

## Kate Morecraft

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**From:** bolizhou@bzplating.com  
**Sent:** Friday, March 18, 2011 9:44 AM  
**To:** oce@bpu.state.nj.us; publiccomments@njcleanenergy.com  
**Subject:** Big solar opportunity for New Jersey and Clean Energy Committee

Dear Staff Members of the NJ Clean Energy Program:

I am writing to bring your attention to an opportunity that the Clean Energy Committee and the state of New Jersey can and should capture to greatly benefit the state's renewable energy ambition and economic competitiveness.

I am presenting a product idea that will, if successful, create a viable solar energy industry by leapfrogging the technology of solar panels and enabling reliable solar power production. In the process, it will create an entirely new supply chain with manufacturing jobs in many technology fields. The detail of the idea is provided below. The idea is in the early stage of its development, and product-driven R&D is needed for prototyping.

The Clean Energy Committee has an opportunity, with the carry-over fund from last year, to create a **NJ Clean Energy Innovation Fund** to support product-driven R&D of innovative, disruptive and impactful renewable energy ideas such as the one described below. This fund can be administered by EDA. A specific recommendation is that we have a meeting for further discussion of the innovation fund with Paula Durand, Kathleen Coviello of EDA and the Office of Lt Governor Kim Guadagno.

My contact information is as follows:

Boli Zhou, Ph.D.  
Managing Director  
BZ Plating Process Solution  
[bolizhou@bzplating.com](mailto:bolizhou@bzplating.com)  
908-336-0299 (o)  
503-548-7910 (c)  
[www.bzplating.com](http://www.bzplating.com)

### Detail of the product idea:

The energy needs of the rapidly developing nations such as China and India will lead the way for a global solar marketplace. However, there are still many challenges facing solar power production. A key challenge is that solar power can't be produced reliably using solar panels. The panel's output is unpredictable and uncontrollable due to the variation of sunlight's intensity. On the other hand, the energy industry requires certainty of its ability to produce as much as power as needed at any given moment. The current solution to the unreliability problem is to back up solar panels with the grid. However, grid backup still requires the ability to predict the panel's output to manage backup resources. Furthermore, grid backup prevents solar energy from moving down its cost curve and continues our dependence on fossil fuels. Therefore, a method of reliable solar power production is needed. Those who deliver the solution will be rewarded in the global solar marketplace. New Jersey can and should take the lead in delivering the solution.

Reliable solar power needs an integrated method comprised of production, storage and later release of solar power. The production occurs when there is sunshine. The storage allows the accumulation of sufficient solar power ready to be released when demand goes

up, and the release converts solar power from its stored form to usable form. There are several energy forms for solar power to be stored in, and they are battery power (using batteries), hydrogen energy or solar hydrogen (from photoelectrochemical or PEC water splitting), and pumped hydro energy. Among those storage methods, only the hydrogen technology can meet the requirement of cost-effectiveness, scalability and sustainability of a global solar industry. Said differently, reliable solar power needs a stockpile of fuel that is generated from solar energy and can be used to produce as much electricity as needed at any time. Hydrogen from sunlight and water can be such a stockpilable fuel.

Pilot-scale solar hydrogen systems have been designed using an array of photovoltaic modules that supplies electricity through storage and power conditioning systems to electrolyzers. This was done in major projects in California and Germany. In these designs, solar modules are connected to a charge controller, storage batteries, and DC–DC power converter to supply DC current to a commercial electrolyzer consisting of a series of electrodes to split water and produce hydrogen. The additional resistance imposed by and cost associated with the transmission lines, charge controllers, batteries, voltage converters and electrolyzers in the systems lead to significant disadvantages in cost and energy efficiency. On the other hand, a **“solar hydrogen panel” (e-H Panel)** would perform on a single device the functions of a number of modules and components used in a traditional electrolysis setup, resulting in reduced cost and improved solar-to-hydrogen efficiency (STH). In a fashion analogous to solar panels, e-H Panels would generate hydrogen (instead of electric current) when exposed to solar irradiation. BZ Plating Process Solutions, of New Jersey, has undertaken to develop and commercialize e-H panels.

The energy system consisting of e-H Panels and fuel cells for converting hydrogen to electricity represents a **“2<sup>nd</sup> solar path”** (vs. solar panels tied to the grid). This 2<sup>nd</sup> path is free of any fundamental limitation such as unreliable output capacity that hinders the development of a solar industry of large scale. Developing and commercializing such a solar fuel system requires creation of materials, construction of a device using the materials, and fabrication of the device using methods suitable for volume production. The panel is comprised of multiple components made from different materials, and they range from conducting materials and semiconductors to inorganic and organic substances. The construction and fabrication of the panel can involve a variety of methods ranging from printing, coating, electrodeposition, lamination, patterning and etching. The scientific and engineering disciplines underlying the work include inorganic chemistry, analytical chemistry, photochemistry, electrochemistry, photophysics, solid state physics, material sciences, and chemical, mechanic and electrical engineering. Therefore, a successful solar hydrogen panel project can lead to a supplying chain of enormous scale and create sustainable manufacturing jobs commercializing pipelines of products in numerous technology fields to supply a global solar marketplace. New Jersey is well-positioned to, and should, take the lead in establishing and headquartering this supplying chain and the many jobs it will spawn in many fields.

