

Request for Comments
Proposed Changes to Residential Energy Efficiency Budgets, and
the Residential New Construction Program

The Office of Clean Energy is developing several proposed changes to the NJCEP programs and budgets and is requesting comments on the proposed changes prior to submitting its recommendations to the Board for consideration. Specifically, Staff is proposing several changes to the Residential Energy Efficiency (EE) program budgets and changes to the Residential New Construction (RNC) program as described more fully below.

Proposed Budget Modifications

Several Residential EE programs have experienced higher than anticipated participation levels since the beginning of the fiscal year 2016 (FY16). The following summarizes the proposed changes to the budget intended to address the higher participation levels:

- **Residential New Construction:** Staff is proposing the transfer of \$2,845,000 into the RNC program budget. The program received a large number of applications in August 2015 which exhausted the current rebate budget. Transferring funds into the RNC rebates budget will allow the program to continue to accept applications and remain open under the revised enrollment requirements proposed below.
- **Home Performance with ENERGY STAR® (HPwES):** Staff is proposing to transfer \$813,620.47 into the HPwES program budget. The program received a large volume of applications during the first half of FY16 as a result of incentive level reductions that were set to be implemented.
- **Energy Efficient Products (EEP):** Staff is proposing to transfer \$3,658,620.47 out of the EEP program and into the two residential programs noted above. This funding is available as a result of the lighting markdown promotions ending mid fiscal year (December 31, 2015) in anticipation of the transition to the Program Administrator. Sufficient funds remain in EEP to cover expenses through the remainder of the fiscal year.

The proposed budget modifications and resultant budgets are shown in the table below. In addition to the budget modifications proposed above, Staff is proposing changes to the RNC program. A description of the proposed program changes is attached hereto.

These recommendations and any adjustments made based on feedback gathered during the comment period are being scheduled for consideration at the March 18, 2016 Board agenda meeting.

Comments should be submitted by February 22, 2016 to:
publiccomments@njcleanenergy.com and reference “Proposed Changes to the NJCEP Program and Budget.”

Summary of Proposed Budget Modifications

3rd Revised FY16 Energy Efficiency Program Budget

	Current Budget	Line Item Transfers	Revised FY16 Budget
Programs	(a)	(b)	(c) = (a)+(b)
Residential EE Programs			
Residential HVAC - Electric & Gas	\$13,187,678.81		\$13,187,678.81
Residential New Construction	\$15,832,692.95	\$2,845,000.00	\$18,677,692.95
Energy Efficient Products	\$19,449,665.72	(\$3,658,620.47)	\$15,791,045.25
Home Performance with Energy Star	\$37,038,090.33	\$813,620.47	\$37,851,710.80
Residential Marketing	\$1,249,033.75		\$1,249,033.75
Sub Total Residential	\$86,757,161.56	\$0.00	\$86,757,161.56

Proposed revisions to Residential New Construction

Historically, the Residential New Construction Program commits funds to projects as they are enrolled into the program. Projects are enrolled in the program for up to 12 months and have the ability to be re-enrolled after the 12 months expire, which can commit program dollars for incomplete projects for several years. The Program has seen an unprecedented amount of applications submitted during the first quarter of FY16, resulting in a pipeline of approximately 4,500 applications requesting enrollment into the program. This pipeline has exhausted all available funding in the RNC rebates budget and will require approximately \$10 million to process based on the current enrollment requirements and method of committing funds at the enrollment stage.

For the remainder of FY16 Staff is proposing changes to the enrollment requirements and to the process for committing funds to projects. The proposed changes will reduce the funding required for the remainder of FY16 to approximately \$2.8 million and will reduce the timing by which projects are enrolled in the program. Furthermore, these changes are designed to ensure that funding commitments are made to those projects most likely to be completed in FY16, which will allow the RNC Program to continue to enroll applications in FY16.

Proposed Enrollment Changes:

- Single family projects will be required to submit a valid building permit and plans with the unit’s address clearly referenced on each document in order to be enrolled. (The program does not currently require these submissions.)
- Single family projects must complete a pre-sheetrock inspection within 60 days of being enrolled.
- Multi-family, multi-family high rise, and multi-single projects must submit a valid permit and plans with the unit’s address clearly referenced on each document in order to be enrolled.
- Projects enrolled between August 31, 2015 and June 30, 2016 will be given an application number without a commitment. Publicly funded projects that require proof of a commitment in order to be financed will receive a commitment.

- Enrolled projects will be subject to the program requirements and the incentive levels available at the time of their enrollment.

