

New Jersey Energy Master Plan
Strategy Template
2005-2020
**Performance-based Energy Efficiency Program for Large Commercial and
Industrial Customers**

<u>SUBMITTED BY</u>	
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Objective

1. Attain technically feasible electricity efficiency and conservation gains of 19.95 million MWhs by 2020.
2. Attain technically feasible efficiency and conservation gains of 77.2 trillion BTUs of non-electric heating demand by 2020.
3. Electricity prices in New Jersey should remain no more than +5% of the regional average.
4. Meet 5% of heating demand in the state with renewable fuels by 2020.
5. reduce greenhouse gas emissions
6. Improve air quality

Strategy

Enable energy companies to operate performance-based programs for the installation of energy efficiency measures for commercial and industrial customers. Earnings incentives would be made based on measured and verified energy savings over multiple years. Simplified measurement and verification (M&V) protocols will be developed based upon lessons learned from prior State endorsed programs and using a statewide Advanced Metering Infrastructure (AMI) that may be leveraged for the M&V process.

Energy Companies should be encouraged through incentive ratemaking to invest the necessary capital for improvements at a host site, and earn returns, for the energy savings through rates.

For electric savings, measures can include lighting, HVAC, energy management systems, process, variable speed drives, and motors, as well as customized programs. For gas savings, measures can include boilers, furnaces, energy management systems, process, and water heaters.

This strategy targets commercial and industrial customers that have not made the investment in energy efficiency on their own, whether due to lack of capital, lack of expertise, or lack of adequate return.

Responsible Party

While the BPU will oversee the program, New Jersey Energy Companies will be required to make a significant capital investment. Accordingly, prior to program implementation, the energy companies will need to work with the New Jersey Board of Public Utilities and other stakeholders

to develop an appropriate pre-approved asset investment recovery mechanism for this purpose. .

The new investment will lower annual throughput and suppress the recovery of previously existing investment, and slow the recovery of this investment. Accordingly, this new environment requires that the traditional recovery mechanism of throughput needs to be reconsidered, or an algorithm developed to be applied to consumer’s bills to afford the utility’s appropriate recovery of existing and future investment as throughput declines. One method to assure appropriate rates is to decouple the utility investment recovery from throughput.

Timeline of action

Protocols, processes and systems for managing the performance contracting program must be developed over a 6-8 month period.

Strategy outcome – Statewide potential results

Fuel	Estimated Energy Savings 2020	Estimated Cumulative Energy Savings	Estimated Bill Savings
Electric	8,500,000 MWh	110,000,000 Gwh	\$4.5 Billion @ \$0.085/kwh
Gas	400 million Therms	5,000,000 Billion Therms	\$2.5 Billion @ \$1.00/Therm

Implementation cost

See above. In addition, the BPU will need to set aside administrative costs from the SBC to manage the implementation of the program. The Societal impact should be neutral as funds not spent on supply will be utilized to pay for savings.

<u>Source of Funding</u>	
Funding sources Yes No	
Public sector funds None	Consumer/ratepayer Funds Incentive Payments funded through rate base rate of return

Indicators:

The potential for energy savings is directly related to the number and size of customers in the C&I market.

The majority of savings will come from high efficiency lighting systems, HVAC systems and process improvements.

Source:

New Jersey Energy Efficiency and Distributed Generation Market Assessment Report

Prepared by KEMA, Inc. for Rutgers University Center for Energy, Economic and Environmental Policy in 2004.

This report recommended implementation of an aggressive energy efficiency program with the goals of reducing 5,183 GWh of electric energy savings during the 2004 to the 2020 period and 371 Million Therms of natural gas saving for the same period.

The PSE&G strategies are targeting 8,500 GWh and 400 Million Therms of annual energy savings by the year 2020. The targets laid forth in this analysis are aggressive but within the achievable parameters quantified in the report.

Indicator Projection to 2020

Energy savings delivered from this program should be accurately measured and verified to confirm that program objectives can be met.

Program participation rates (i.e. number of customers and expected energy savings) need to be monitored to ensure the aggressive goals remain attainable.