TechniArt Inc.  
Adam Tardif  
205A Route 22 East  
Green Brook, NJ 08812



State of New Jersey  
Office of Clean Energy  
44 South Clinton Avenue  
Trenton, NJ 08625

March 18, 2011

Dear Office of Clean Energy Staff,

My name is Adam Tardif and I am the Vice President of TechniArt Incorporated, a proud partner of New Jersey's **Clean Energy Program**<sup>™</sup> (NJCEP) and member of the Green New Jersey Resource Team since its inception in 2008. I'm submitting comments regarding the proposed modifications to the 2011 NJCEP budget, specifically about the Energy Efficient Products program.

The proposed modifications to the 2011 NJCEP budget state broadly,

“Reallocate \$3.4 million to the Energy Efficient Products program. One of the components of this program provides upstream incentives to manufacturers and retailers to provide discounted Energy Star products to customers such as CFLs, electronics and appliances. Staff proposes that the additional funding be utilized for additional upstream promotions.”

Our program, Corporate Lighting Fairs, is funded through the upstream lighting portion of the Energy Efficient Products program. We ask OCE staff to consider allocating additional funds to our program based on its high demand and current lack of funding. If we don't receive additional funds, the Corporate Lighting Fair program will exhaust its budget in August.

TechniArt has been conducting Energy Saving Lighting Fairs since August of 2008. These unique events are hosted by some of New Jersey's largest employers, including Merck, AT&T, Blue Cross Blue Shield, Johnson & Johnson, PSE&G, Becton Dickinson and several casinos and hospitals across the state. We promote, educate and sell ENERGY STAR qualified CFLs, fixtures and LEDs to the employees of these businesses for use at their homes. In addition to selling discounted lighting products we promote NJCEP residential programs to our customers and help cross promote commercial programs to our event hosts.

Since 2008, we have sold 250,000 CFLs and 60,000 fixtures at 275 events to 52,000 New Jersey residents. Impressive numbers, but we have only begun to scratch the surface of the thousands of employers in the state who are eagerly awaiting their chance to host an event. Just yesterday, approximately 200 employees of Toys-R-Us purchased 1,500 ENERGY STAR lighting products at a Corporate Lighting Fair hosted at their corporate headquarters in Parsippany.

In addition to selling lighting products that offer cost effective kWh savings for the state, our one-on-one education is unmatched in the typical retail environment. Our experienced staff speaks directly to our customers, NJ residents, to educate and inform them about the features and benefits of ENERGY STAR lighting. This is one of the significant advantages Lighting Fairs has over the retailer and manufacturer upstream component of the Products program.

The Corporate Lighting Fair program is successful. It targets an under-served target population, supports the largest employers and tax payers in New Jersey, causes people to take action on not just ENERGY STAR lighting products but all NJCEP programs and is cost effective. Sales stemming from our past events (2008 – 2010) will save New Jersey rate payers over 117 million kilowatt hours and over \$21.1 million over the lifetime of the products. For every dollar NJCEP invests in Lighting Fair incentives, ratepayers save over \$11 in reduced electric cost.

TechniArt appreciates the support OCE staff and the BPU has given to our Corporate Lighting Fair program. In light of the additional 2011 NJCEP funds, and specifically the additional \$3.4 currently earmarked for the Energy Efficient Products program, we highly encourage staff to allocate additional funds to our program. We have submitted a proposed

budget allocation to OCE Market Manager, Honeywell, that is reasonable and ensures that the Corporate Lighting Fair program can operate for the balance of the year.

Sincerely,

A handwritten signature in black ink, reading "Adam J. Tardif". The signature is written in a cursive style with a large, sweeping initial "A".

Adam Tardif  
Vice President



March 17, 2011

Ms. Kristi Izzo, Secretary  
New Jersey Board of Public Utilities  
Two Gateway Center  
Newark, NJ 07102

RE: Request for Comments regarding Proposed Modifications to the 2011 NJCEP budget  
*Via e-mail*

Dear Ms. Izzo:

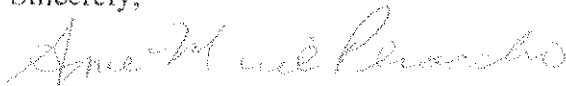
New Jersey Natural Gas (“NJNG” or the “Company”) has reviewed the Proposed Modifications to 2011 New Jersey’s Clean Energy Program (NJCEP) Budgets issued by Office of Clean Energy (OCE) on March 9, 2011. NJNG generally supports the proposal and would like to share two specific comments:

- NJNG strongly supports the recommendation to dedicate a portion of this carryover funding to establishing a budget for the pilot program for large energy users. Previous NJCEP committee discussions regarding the pilot had indicated that this pilot would be serving a pool of customers currently eligible for NJCEP commercial and industrial programs and, as such, it would be possible to establish a pilot by reallocating funding from other programs. However, as a practical matter it would have been extremely challenging to determine the most equitable manner to shift funding from other ongoing NJCEP programs since it is anticipated that this pilot program will allow for dramatically higher incentive levels than currently available under any NJCEP energy efficiency program. Designating a specific budget for this pilot will now avoid potential disruption to the budgeting process and target participation levels for the other commercial and industrial clean energy programs.
- NJNG also supports the recommendation to move additional funding into the Energy Efficient Products program; however, NJNG encourages OCE to consider a broader view of the types of products that may be offered. To date, the NJCEP Energy Efficient Products category has maintained a strong focus on products that reduce electric usage, especially in the low cost product categories. We also believe it is appropriate to consider upstream incentives for other low cost products such as those to reduce water heating load that provide the added benefit of lowering water usage, helping to reduce two utility bills. Broadening the focus also helps to reinforce a

“whole house” philosophy, providing a link in outreach discussions to conversations about NJCEP’s more comprehensive programs. NJNG would also encourage continued consideration of the role that the NJCEP creative partners can play in promoting energy efficiency. We believe that this approach helps to reach and educate customers that might not currently be predisposed to seeking out energy-efficient products.

