

The 2005 New Jersey  
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# Transforming New Jersey's Clean Energy Market: Next Steps



*New Jersey's Clean Energy Program*

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## *New Jersey's Integrated Approach Goals and Objectives*

- EE (including CHP) and RE will provide energy growth by 2012
- 20% annual increase in electric and natural gas energy efficiency saving
- 300 MW of Class I RE facilities (includes 90 MW PV) by 2008

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*New Jersey's Clean Energy Program 2005 – 2008 Funding Level  
 Non-bypassable fee on all electric and natural gas customers*

Year	Total	EE	%	RE	%
2005	\$140	\$103	74%	\$37	26%
2006	\$165	\$113	68%	\$52	32%
2007	\$205	\$123	60%	\$82	40%
2008	\$235	\$133	56%	\$102	44%
<b>Total</b>	<b>\$745</b>	<b>\$472</b>	<b>63%</b>	<b>\$273</b>	<b>37%</b>

*44% for electric EE 17% for NG EE and 37% for RE  
 \$18/yr/HH for electric and \$14/yr/HH for natural gas (1% rate impact over 4 years)*



## *New Jersey's Clean Energy Program 2005 – 2008 Annual Objectives*

Year	EE Electric	EE NG	RE Solar	RE Solar	RE Class I	RE Class I
	MWh	Dtherm	MW	MWh	MW	MWh
<b>2005</b>	<b>341,770</b>	<b>489,305</b>	<b>4</b>	<b>4,800</b>	<b>19</b>	<b>108,900</b>
<b>2006</b>	<b>409,454</b>	<b>586,206</b>	<b>14</b>	<b>16,800</b>	<b>38</b>	<b>216,600</b>
<b>2007</b>	<b>486,958</b>	<b>697,167</b>	<b>27</b>	<b>32,400</b>	<b>66</b>	<b>376,200</b>
<b>2008</b>	<b>575,568</b>	<b>824,028</b>	<b>39</b>	<b>46,800</b>	<b>89</b>	<b>507,300</b>

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## *NJ's Clean Energy Program Results – EE & RE*

*NJ residents and business use 74,000,000 MWh per year increasing at 1.4 % per year*

*NJCEP saves 330,000 MWh in 2004  
Committed 116,000 MWh  
44% of energy growth*

*NJCEP has installed 6.6 MW of PV (2.6 MW in 2004)  
Total Class I DG 10.4 MW*

***Committed***

***29 MW of PV and 23 MW other Class I RE***



## *Renewable Energy Portfolio Standard*

- *NJ electric supplier must provide a percentage of their electricity as Class I renewable*
- *0.75 % (3.25%) by EY 2005 - 4 MW of PV (\$1.40)*
- *4.0 % (6.5%) by EY 2009- 90 MW of PV (\$4.50)*
- *20% (22.5%) by EY 2021 – 1500 MW of PV (\$18.00)*
  
- *Compliance with NJ's RPS through*
- *Renewable Energy Certificates (RECs)*
- *1 MWh of renewable energy = 1 REC*
- *LFG REC \$5, Wind REC \$15, Solar REC \$170*

**NJ's RE goals will be achieved through the RPS and financed by RECs**



## *New Jersey's RPS Value of RECs*

<b>Year</b>	<b>Class 1 – Class 2 and Solar RECs</b>	<b>Solar RECS</b>
<b>2004</b>	<b>\$ 14,009,400</b>	<b>\$ 1,448,000</b>
<b>2008</b>	<b>\$ 48,746,600</b>	<b>\$ 15,080,000</b>
<b>2020</b>	<b>\$ 222,275,800</b>	<b>\$ 126,000,000</b>
<b>GHG Credits</b>	<b>-&gt; \$25</b>	<b>-&gt; \$250</b>
<b>REC</b>	<b>\$15 -&gt; \$5 (\$2.5)</b>	<b>\$200 -&gt; \$70</b>



## *New Jersey's Integrated EE and RE Approach: Next Steps Using EE as a Resource*

- Energy Efficiency Portfolio Standards
- EE Certificates

We should apply the lessons learned in the transformation of the RE Programs



*Energy Efficiency Portfolio Standard for Illustrative Purposes only*

Reporting Year	Residential EE	C&I EE	Clean DG	Load Mgmt	Total
	Class I	Class II	Class III	Class IV	
<b>2006</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.40</b>
<b>2007</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.80</b>
<b>2008</b>	<b>0.30</b>	<b>0.30</b>	<b>0.30</b>	<b>0.30</b>	<b>1.20</b>
<b>2009</b>	<b>0.40</b>	<b>0.40</b>	<b>0.40</b>	<b>0.40</b>	<b>1.60</b>
<b>2010</b>	<b>0.50</b>	<b>0.50</b>	<b>0.50</b>	<b>0.50</b>	<b>2.00</b>
<b>2011</b>	<b>0.60</b>	<b>0.60</b>	<b>0.60</b>	<b>0.60</b>	<b>2.40</b>
<b>2012</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>2.80</b>

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## *New Jersey's Integrated Approach*

- New Jersey's Clean Energy Program:
  - [www.njcleanenergy.com](http://www.njcleanenergy.com)
- Rutgers' Center for Energy, Economics and Environmental Policy (CEEPP)
  - <http://policy.rutgers.edu/ceep>
- Clean Energy Council – Committees
  - Portfolio Management Work Group
  - State Energy Master Plan and Energy data management
  - Hydrogen Learning Center

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