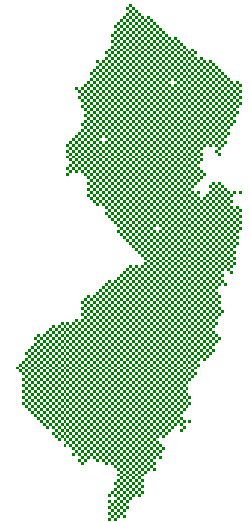




**New Jersey's Clean Energy Program  
To Promote and Advance Distributive  
Generation RE and Combined Heat & Power**



**State EE/RE Technical Forum – The Keystone Center  
Michael Winka Director NJBPU – OCE March 17, 2005**

# **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**

# **New Jersey's Approach Holistic and Integrated or A Little Bit of Everything**

- **Net Metering/Standard Interconnections**
- **Good Rate design**
- **Capital Cost Incentives/Rebates**
- **Portfolio Management**
- **Next Steps**

# **New Jersey's Net Metering and Interconnections Standards**

- **Up to 2 MW – 125% of Annual Use**
- **Small Commercial Business  
Up to 10 MW peak**
- **≤ 10 kW Inverter-based - No fee**
- **Reduce barriers**
- **Limit timeframe for review**

# **Net Metering/Standard Interconnections**

**Equivalent Technical Standards**

**Across the Region are good but  
Devil is in the details**

**Set maximum fee the Utilities can charge  
Including rates for feasibility studies, the  
timeframe for reviews and different levels  
of review for inverter based systems**

**Next Steps – Microgrids**

# **Good Rate design**

**Establish gas rates that promote the efficiency of CHP and minimize the electric rate capacity charges.**

**Everyone has to pay for infrastructure upgrades and maintenance but the rates should be fair and equitable**

**Next steps - Decouple throughput from service – phone/internet**

# **New Jersey's Societal Benefits Charge**

**Non-By-passable charge on all electric and NG use**

**Average Funding Level - \$ 187 Million per year - 4 years  
63% for EE and 37% for RE**

**\$19/HH/yr electric \$ 14/HH/yr \$4 NG**

**1-2 % on total bill (1% rate increase over 4 years)**

**Rebate for Capital Cost for EE and RE technology**

**Grants and long term financing for EE/RE projects**

**Grants and long term financing for RE Power Plants**

## New Jersey's Clean Energy Program 2003 Expenditure

	Budget	Actual	Committed	Total
EE	\$101,138,000	\$88,313,000	\$35,375,000	\$123,688,000
RE	\$36,000,000	\$9,472,000	\$44,078,000	\$53,550,000
<b>Total</b>	<b>\$137,138,000</b>	<b>\$97,785,000</b>	<b>\$79,453,000</b>	<b>\$177,238,000</b>

## Environmental Benefits of the 2003 Clean Energy Program Results

	Actual	Committed	Total
EE Annual Saving	\$12,565,344	\$8,120,156	\$20,685,500
RE Annual Savings	\$318,516	\$2,717,000	\$3,035,516
<b>Total</b>	<b>\$12,882,860</b>	<b>\$10,837,156</b>	<b>\$23,721,016</b>
EE Lifetime	\$164,523,216	\$126,825,996	\$291,349,212
RE Lifetime	\$4,839,164	\$55,674,828	\$60,513,992
<b>Total</b>	<b>\$169,362,380</b>	<b>\$182,500,824</b>	<b>\$351,863,204</b>



# **DG/CHP Capital Cost Incentives/Rebates**

**Rebates to lower the initial capital cost  
to lower the improve the payback to  
5 years**

**30% of capital cost for up to 1 MW for  
Engines and Turbines  
and 60% for Fuel cells  
using traditional fuels  
Must meet SOTA air emission limits**

# DG/CHP Capital Cost Incentives/Rebates

NJCEP Incentives for Class I RE			
Wind and Sustainable Biomass			
10 kW		\$5.00/ watt	60 %
>10 – 1MW		\$3-2-1/ watt	30 %
Solar (Photovoltaics)			
10 kW		\$5.50	70%
> 10 – 1MW		\$5-4-3/ watt	60%

# Capital Cost Incentives/Rebates

Status	Number	Capacity	Rebate
Approved funding	873	39.5 MW	\$151 M
Installed	350	5.3 MW	\$17.7 M
Solar AF	484	31.6 MW	\$127 M
Solar Installed	335	2.5 MW	\$11.8 M

# Portfolio Management

- **Renewable Portfolio Standard**

  - 4 % Class I by 2008**

  - 2.5 % Class II by 2008**

  - set aside for PV**

  - 20% by 2020**

- **Next Steps**

  - Energy Efficiency Portfolio Standard**

# 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>\$ 131,275,800</b>	<b>\$ 35,000,000</b>

**GHG Credits  
REC**

**\$10 - \$25**

**\$15 - \$5 (\$2.5)**

**\$100 - \$250**

**\$200 - \$70**

# **New Jersey's Integrated Approach**

**Information on New Jersey's Clean Energy  
Program: [www.njcleanenergy.com](http://www.njcleanenergy.com)**

**Evaluation Reports Rutgers' Center for Energy,  
Economics and Environmental Policy (CEEPP)**

**[http://policy.rutgers.edu/ceepp/images  
/NJ\\_REMA\\_Final\\_8-04.pdf](http://policy.rutgers.edu/ceepp/images/NJ_REMA_Final_8-04.pdf)**



New Jersey BPU  
**Clean Energy**  
PROGRAM

***YOUR POWER TO SAVE***