCEP Energy Efficiency:	Annual kWh	Annual Therms	Measure Lives	Lifetime MWh Saved	Lifetime MMBtu Saved
Total 2011 NJCEP Energy Efficiency **at use**				2,205,423	10,345,071
T&D Loss adjustment factor				1.11	1.00
Net to Gross Ratios				1.00	1.00
Total Adjustments				1.11	1.00
Total 2011 NJCEP Energy Efficiency **at Gen.**				**2,448,020**	**10,345,071**

Efficiency Savings By Program and Category		Measures	Annual kWh	Annual Therms	Measure Lifetimes	Lifetime MWh	Lifetime DTh
Efficient Products	2010 EE Lighting CFL markdowns (Std & Spclty)	5,000,000	230,454,000	0	6.4	1,474,906	0
	2010 EE Lighting Fixture & SSL markdowns	25,000	1,452,000	0	6.4	9,293	0
	Clotheswasher Tier 2 (MEF 2.2)	20,000	2,944,000	20,700	20	58,880	41,400
	Room AC retail	0	22,560	0	10	226	0
	Room AC upstream	0	0	0	11	0	0
	Dehumidifiers	0	56,800	0	6.4	364	0
	Creative (Lighting)	294,370	13,644,281	0	8	109,154	0
	Co-Op Advertising/Product Incentive Offerings	0	0	0	0	0	0
	TOTAL Rebated Retail Measures	5,339,370	248,573,641	20,700		1,652,822	41,400
	Refrigerator/Freezer Early Retirement Program	15,000	18,627,840	0	4	74,511	0
	Refrigerator/Freezer ERP Direct Customer Rebate	15,000	0	0	4	0	0
	Efficient Pool Pumps	0	0	0	10	0	0
	Pool Pump Timers	0	0	0	10	0	0
	O-Power	0	0	0	0	0	0
	ARRA Processing	0	0	0	0	0	0
	Electronics - Desktop (E-Star 5.0)	0	0	0	4	0	0
	Other Upstream Incentives	1	1,356,800	9,540	20	27,136	19,080
	Energy Efficient Television (CEE Tier 3 / E-Star 4.0/5.0)	0	0	0	10	0	0
	Energy Efficient Set-Top Box (ENERGY STAR TIER 1&2)	75,265	7,074,941	0	4	28,300	0
	TOTAL New Programs and Pilots	105,266	27,059,581	9,540		129,947	19,080
	Total	**5,444,636**	**275,633,222**	**30,240**		**1,782,769**	**60,480**
Residential New Construction		**Measures**	**kWh**	**Therms**	*Lifetime*	**MWh**	**DTh**
	Tier 1 (ENERGY STAR) Committed in 2010	2,800	2,636,403	780,717	20	52,728	1,561,434
	Tier 2 (Tax Credit) Committed in 2010	900	1,050,307	478,244	20	21,006	956,489
	Tier 3 (Micro Load) Committed in 2010	100	152,720	59,071	20	3,054	118,142
	Lighting Units (New Enrollments)	12,000	358,286	0	6.4	2,293	0
	Coop. Marketing	0	0	0	0	0	0
	2010 Commitments (carried forward)	15,800	4,197,716	1,318,032		79,082	2,636,064
	Tier 1 (ENERGY STAR) Committed in 2011	0	0	0	7	0	0
	Tier 2 (ES Ver 2.5/3) Committed in 2011	2,500	2,917,519	1,328,456	7	20,423	929,919
	Tier 3 (Micro Load) Committed in 2011	50	76,360	29,535	7	535	20,675
	2011 Enrollments/Commitments	2,550	2,993,879	1,357,992		20,957	950,594
	Total	**18,350**	**7,191,594**	**2,676,024**		**100,039**	**3,586,658**
Heating, Ventilation and Air Conditioning	2011 and 2010 carryover	**Measures**	**kWh**	**Therms**	*Lifetime*	**MWh**	**DTh**
	A/C SEER 14.5 (with proper sizing)	0	14,352	0	15	215	0
	A/C SEER 15 (with proper sizing)	0	221,982	0	15	3,330	0
	A/C SEER 16 (with proper sizing)	10,331	3,467,855	0	15	52,018	0
	ASHP 14.5 (with proper sizing)	0	110,543	0	15	1,658	0
	ASPH 15 (with proper sizing)	0	148,545	0	15	2,228	0
	ASPH 16 (with proper sizing)	0	274,425	0	15	4,116	0
	GSHP ENERGY STAR	0	281,272	0	30	8,438	0
	Electric Applications	10,331	4,518,974	0		72,004	0
	Gas Furnace: 92% AFUE	5,831	0	1,198,143	20	0	2,396,286
	Gas Furnace: 92% AFUE w ECM	6,400	3,126,820	802,827	20	62,536	1,605,654
	Boiler: 85% AFUE	3,500	0	109,997	20	0	219,994
	Water Heater: 0.62 Energy Factor	0	0	0	10	0	0
	Water Heater: 0.82 Energy Factor	2,000	0	134,451	10	0	134,451
	Gas Applications	17,731	3,126,820	2,245,418		62,536	4,356,385
	Upstream equip incentives (electric)	1,500	246,380	0	15	3,696	0
	Upstream incentives (gas)	1,500	0	50,134	20	0	100,268
	Other	3,000	246,380	50,134		3,696	100,268
	Total	**31,062**	**7,892,175**	**2,295,552**		**276,472**	**4,456,653**
Home Performance with ENERGY STAR	2011 and 2010 carryover	**Measures**	**kWh**	**Therms**	*Lifetime*	**MWh**	**DTh**
	Tier 3: Insulation, HVAC, DHW, other eligible measures	5,709	1,998,150	970,530	20	39,963	1,941,060
	Tier 3: Multi-family	883	309,050	150,110	20	6,181	300,220
	Total	**6,592**	**2,307,200**	**1,120,640**		**46,144**	**2,241,280**

Total Emissions Savings (lbs reduction)	**Annual Lbs Reduction** Electric	Gas		**Lifetime Lbs Reduction** Electric	Gas
CO2 (Carbon Dioxide)	445,396,770	71,632,731		3,352,243,372	258,034,523
NOx (Nitric Oxide)	820,468	56,327		6,175,185	202,899
SO2 (Sulphur Dioxide)	1,904,657			14,335,251	
Hg (Mercury	10			79	

Total Program Savings	**kWh**	**Therms**		**MWh**	**Dtherms**
	293,024,191	6,122,456		2,205,423	10,345,071