



A NEW PERSPECTIVE

On Energy Saving Incentives



NJCleanEnergy.com/ssb



m

Energy Saving Incentives

Program Market Manager:

TRC Energy Services, Inc.

900 Route 9 North, Suite 104

Woodbridge, NJ, 07095

732-855-0033

Presenter:

Dr. Ron Maslo, P.E.

Project Manager

EAM Associates, Inc

732-267-1174



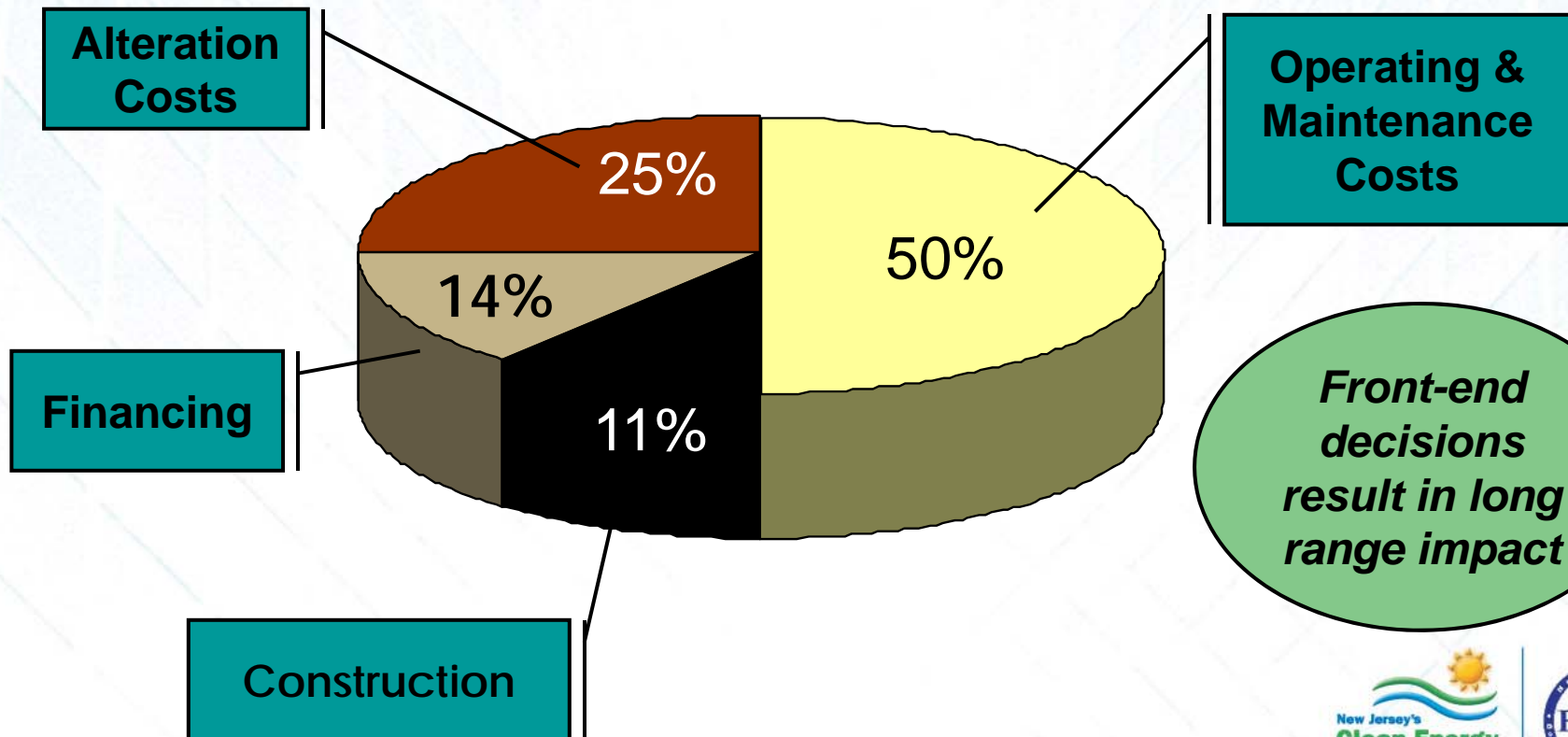


NJ Clean Energy Program

- Introduced March 9, 2001, as part of the Electric Discount and Energy Competition Act, N.J.S.A. 48:3-49 et. Seq, February 9, 1999.
- Funding comes from “Societal Benefits” or “SBC” Charge on Utility bill, N.J.S.A. 48:3-60(a)(3).
- Provisions for Commercial & Industrial projects, Residential Projects, and Renewable Energy projects
- New construction projects must be in designated Smart Growth areas to be eligible for incentives.
- Refer to the Program Guide found at www.njcleanenergy.com/ssb under “Quick Start”



OWNERSHIP COST SUMMARY (40-year building life cycle approximation)





Who Can Participate?