NJNG appreciates the opportunity to provide comments on this Proposal.

Sincerely,



Anne-Marie Peracchio

Director- Conservation and Clean Energy Policy

Cc: Michael Winka, BPU  
Michael Ambrosio, AEG  
Mona Mosser, BPU  
[publiccomments@njcleanenergy.com](mailto:publiccomments@njcleanenergy.com)  
[oce@bpu.state.nj.us](mailto:oce@bpu.state.nj.us)

## Kate Morecraft

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**From:** Neal Zislin [nzislin@renuenergy.com]  
**Sent:** Thursday, March 17, 2011 4:17 PM  
**To:** oce@bpu.state.nj.us; publiccomments@njcleanenergy.com  
**Subject:** Proposed 2011 OCE Budget

I offer the following questions/comments pertaining to the proposed 2011 Office of Clean Energy Budget:

- \* How realistic is this proposed 2011 OCE budget of \$558.8 million to achieve the objectives of the programs being funded given that:
  - o 2011 revised budget of \$558.8 million for new expenses plus commitments represents 24% increase from total 2010 expenses plus commitments of approximately \$450 million
  - o 2011 revised budget of \$319.5 million in new spending represents 39% increase from 2010 expenses of \$229.5 million
  - o Actual spending on programs depends on when the programs are initiated.
  - o OCE budget for administrative & program coordination shows a 60% increase in staff & overhead which will require several months to ramp up to increased levels from 2010 staffing.
  - o Organization (market managers and staff) responsible for executing and managing the portfolio of programs will undergo a major revamp during this fiscal year which will create inefficiencies over the transition period
    - ◆ Do the budgets for the major programs reflect expenditures based on reasonable timelines?
    - ◆ Will the staffing profiles be able to support the overall budget?
- \* The \$20.5 million of carried-over funds in excess of commitments from 2010 (\$220.6 million) and \$88 million of new funding in excess of 2010 expenditures (\$229.6 million):
  - o Support three new programs; Large Energy Users Pilot, Competitive Grant-Loan Solicitation and True Grant.
    - ◆ What are the descriptions, objectives and targets of these new programs?
    - ◆ Are resources available to develop, launch and manage these programs?
  - o Provide significant incremental funding for established programs over 2010; pay for performance (+\$38 million), direct install (+\$14 million), clean energy manufacturing fund (+\$23 million), C&I retrofit (+\$8 million) and others.
    - ◆ What has been the measurable success in achieving these program targets from recent past years?
- \* Is EDA adequately staffed to support new programs such as the Edison Innovation Green Growth and Energy Efficiency Loan Funds and stepped up funding for the Edison Innovation Clean Energy Manufacturing Fund?
- \* Will any of the programs within the proposed 2011 budget enable municipalities and school districts to borrow money to implement energy efficiency initiatives with repayments coming from reductions in energy costs? Initial capital investments required upfront to save operating costs over future years present roadblocks to public institutions whose operating budgets are tight.
- \* Discrepancies exist between the summary table and the supporting detailed tables:
  - o 2011 Budget from Board Order 12/22/10 & Funding Adjustments for Energy Efficiency line item - \$1 million
  - o Committed Expenditures for OCE Oversight line item - \$0 vs. \$154,185.47

Regards,

Neal Zislin  
Vice President Engineering

Renu Energy  
[nzislin@renuenergy.com](mailto:nzislin@renuenergy.com)  
908-371-0014 (Office)  
908-425-0089 (Cell)



**Kate Morecraft**

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**From:** MTLMURRAYS@aol.com  
**Sent:** Wednesday, March 09, 2011 2:27 PM  
**To:** publiccomments@njcleanenergy.com  
**Subject:** Request for Comments: Revised 2011 NJCEP Budgets

IT SEEMS THAT THE RESIDENTIAL SBC CONTRIBUTORS/STAKEHOLDERS WILL NOT HAVE ACCESS TO THEIR SHARE OF SBC FUNDING IN A COMMENSURATE PORTION OF BUDGETED PROGRAMS.

IF THE 20% - 26% OF THOSE RESIDENTIAL SBC FUNDS COLLECTED ARE NOT AVAILABLE IN RESIDENTIAL PROGRAM FUNDING, THEN THOSE FUNDS SHOULD BE GIVEN BACK TO THOSE RESIDENTIAL CONTRIBUTORS.

IF THE MILLIONS OF DOLLARS COLLECTED THROUGH THE SOCIETAL BENEFITS CHARGES ARE NOT APPLIED PROPORTIONATELY VIA THE RE/EE PROGRAMS FOR THE CONTRIBUTING SEGMENTS - THEN THOSE MONIES SHOULD BE RETURNED IN PROPORTION TO THE CONTRIBUTING SHAREHOLDER SEGMENTS.

THE ADMINISTRATION AND THE LEGISLATURE SHOULD BE HONEST WITH THE UTILITY-BILL-PAYING-CITIZENS.  
THEY HAVE DIVERTED MILLIONS OF DOLLARS COLLECTED THROUGH THE SBC AND MEANT TO FUND EE/RE PROGRAMS AND, INSTEAD, SURREPTICIOUSLY APPLY THESE FUNDS TO BALANCE THE STATE BUDGET.

