

Why are ESIPs so Important?

For Additional Information

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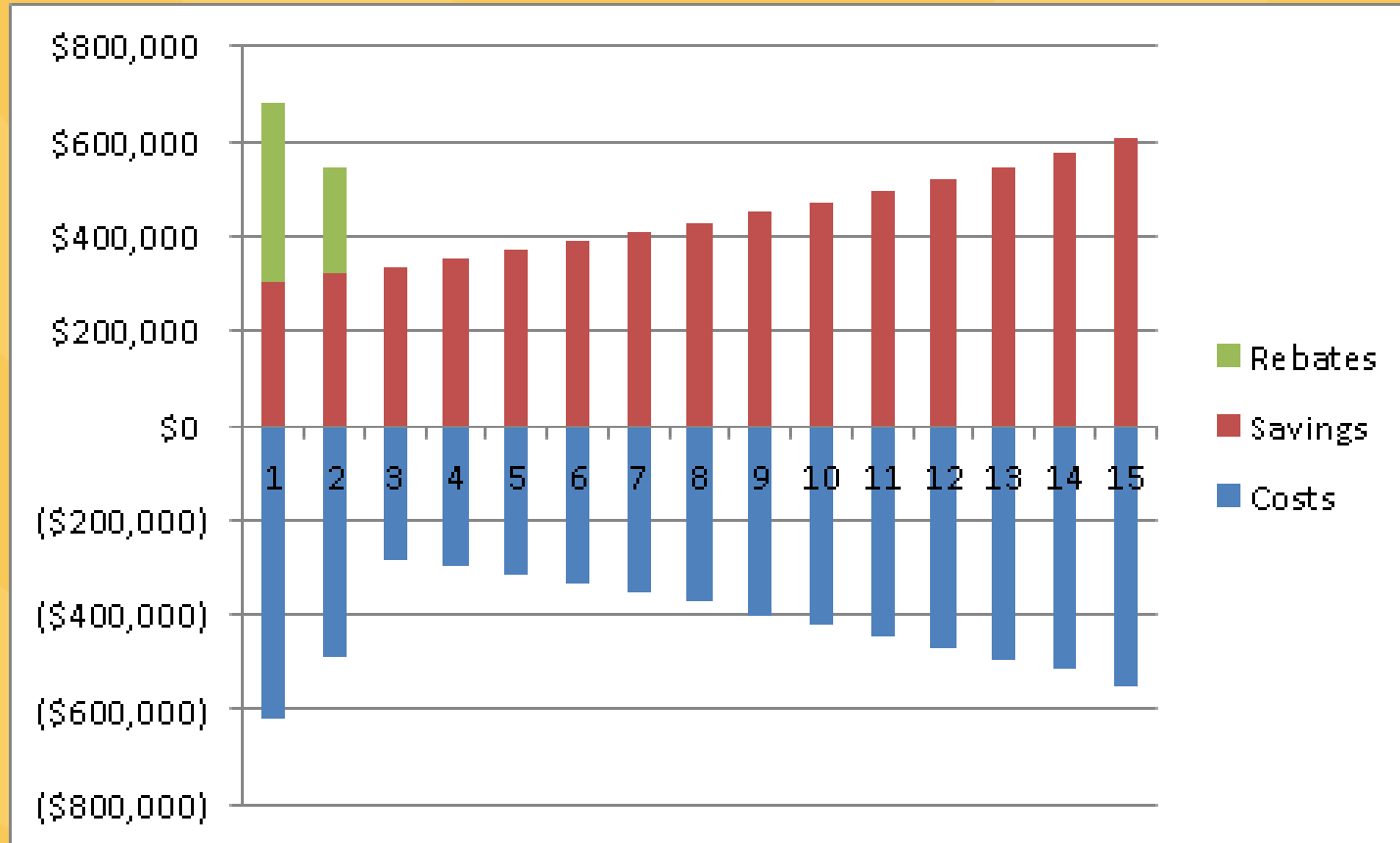


ESIP Concept

- Retrofitting public facilities with Energy Conservation Measures (ECM) without new capital investment
 - Savings from reduced energy use pays for the improvements = No New Money!
 - Maximum repayment term is 15 years
 - If Combined Heat & Power Technologies are used, payback period can be stretched even further (20 yrs.)