Commitments:

- Projects with existing funding commitments will be able to re-enroll one time and will be required to meet the enrollment rules in place at the time of re-enrollment. If a project cannot meet the enrollment requirements the project will be deactivated and removed from the pipeline. The project will be allowed to re-enroll when it is able to meet the new enrollment requirements and will be eligible for the incentives in place at the time of re-enrollment.
- Commitments for multi-family/multi-single projects will now be valid for two years.
- Commitments for single family projects will continue to be valid for one year.
- Zero Energy Ready Home (ZERH) projects that demonstrate progress towards completion will be eligible for a one-year extension.
- Projects that expire will be removed from the program upon expiration. Any project that is removed from the program will not be permitted to re-enroll without a waiver from the Program Administrator.

Rebates:

- To the extent that program funding is available, projects enrolled without a commitment will be paid in the order that the completed final incentive applications are received.
- In the event that incentive levels increase in a subsequent program year, enrolled projects will not be eligible for the higher incentive levels and will not be allowed to “deactivate” and re-enroll.

IECC 2015 Related Changes

The International Energy Construction Code (IECC) 2015 was adopted by New Jersey’s Department of Community Affairs on September 21, 2015 with an effective date of March 21, 2016. The new code significantly increases the level of energy efficiency required by the IECC 2009. In addition to more stringent prescriptive requirements, the IECC 2015 introduces an alternative compliance path based on total building performance and termed the Energy Rating Index (ERI). The ERI compliance path was designed to exceed the IECC 2015 prescriptive requirements.

In its Uniform Construction Code (UCC) which supplements the IECC, New Jersey amended the IECC 2015 code requirement to field testing newly constructed homes to verify a maximum allowable air leakage of three air changes per hour (3ACH50), and made the field test optional. However, the ERI compliance path requires field testing to demonstrate performance. The differing compliance requirements can result in significantly different performance levels depending on the compliance pathway chosen. The sections that follow discuss recommendations for reconciling RNC Program requirements and these differing compliance requirements within the IECC 2015. These program requirements will take effect on March 21, 2016.

RNC Incentive Tiers

Under the RNC FY16 program rules, the program currently incentivizes four tiers of energy efficiency for the construction of new single family and multi-family housing. As part of this proposal, Staff is recommending that going forward, the program eliminate the numbering system and identifies the tiers (from least to most energy efficient) as IECC 2015 ERI, ENERGY STAR, Zero Energy Ready Homes (ZERH), and ZERH + renewables (RE).

As indicated in the Incentive Table below, each tier must achieve a minimum HERS score in order to be eligible for incentives. The Home Energy Rating System (HERS) Index is the industry standard by which a home's energy efficiency is measured. It is also the nationally recognized system for inspecting and calculating a home's energy performance.

In FY16, the current Tier 1 "Energy Efficient Home" incentive level was designed to anticipate the pending adoption of IECC 2015 and to allow builders to become familiar with the updated code requirements. Since the start of FY16, only four homes have enrolled in this tier, all of them single-family homes. With the adoption of IECC 2015, the RNC Tier 1, *ENERGYEfficient* Home is obsolete as homes built to this standard may not be as efficient as an IECC 2015 code-compliant home.

Recommendation

Staff recommends eliminating eligibility and incentives for this tier from the program.

IECC 2015 ERI

The compliance requirements of IECC 2015 represent a heavy lift for New Jersey's construction industry. Homes built using IECC 2015 ERI compliance path will result in a higher level of performance than homes built using the prescriptive path that do not perform field testing. Incenting builders to the ERI standard has the following benefits:

- Ensures a higher level of performance than homes built using the prescriptive path that opt out of field testing.
- Demonstrates the State's infrastructure to meet air leakage testing requirements

The ERI targets (i.e. HERS Index targets) required by IECC 2015 are based on typical single family residences. Staff recognizes that these targets will be more difficult to meet by smaller dwelling units within multi-family housing.

Recommendation

Staff recommends providing a flat \$750 incentive for any home that demonstrates compliance with the IECC 2015 through the ERI path. This incentive will serve as a stand-alone incentive for the lowest tier of efficiency, or an adder to ENERGY STAR or ZERH incentives. A code official signature verifying code compliance was achieved using the ERI path will be required.

ENERGY STAR Home

The ENERGY STAR program is designed to achieve 15% more energy efficiency than the building code. For states that have adopted IECC 2012 or IECC 2015, ENERGY STAR developed v3.1. Homes that meet ENERGY STAR v3.1 achieve a 15% increased energy savings above code. EPA recognizes that builders need 6-12 months to adjust to a new specification; therefore EPA doesn't enforce v3.1 until 12 months after IECC 2012 or 2015 adoption.