IF THE MONIES ARE DIVERTED AS AN INCOME STREAM COLLECTED FROM THE CITIZENS, THEN THE BLOVIATOR(S) NEED TO CALL IT WHAT IT IS - A **TAX**. OTHERWISE, GIVE IT BACK.

Patrick Murray  
4197 Bridgeboro Rd  
Moorestown, NJ 08057

## Kate Morecraft

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**From:** Erin Thomas [erin@sola-design.com]  
**Sent:** Friday, March 18, 2011 11:21 AM  
**To:** oce@bpu.state.nj.us  
**Cc:** publiccomments@njcleanenergy.com  
**Subject:** CEO Budget Modifications

I would like to add public comment to advise the Board of Public Utilities I would like to see the Solar Hot Water Program Funded for 2011 and see the funding come out of the \$3.4 million set aside for stimulating retail sales of energy efficient products. Energy efficient product purchases are mandated by federal law (2007 Energy Independence and Security Act) to be 30% more efficient by 2012. Why are we spending \$3.4 million to promote something that is federally mandated to take effect in 2012 with or without us allocating \$3.4 million, when we can stimulate the economy with **job creating** Solar Hot Water rebates. With a \$3.4 million budget for Solar Hot Water we could install thousands of solar thermal systems at an average cost of \$8,000 to \$13,000. This would generate millions in new wages for our economy, not to mention in income tax and sales tax revenue.

As a small business owner in NJ it has been a struggle to keep anyone on payroll for almost two years. Solar thermal rebates would make our product more attractive to residents while decreasing the environmental impact of the state.

Erin

Erin S. Thomas  
A Small Business/Woman Business Enterprise  
SolaDesign Systems, LLC  
856.340.1274c  
856.795.9559 x1  
856-795-9559f  
[www.sola-design.com](http://www.sola-design.com)

**Kate Morecraft**

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**From:** John Foust [john@foustsolar.com]  
**Sent:** Friday, March 18, 2011 11:17 AM  
**To:** oce@bpu.state.nj.us; publiccomments@njcleanenergy.com  
**Subject:** 2011 NJCEP BUDGET COMMENT

I WOULD LIKE TO SEE MORE STIMULUS MONEY FOR THE SOLAR DOMESTIC HOT WATER PROGRAM. A RESIDENTIAL SYSTEM TYPICALLY SAVES THE HOMEOWNER 70% AND LASTS FOR OVER 20 YEARS. WHAT PERCENTAGE DOES PROMOTION RETURN? ONCE THAT MONEY IS SPENT ITS GONE WITH NO LONG TERM SAVINGS BENEFIT.

IF THE STATE PURCHASED SOLAR HOT WATER SYSTEMS WITH PROMOTION DOLLARS THEY COULD SLOWLY REDUCE THE SUBSIDIES TO LOW INCOME FAMILIES. PAYING PEOPLES BILLS DOES NOT ACCOMPLISH ENERGY SAVINGS FOR 20 YEARS.

ALL THE STUDIES SHOW A BOOST TO THE ECONOMY WITH GREEN JOBS. THE GREATER GOOD WOULD BE SERVED BY MORE RENEWABLE ENERGY SYSTEMS SOONER THAN LATER.

JOHN FOUST  
FOUSTSOLAR.COM  
NJCEP APPROVED CONTRACTOR

## Kate Morecraft

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**From:** Eric DeGesero [edegesero@fmanj.org]  
**Sent:** Friday, March 18, 2011 11:02 AM  
**To:** oce@bpu.state.nj.us; publiccomments@njcleanenergy.com  
**Cc:** 'John F Donohue'  
**Subject:** FMANJ Comments on Proposed Modifications to 2011 NJCEP Budgets

**Categories:** Purple Category

The Fuel Merchants Association of New Jersey supports the proposed modifications to the 2011 New Jersey Clean Energy Program Budgets.

Eric DeGesero  
Executive Vice President



State of New Jersey  
DIVISION OF RATE COUNSEL  
31 CLINTON STREET, 11<sup>TH</sup> FL  
P. O. Box 46005  
NEWARK, NEW JERSEY 07101

CHRIS CHRISTIE  
*Governor*

KIM GUADAGNO  
*Lt. Governor*

STEFANIE A. BRAND  
*Director*

March 18, 2011

**Via Hand Delivery and Electronic Mail**

Honorable Kristi Izzo, Secretary  
New Jersey Board of Public Utilities  
Two Gateway Center  
Newark, NJ 07102

**Re: In the Matter of Comprehensive Energy Efficiency  
and Renewable Energy Resource Analysis for 2009-2012:  
2011 Programs and Budgets: Compliance Filings – Revisions  
to Previously Approved Budget  
BPU Docket Nos.: EO07030203 and EO10110865**

Dear Secretary Izzo:

Enclosed please find an original and ten copies of comments submitted on behalf of the New Jersey Division of Rate Counsel in connection with the above-captioned matters. Copies of the comments are being provided to all parties by electronic mail and hard copies will be provided upon request to our office.

We are enclosing one additional copy of the comments. Please stamp and date the extra copy as "filed" and return it to our courier.

Honorable Kristi Izzo, Secretary  
March 18, 2011  
Page 2

Thank you for your consideration and assistance.

Respectfully submitted,

STEFANIE A. BRAND  
Director, Division of Rate Counsel

By:

A handwritten signature in black ink, appearing to read "Felicia Thomas-Friel", written over a horizontal line.

