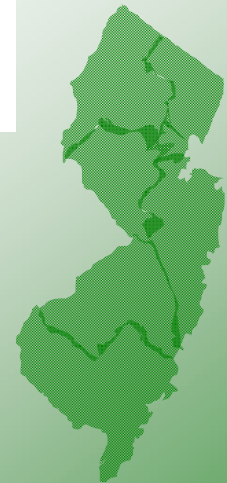




**New Jersey's Clean Energy Program
To Promote and Advance Distributive
Generation RE and Combined Heat & Power**



**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**

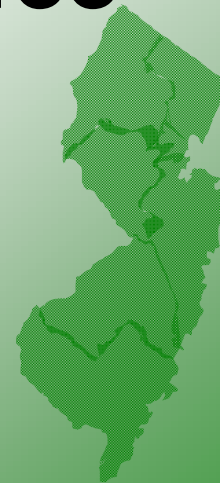


New Jersey's Approach Holistic and Integrated or A Little Bit of Everything

- **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	000	\$9,472,000	\$44,078,000	0
Total	\$101,138,000 \$137,138,000	\$97,785,000	\$79,453,000	\$53,550,000 \$177,236,000

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
Total	\$12,882,860	\$10,837,156	\$23,721,016
EE Lifetime	\$164,523,216	\$126,825,996	\$291,349,212
RE Lifetime	\$4,839,164	\$55,674,828	\$60,513,992
Total	\$169,362,380	\$182,500,824	\$351,863,204

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



Year	Class 1 – Class 2 and Solar RECs	Solar RECS
2004	\$ 14,009,400	\$ 1,448,000
2008	\$ 48,746,600	\$ 15,080,000
2020	\$ 131,275,800	\$ 35,000,000

**GHG Credits
REC**

\$10 - \$25

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

\$100 - \$250

\$200 - \$70

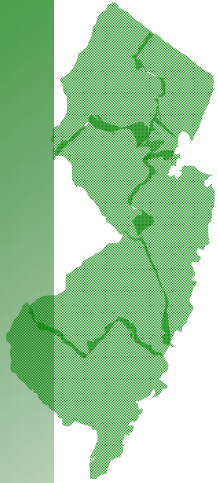
New Jersey's Integrated Approach

Information on New Jersey's Clean Energy Program: www.njcleanenergy.com

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

http://policy.rutgers.edu/ceecep/images/NJ_REMA_Final_8-04.pdf





New Jersey BPU
Clean Energy
PROGRAM

YOUR POWER TO SAVE