Recommendation

While ENERGY STAR v3.1 standards will not be enforced by EPA in New Jersey until April 1, 2017, Staff recommends adopting the ENERGY STAR v3.1 standards upon the effective date of IECC 2015 on March 21, 2016. This is consistent with the program's history of providing incentives to transform the market, i.e. only when appliances/equipment/construction, etc. exceed the energy savings mandated by code.

Zero Energy Ready Home (ZERH)¹

Discussion

Upon adoption of IECC 2012 and 2015, the DOE Zero Energy Ready Home (ZERH) program has more stringent energy performance requirements than the other program paths. These requirements include both the ENERGY STAR v3.1 specification as well as IECC 2015 insulation levels. Like ENERGY STAR, the DOE ZERH program does not require the more stringent standards until one year following the effective date of the new code.

Recommendation

Staff recommends adopting the ENERGY STAR v3.1 specification as well as IECC 2015 insulation levels in alignment with the effective date of IECC 2015 on March 21, 2016.

Multi-Family High Rise (MFHR) Program

Discussion

The EPA MFHR program requires a 15% increased energy savings above code. With NJ's adoption of ASHRAE 90.1-2013 for the commercial code, the baseline against which building performance is measured must be increased to meet the new code. In addition to increased baseline performance, the adoption of the IECC 2015 triggered additional changes to the commercial code. Until the impact of these changes can be fully understood, the EPA is allowing a program participant to choose the baseline against which to measure a building's performance while requiring a higher percent savings above code requirements for a baseline that is less than the current code. For example, if a state has adopted ASHRAE 90.1-2013, a building may comply with the MFHR program by either performing at 15% better than 90.1-2013, 20% better than 90.1-2010, or 25% better than 90.1-2007. While there is the risk that it will be easier for participants to achieve a higher percent savings over the lower code, EPA recognizes that there is not enough experience with the new code at this time to ensure that buildings will indeed be able to meet 15% above 90.1-2013. In fact, the NJCEP Pay for Performance Program has received feedback from program participants that the 15% over ASHRAE 90.1-2013 is indeed quite difficult to achieve.

Recommendation

With the MFHR program, Staff recommends following EPA's guidance to allow a target baseline of choice. This change will require that the NJCEP collect new data, including a project's baseline code and the percent savings above code that participant project has been designed to achieve. The incentive table will also need to be updated to align with the various baselines.

¹ Zero Energy Ready Home is a USDOE designation for a high-performance home which is so energy efficient that a renewable energy system can offset all or most of its annual energy consumption.

New Financial Incentive Table for Single-Family, Multi-Single, and Multi-family Units

HERS (Before Renewables)	IECC2015 ERI Compliance	Single-Family			Multi-Single			Multifamily			
		ENERGY STAR Home	Zero Energy Ready Home	Zero Energy Home 100% Renewables	ENERGY STAR Home	Zero Energy Ready Home	Zero Energy Home 100% Renewables	ENERGY STAR Home	Zero Energy Ready Home	Zero Energy Home 100% Renewables	
75											
70											\$625
65											\$750
60											\$875
55											\$1,000
50	\$1,500										
50	\$750	\$4,500	\$6,500	\$9,500	\$3,375	\$4,875	\$7,125	\$2,250	\$3,250	\$4,750	
45		\$7,250	\$9,250	\$12,250	\$5,438	\$6,938	\$9,188	\$3,625	\$4,625	\$6,125	
40		\$10,250	\$12,250	\$15,250	\$7,688	\$9,188	\$11,438	\$5,125	\$6,125	\$7,625	
35		\$13,750	\$15,750	\$18,750	\$10,313	\$11,813	\$14,063	\$6,875	\$7,875	\$9,375	
30		\$17,250	\$19,250	\$22,250	\$12,938	\$14,438	\$16,688	\$8,625	\$9,625	\$11,125	
25		\$18,250	\$20,250	\$23,250	\$13,688	\$15,188	\$17,438	\$9,125	\$10,125	\$11,625	
20		\$19,250	\$21,250	\$24,250	\$14,438	\$15,938	\$18,188	\$9,625	\$10,625	\$12,125	

New Financial Incentive Table for Multi-family High Rise

Baseline	Savings Before RE	Baseline	Savings Before RE	Baseline	Savings Before RE	Incentive Per Unit
90.1-2007	25%	90.1-2010	20%	90.1-2013 App G 2010 OR 2013	15%	\$1,250
	30%		25%		20%	\$1,500
	35%		30%		25%	\$1,750
	40%		35%		30%	\$2,000
	45%		40%		35%	\$2,250