Felicia Thomas-Friel, Esq.  
Deputy Rate Counsel

c: [OCE@bpu.state.nj.us](mailto:OCE@bpu.state.nj.us)  
[publiccomments@njcleanenergy.com](mailto:publiccomments@njcleanenergy.com)  
Mike Winka, BPU  
Mona Mosser, BPU  
Benjamin Hunter, BPU  
Anne Marie McShea, BPU

**In the Matter of Comprehensive Energy Efficiency  
and Renewable Energy Resource Analysis  
for 2009-2012 Clean Energy Program:  
2011 Programs and Budgets: Compliance Filings  
– Revisions to Previously Approved 2011 Budget  
BPU Docket Nos. EO07030203 and EO10110865**

**Comments of the New Jersey  
Division of Rate Counsel**

**March 18, 2011**

**Introduction**

The Division of Rate Counsel (“Rate Counsel”) would like to thank the Board for the opportunity to present our comments on the proposed revisions (“Proposed Revisions”) to the 2011 Clean Energy Program (“CEP”) Budget submitted to stakeholders for comment by the Office of Clean Energy (“OCE”) on March 9, 2011. Rate Counsel generally supports the Proposed Revisions Straw as it relates to the energy efficiency (“EE”) and renewable energy (“RE”) program funding levels for 2011.

Rate Counsel has long supported what are now called Clean Energy Programs. These programs, funded by ratepayers, can help ratepayers use energy more efficiently and productively, thus reducing conventional energy requirements in part by measures to improve the efficiency of heating, cooling, and lighting as well as by measures to support new ways to produce power.

Benefits to the State’s economy as a whole and to the environment have been documented. On the cost side, Rate Counsel has always been concerned that clean energy programs be designed to yield benefits that are proportionate to the ratepayers’ investment in them, and also that the overall level of ratepayer funding be sustainable.

After all, in any given year most ratepayers cannot participate directly in clean energy programs, so for them the benefits consist of the opportunity to participate at some future time, plus broad economic and environmental benefits that accrue. Nevertheless, Rate Counsel believes that most ratepayers accept modest charges to support clean energy programs, taking a broad view of the need for them.

Finally, Rate Counsel's comments are based upon our observations at this time and we reserve our right to continue our analysis and provide additional comments, as appropriate, on items addressed, or not addressed, herein.

#### **I. Specific Budget Modifications - Energy Efficiency**

The 2011 CEP budgets approved by the December 22, 2010 Board Order were partially based on estimated expenses for 2010 and were subject to "true up" based on final 2010 expenses. In its March 9, 2011 notice, the OCE sets forth proposed revisions to the 2011 budgets to account for the difference between the estimated 2010 expenses used to develop the initial 2011 budgets and actual 2010 expenses. The OCE reports that the difference between the estimated and actual carry over of unspent 2010 funding, called "additional carry over", totals approximately \$42 million for EE and RE programs. The OCE states that these funds are available for allocation to CEP programs for 2011. In addition to the additional carry over, OCE proposes other changes to the budgets.

Rate Counsel addresses some elements of the proposal for the CEP's EE programs below.

##### **A. Home Performance with Energy Star ("HPwES") Transfers**

The HPwES program has additional carry over of \$11.5 million from 2010, which the OCE effectively proposes to transfer to the residential HVAC programs, the residential



Energy Efficient Products program, and the C&I Large Energy Users Pilot. The HVAC programs have grown substantially since HPwES was suspended last year, and thus a transfer from HPwES to HVAC programs for 2011 is reasonable until HPwES participation picks up again. Beyond the near term, the HVAC programs should not be considered a substitute for the HPwES program, because it could lead to lost opportunities for whole house energy efficiency. Resources should be invested in marketing HPwES in the near term to jump start the program again.

### **B. Large Energy Users Pilot**

The OCE proposes to allocate \$20 million to the Large Energy Users Pilot program from programs that OCE anticipates will not require their additional carry over to meet expected 2011 expenses. The \$20 million reallocation comes partially from Commercial and Industrial (“C&I”) programs, including \$3 million from Pay for Performance, \$2 million from Combined Heat and Power (“CHP”), \$11 million from Direct Install, and about \$1 million from Local Government Energy Audits and C&I marketing combined. In addition, \$2.5 million is transferred from Residential programs. Rate Counsel maintains that the Large Energy Users pilot, with such a large funding allocation—over 11% of the total C&I EE budget, is generally not considered to be “pilot” scale. Rate Counsel is concerned about allocating \$20 million to a program that has yet to be designed and about diverting funds from programs that are currently producing energy and emissions savings. Rate Counsel recommends that the pilot should be started at a much smaller scale and be considered for a full scale: (1) after the design is finalized and the pilot is tested, and (2) if it results in a successful program with good participation levels, cost effective measures, verified savings, and minimized lost opportunities.

### **C. Energy Efficient Products**

The OCE proposes to reallocate \$3.4 million to the Energy Efficient Products program for upstream incentives to manufacturers and retailers to offer discounts on Energy Star products such as CFLs, electronics and appliances. The details on upstream incentives have yet to be defined. Rate Counsel does not object to this reallocation but recommends that the designs be developed and presented for comment as soon as possible.

### **D. Marketing**

Marketing is not increased commensurate with the increases in the budgets of the individual programs. Overall, the residential EE budget increases about 5%, and the C&I budget increases over 13%. In contrast, neither the residential nor the C&I marketing increase at all under the proposed budget. As Rate Counsel stated in its November 17, 2010 comments on the initial 2011 budget proposal, the marketing budget (0.6% of the C&I budget, and 1.4% of the residential budget) is very small compared with what other states are spending. Rate Counsel recommends that marketing budgets for residential and C&I programs be increased by at least the sector's overall percent budget increase (5% and 13%, respectively) and that the proposed allocation to the Large Energy Users Pilot be decreased to accommodate an increase in marketing budgets.