All New Jersey C&I Electric and Gas customers
(who pay Societal Benefits, i.e., not served by municipal utility)

Opportunities for all size and type projects:

- New construction (new buildings & additions)
- Major renovation (gut-rehabilitations)
- Equipment replacement





Incentives Available For:

- Design Assistance Grants
- Pre-Qualified Equipment
- Custom Measures with energy-saving potential
- Cost-sharing for Studies & Commissioning





Design Assistance Grants

- Comprehensive Design Support
 - At conceptual design stage of construction project
 - For Facilities of 50,000 Square Feet and Larger
OR HVAC > 150 tons and Demand > 75kW
 - Brainstorming: \$1,000 grant
 - Energy Modeling: \$5000 minimum
 - Incremental design incentive: up to \$5,000
- Modified Design Support
 - Design substantially complete, but before bidding
 - Goal to re-consider energy saving potential
 - Up to \$5,000 on case-by-case basis





Pre-approved Technologies

- Electric Chillers
(\$8 to \$170 / ton)
- Natural Gas Cooling
(\$185 to \$450 / ton)
- Electric Unitary HVAC Systems
(\$40 to \$92 / ton)
- Ground Source Heat Pumps
(\$370/ton)
- Gas Heating (\$300 minimum /
furnace or boiler) & DHW
Heating (\$50 minimum / heater)
- Variable Frequency Drives
(\$60 to \$155 / HP)
- NEMA Premium Motors - 1 to
200 hp (\$45 to \$700 / motor)
- Prescriptive & Performance
Lighting (\$10 to \$284 / fixture)
- Lighting Controls
(\$20 to \$75 / unit)





More Ways to Participate

- **Multiple Measures Bonus (up to 10% extra)**
For projects with lighting and non-lighting incentives or
2 non-lighting incentives, if lighting previously upgraded
- **Building Commissioning (CX)**
For K-12 public schools only (at least 50,000 s.f. in area)
Must follow Comprehensive Design Path
50% of Commissioning Agent fee to \$30,000 maximum





More Ways to Participate

Chiller Plant Optimization Studies

- When deciding to upgrade or replace chillers (500 tons min.)
- Study incentives to \$10,000 (on 50/50 cost sharing basis)

Compressed Air Optimization Studies

- Include both supply & demand sides of system
- Typically improve system operation efficiency 20 – 50 %
- Study incentives to \$10,000 (on 50/50 cost sharing basis)





New Incentives for 2009

- Pay For Performance Program
- Direct Install Program
- Local Government Energy Audit Program
- TEACH Energy Education Program





Pay For Performance (includes CHP projects)

- For facilities with an average peak demand of > 200 kW.
- No Demand Requirement for Multi-Use Facilities (Residential & Commercial)
- Incentives are based on analysis & simulation and are linked directly to energy savings, with a 15% reduction as the minimum goal.
- Three milestone payments:
 - 1) Submittal of Energy Reduction Plan – Incentives are Contingent on moving forward and are based on \$0.10 / sq ft and range from \$5K to \$50K max (not to exceed 50% of annual energy expense).
 - 2) Installation of all Recommended Energy Saving Measures – Incentives equal 60% of total Performance Based incentive.
 - 3) Completion Measurement and Verification Report - Final incentive equals remaining 40% of total Performance Based incentive.
- Payment 1 cannot exceed 50% of annual energy cost. Payment is Contingent on completing Phase 2.
- Combined Payments 2 & 3 cannot exceed 50% of project cost
- Incentive is capped at \$1M / utility meter and \$2M / facility
- EPA Portfolio Manager or LEED EB may be followed to validate savings, along with post Retrofit billing data.
- Budget for 2009 ~\$22.5M





Direct Install

- **Retro-fit Program for users with an average peak demand ~200 kW or less.**

Incentives and education are to encourage early replacement of eligible, energy consuming equipment.

- **Provides for direct installation by pre-qualified contractors. Incentives are paid directly to the contractor.**
- **Qualifying Users are eligible for incentives up to 80% of installed cost of approved projects.**
- **User pays contractor remaining 20%.**
- **Budget for 2009 ~ \$10.2 M**



[... back](#)

NJCleanEnergy.com/ssb



Local Government Energy Audit Program

- **Program to audit government facilities and to determine energy saving measures.**
- **Agency submits information to TRC and requests proposal for an energy audit from contractor on approved NJ Dept of Treasury list.**
- **Agency pays 25% of audit fee - if recommended upgrades are installed, equivalent in amount to the 25% fee, the 25% fee is refunded to Agency.**
- **Agency participating is eligible for upgrade equipment installation through the Smart Start Program or the Direct Install Program (2Q009).**
- **Total 2009 Funding ~ \$5M**





Teach - Energy Education Program (Teaching Energy Awareness with Children's Help)

- An educational, practical program for approximately 100 K – 12 Public Schools in 6 to 9 Districts.
- Schools to be Selected by State of NJ based on building characteristics
- Requires 24 months of energy consumption data to serve as baseline for comparison of savings versus baseline.
- Will entail modeling of facility to establish a base condition and to identify energy saving alternatives.
- Will allow administrators to see how their schools are performing against a local and national sample.
- Provide energy efficiency educational programs for the students and training of the faculty to teach these programs.





NJ SmartStart Buildings Rules

Send TRC Energy Services (Market Manager):

- Application & worksheet (if applicable)
- Copies of latest utility bills and W-9 form
- Equipment manufacturer technical data sheets

You must receive TRC's approval letter prior to the removal of existing, or installation of new, equipment

- When incentives > \$5,000 for HVAC or motors
- For all other energy-efficiency measures (EEMs)

Install in accordance with the "approval letter" within the specified time frame





NJ SmartStart Rules (continued)

Submit “proof-of-purchase” documentation and tax clearance certificate. Incentive will be the lesser of:

- **Approved program incentive amount**
- **Actual equipment cost of the EEM**

Allow 60 days for delivery of incentive after submission of all required documentation.

The NJBPU reserves the right to cap incentives at \$500,000 per utility account per calendar year.





Program Project Commitment Period

- **Pre-approved technologies ----- 12 months for existing facilities**
- **Custom measures ----- case by case**
- **New construction projects ----- 18 Months**
- **One-time extension with ----- 12 months TRC's written approval**





For More Information

- Commercial & Industrial Market Manager
TRC Energy Services, Inc. (732) 855-0033
- Marketing Outreach - EAM Associates, Inc.
Dr. Ron Maslo, P.E. (732) 996-2762

njcleanenergy.com/ssb



NJCleanEnergy.com/ssb