### **E. C&I Retrofit**

The OCE proposes to reallocate \$3 million to the C&I Retrofit program to provide for recent increases in program participation levels. Rate Counsel does not object to this reallocation.

## **II. Specific Budget Modifications - Renewable Energy**

Rate Counsel does not have any comments on the proposed RE budget revisions since the proposed revisions appear reasonable and are consistent with the Board Order approving the 2011 budget. However, we reserve our right to continue our analysis and provide additional comments, as appropriate, as the budget year progresses.

## **III. General**

The Proposed Revisions show a reduction in the OCE Oversight budget, from approximately \$8 million to \$7.7 million. Rate Counsel supports efforts to reduce administrative costs.

## Alternate Proposed Modification to 2011 NJCEP Budget

Reallocate \$3.4 million to the Solar Hot Water program instead of the retail products upstream budget.

In 2009, 2010 the Board of Public Utilities considered Domestic Solar Hot water "the obvious huge hole in the Solar Program that needed to be filled."

With the attached documentation you can see we have a huge opportunity to create a new industry, create jobs, reduce our carbon foot print, save consumers money so they can spend it elsewhere in our economy<sup>1</sup>, and generate revenue for the state of New Jersey Treasury by funding the Solar Hot Water Program for 2011.

With a \$3.4 million budget to jump start the Solar Hot Water industry in the first year based on \$1,200 rebates, we can install 2,833 Solar systems at an average cost of \$12,000 to \$15,000. Generating an estimated \$42.5 million in NEW gross sales. Creating an anticipated \$13 million in NEW wages to our economy. An estimated \$400,000 in income tax and \$234,000 to the SUI fund and an estimated \$1.2 million in sales tax<sup>2</sup> would be contributed to the NJ state treasury. Additionally a new job sector would be created to keep people off unemployment. We need to take care of "Joe the Plumber" the working man running a small business, the backbone of economic recovery. BPU loved Domestic Solar Hot Water in 2009 (see attached pdf. press release). The 2009 pilot was successful enough to subsequently open up the program to gas customers in 2010 (see attached pdf.). Now we need to launch this program state wide to make a greater impact towards economic recovery. By reallocating the money to the solar program you will stimulate new purchases not previously considered by rate payers that will yield dividends for years to come. To accelerate the growth rate of the solar hot water program; increase the rebate to \$2,400 over and above all other programs.

I propose we redirect the money under consideration to be reallocated to "upstream incentives to manufacturers and retailers to provide discounted Energy Star products to customers such as CFL's, electronics and appliances." This would amount to wasteful spending for the reasons listed below.

By 2012 HR6 Federally mandates energy efficiency improvements by 30% in the lighting category (CFL's) this title sets, by statute, new efficiency standards for external power supplies, residential clothes washers, dishwashers, dehumidifiers, refrigerators, refrigerator-freezers, freezers, electric motors, and residential boilers. What would be the point of spending economic stimulus dollars for a market that is going to be 100% transformed for all new products by federal mandate by 2012(pdf. attached).

Manufacturers and Retailers have their own budget for marketing, discounting and promoting Energy Efficient products. No new jobs will be generated by retailers or manufacturers by discounting and promoting Energy Efficient products. The promotions are onetime events. When reallocating the funds to solar hot water rate payers will receive dividends for years to come and create jobs in the short term. Those dividends and wages will be spent on taxable mandated energy efficient consumer products which will generate sales tax revenue for years to come.

Thank you,

Jim Price  
Comfortable Energy Efficient Homes  
by Freedom Solar Energy, LLC  
908-566-7494

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<sup>1</sup> The additional revenue generated in state sales tax is not calculated into any of the numbers on this page. All consumer purchases on taxable goods will be windfall revenue for the state treasury department.

<sup>2</sup> The estimated calculation of sales tax is based on the initial purchase of equipment to be installed into homes.



## New Jersey Board of Public Utilities

### PRESS RELEASE

**For Immediate Release:**  
September 30, 2009

**Contact:**  
Doyal Siddell  
973-468-8515

### **New Jersey's Clean Energy Program™ Launches Solar Domestic Hot Water Pilot Program**

*New Jersey homeowners may receive \$1,200 incentive for purchasing and installing qualified solar domestic hot water heaters*

(NEWARK, NJ) – Sponsored by the New Jersey Board of Public Utilities (BPU), *New Jersey's Clean Energy Program* recently launched a program targeting single family homeowners with electric hot water heating systems. For those who purchase and install a solar domestic hot water heater the *Solar Domestic Hot Water Pilot Program* is currently offering a \$1,200 incentive. The new solar hot water heating system, if qualified, may either replace or supplement the existing electric hot water heating system.

A solar hot water heating system is a reliable and efficient alternative for heating hot water. It can provide a significant portion of a home's water-heating needs. Typically a solar hot water system is designed to meet 100% of summer hot water demand and 30% of winter hot water demand for an average single family home. Standard electric heating is used as a back up to solar hot water heating systems. By installing a solar hot water heater, New Jersey homeowners can potentially cut their water heating bills in half. Additionally, installing a qualified solar domestic hot water heater can reduce the load of an electric water heater by almost 2,500 kWh per year, preventing 3,958 pounds of carbon dioxide from entering the atmosphere annually. This is the equivalent of not driving a car for four months every year.

"Participating in New Jersey's *Solar Domestic Hot Water Pilot Program* is another one of the many ways New Jersey residents can help meet Governor Corzine's comprehensive Energy Master Plan goal of reducing energy consumption by 20 percent by the year 2020," said Jeanne M. Fox, President of the New Jersey Board of Public Utilities. It provides the homeowner with immediate savings on their utility bill and all of us save by reducing the need for future utility infrastructure."

Customers interested in applying for this new incentive must meet the following requirements:

- Install and operate a qualified Solar Domestic Hot Water System in an existing New Jersey single family home.

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- Residence must currently be serviced by one of the following electric utilities: Atlantic City Electric (ACE), Jersey Central Power & Light (JCP&L), Public Service Electric & Gas (PSE&G), or Rockland Electric Company (RECO).
- Incentives are available for systems purchased on or after September 9, 2009, through December 31, 2009.
- List of qualifying systems may be found at [NJCleanEnergy.com/sdhw](http://NJCleanEnergy.com/sdhw).
- The solar domestic hot water heater must be installed by a contractor with a NJ Home Improvement Contractor's (HIC) License that is participating in the *Solar Domestic Hot Water Pilot Program*.
- Application must be postmarked within 120 days from the date of purchase.

Replacing or supplementing an electric hot water heater with a solar hot water system will help New Jersey residents save money, energy and help protect the environment.

More information about the *Solar Domestic Hot Water Pilot Program* can be found at [NJCleanEnergy.com/sdhw](http://NJCleanEnergy.com/sdhw) or by calling 866-NJSMART (866-657-6278).

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#### **About the New Jersey Board of Public Utilities (NJBPU)**

*The New Jersey Board of Public Utilities is a state agency and regulatory authority mandated to ensure safe, adequate and proper utility services at reasonable rates for New Jersey customers. Critical services regulated by the NJBPU include natural gas, electricity, water, wastewater, telecommunications and cable television. The Board has general oversight responsibility for monitoring utility service, responding to consumer complaints, and investigating utility accidents. To find out more about the NJBPU, visit our web site at [www.nj.gov/bpu](http://www.nj.gov/bpu).*

#### **About the New Jersey Clean Energy Program (NJCEP)**

*New Jersey's Clean Energy Program, established on January 22, 2003, in accordance with the Electric Discount and Energy Competition Act (EDECA), provides financial and other incentives to the State's residential customers, businesses and schools that install high-efficiency or renewable energy technologies, thereby reducing energy usage, lowering customers' energy bills and reducing environmental impacts. The program is authorized and overseen by the New Jersey Board of Public Utilities (NJBPU), and its website is [www.njcleanenergy.com](http://www.njcleanenergy.com).*



# 2011 WARM Advantage Solar Domestic Water Heater Program Rebate Application Instructions, Terms and Conditions

Statewide, for all Residential Gas Customers in New Jersey,  
including Propane Customers

For Systems Purchased on or after April 9, 2010



Instructions: Please read the program instructions, terms and conditions before completing the form on the other page.

## A. CUSTOMERS — TO QUALIFY FOR YOUR REBATE, YOU MUST

1. Purchase, install and operate a qualified Solar Domestic Water (SDWH) system in a residence that currently uses natural gas or propane to provide hot water.
2. Replace an installation in an existing New Jersey home.
3. All equipment must meet requirements in the table below.
4. Solar Domestic Water Heater (SDWH) must be installed by a properly licensed and approved contractor with a NJ Home Improvement Contractor's (HIC) License, participating in the SDWH Program.
5. Abide by the rules and rebate levels in effect at the date of purchase.
6. Postmark the application within 60 days of purchase date.

Requirement	Qualifying Level	Documentation	Incentive Amount
Qualifying solar water heater system, replacing existing gas water heater in single family home.	SDWH system must be listed on NCJEP approved list and must be: <ul style="list-style-type: none"> <li>• ENERGY STAR® Qualified</li> <li>• Solar Rating and Certification Corporation (SRCC) OG-300 listed.</li> <li>• SF=&gt;0.5</li> </ul>	<ul style="list-style-type: none"> <li>• Completed rebate application form.</li> <li>• Copy of itemized sales receipt showing proof of purchase (marked "paid" if a proposal).</li> </ul>	\$1,200

ENERGY STAR qualified products must be listed at [www.energystar.gov](http://www.energystar.gov).

## B. INSTRUCTIONS FOR COMPLETING THE REBATE FORM As the customer, you are responsible to see that all requirements are met.

Section A & B of this form: Customer to complete

Section C & D of this form: Contractor to complete

Copy of itemized sales receipt showing proof of purchase (marked PAID if proposal) Customer to provide with application

1. Keep copies of all above required documents. If contractor is submitting the rebate documents for you, we suggest you request a copy be mailed to you simultaneously.
2. Attach a copy of itemized sales receipt showing proof of purchase (marked paid if proposal).
3. Mail original application form along with the above mentioned documents to the address below:

New Jersey's **Clean Energy Program**<sup>TM</sup>  
WARM Advantage Program  
c/o Honeywell • 145 Route 46 West • Wayne, NJ 07470  
Phone: 866-NJSMART

## C. IMPORTANT TERMS AND CONDITIONS

1. Funding for this rebate program is provided through the American Recovery and Reinvestment Act (ARRA). Due to the federal source of funds, applicants will be subject to special ARRA terms and conditions as described in this document.
2. Due to the limited availability of funds, the program will terminate at the earlier of **when funds are exhausted or June 30, 2011**. Program termination will be posted on NJCleanEnergy.com.
3. Applications or supporting documentation received after the program termination date will not be honored.
4. Program procedures, requirements and rebate levels are subject to change or cancellation without notice.
5. Failure to provide any of the required information will prevent processing of the application.
6. Participating contractors have to meet minimum training requirements, follow manufacturer installation guidelines and provide warranty service as specified by the program.
7. The contractor must provide the customer with a signed, completed Solar Water Heating Self-Inspection System Checklist.
8. The system must be installed in accordance with the manufacturer requirements.
9. Installations must be completed in accordance with all laws, codes and other requirements applicable under federal, state, and local authority.
10. It is the responsibility of the customer to assure that all requirements for the rebate are met and that **all required information** is provided.
11. If the customer portion of the rebate is to be assigned to another party, the customer must authorize this by completing and signing section B of the application form.
12. Please allow up to 120 days from the date *New Jersey's Clean Energy Program* receives all required information to process your rebate.
13. *New Jersey's Clean Energy Program* reserves the right to inspect all installations in order to ensure compliance with all program requirements.
14. Incentives are available for the installation (replacement) of qualified equipment in existing single family homes.
15. Installations of equipment in new homes are not eligible for incentives.
16. *New Jersey's Clean Energy Program* provides no oversight or control over any contractor services related to this program. Responsibility for proper sizing, installation, as well as delivery and workmanship related to any equipment or services the customer procures, rests exclusively with the contractor selected by the customer. *New Jersey's Clean Energy Program* assumes no responsibility for oversight of contractor services.
17. Each customer is eligible for and will receive a rebate for only one unit.
18. *New Jersey's Clean Energy Program* audits its rebate programs as a protection against consumer and/or contractor fraud. Any attempt to defraud *New Jersey's Clean Energy Program* will result in automatic rejection of the rebate application and possible legal action.
19. Customers participating in other programs within *New Jersey's Clean Energy Program* or New Jersey Weatherization Assistance Programs may not be eligible for rebates.
20. You are urged to seek appropriate consultation concerning both tax liabilities that might be associated with the receipt of the rebate and any federal tax credits available.

For more information about *New Jersey's Clean Energy Program*, or for assistance in completing an application, please call 866-NJSMART.





# 2011 WARMAdvantage Solar Domestic Water Heater Program Rebate Application Instructions, Terms and Conditions

Statewide, for all Residential Gas Customers in New Jersey,  
including Propane Customers

**For Systems Purchased on or after April 9, 2010**

Before completing this form, please refer to the program instructions, terms and conditions accompanying this form.

## A. CUSTOMER INFORMATION

Gas Utility:  New Jersey Natural Gas  Elizabethtown Gas  Public Service Electric & Gas  South Jersey Gas

Propane Propane Provider: \_\_\_\_\_ Account Number: \_\_\_\_\_

First Name: \_\_\_\_\_ Last Name: \_\_\_\_\_

Installation Address: \_\_\_\_\_ Daytime Phone: \_\_\_\_\_

City: \_\_\_\_\_ State: **NJ** Zip: \_\_\_\_\_

Email Address \_\_\_\_\_  Sign me up to receive *New Jersey's Clean Energy Program* E-Newsletter for energy savings

How did you find out about the **WARMAdvantage** Program?  NJCleanEnergy.com  Direct Mail  Event  Print  Radio

Contractor  Friend  Other \_\_\_\_\_

I have read, understood and am in compliance with all rules and regulations concerning this rebate program. I certify that all information provided is correct to the best of my knowledge, and I give *New Jersey's Clean Energy Program* permission to share my records with the US Department of Energy and New Jersey Board of Public Utilities or its contractors, who plan to evaluate my energy usage. The contractor has provided the customer with a signed completed Solar Water Heating Self-Inspection System Checklist. Additionally, I allow reasonable access to my property to inspect the installation and performance of the technologies and installations that are eligible for incentives under the guidelines of *New Jersey's Clean Energy Program*. I certify that old equipment has been replaced and the replaced equipment has been recycled according to the laws of the state of New Jersey.

Customer Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## B. This section to be completed by the customer if the rebate is to be issued to another party.

Rebate Recipient First Name: \_\_\_\_\_ Last Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_ Daytime Phone: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Customer Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## C. CONTRACTOR/INSTALLER All fields must be completed by the installing contractor

Company: \_\_\_\_\_ Daytime Phone: \_\_\_\_\_

Street Address: \_\_\_\_\_ Fax Number: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Email: \_\_\_\_\_

Are you an approved contractor under the NJCEP Solar Domestic Hot Water Heater program?  Yes  No

Contractor Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## D. EQUIPMENT INFORMATION

System	Type: <input type="checkbox"/> Drainback <input type="checkbox"/> Thermosiphon <input type="checkbox"/> Closed Loop			
	Manufacturer:	SRCC/OG-300 System #:	Model #	Primary Tank Serial #
Collector	Solar Azimuth °	Collector Tilt °	Shading% (9AM to 3PM)	Number of Panels
Purchase Date:	____/____/____	ENERGY STAR: Yes ___ No ___	System Size (therms) Newark	

**FOR OFFICE USE ONLY**

Date Received: \_\_\_\_/\_\_\_\_/\_\_\_\_ Receipt Date: \_\_\_\_/\_\_\_\_/\_\_\_\_ Model #: \_\_\_\_\_ ENERGY STAR: Yes \_\_\_ No \_\_\_