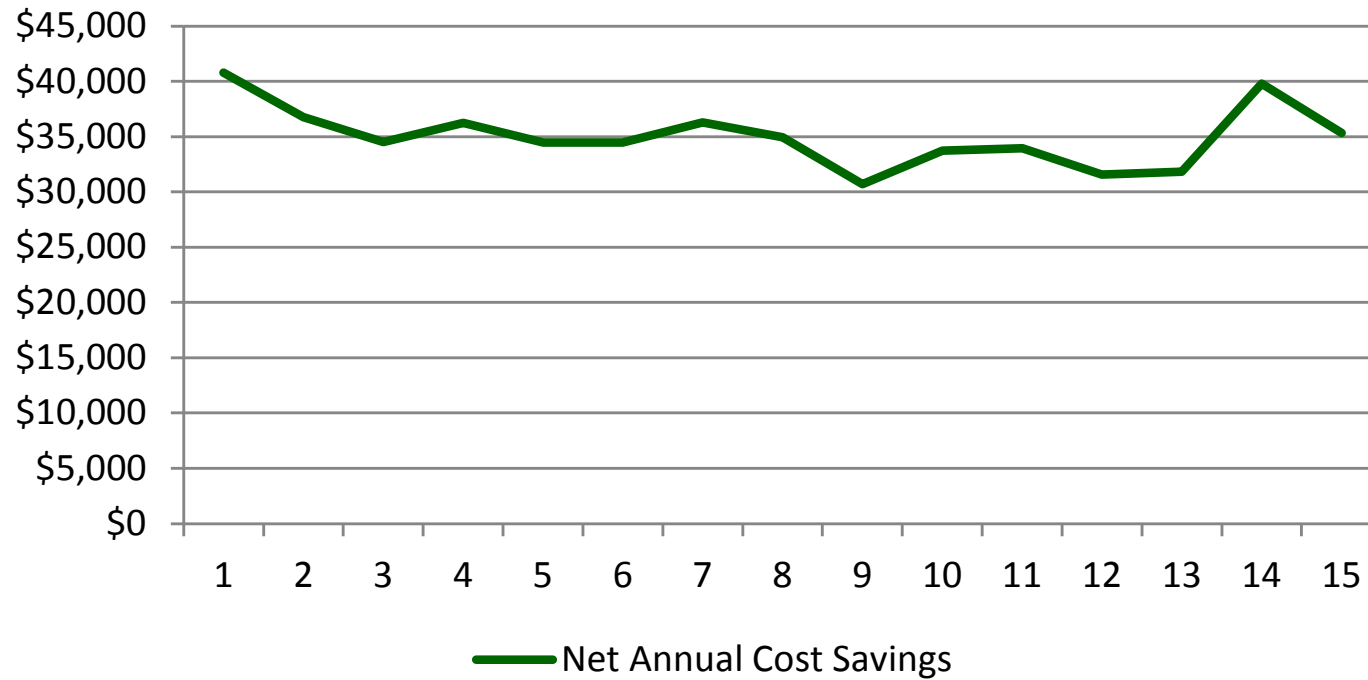


Annual Cash Flows



Annual Savings

Net Annual Cost Savings



ECM Categories:

- Distributed generation (solar, wind, geothermal)
- Boilers, Chillers, HVAC equipment and controls
- Energy efficiency, demand response equipment
- Building envelope, insulation, weatherization
- High efficiency lighting improvements
- High efficiency motors / variable frequency drives
- Water conservation, i.e., low flow fixtures



Advantage of ESIPs Approach: Synergy

syn·er·gy - [sin-er-jee]

(noun, plural syn·er·gies)

- 1. The interaction of elements that when combined produce a total effect that is greater than the sum of the individual elements, contributions, etc.; synergism.*



Advantage of ESIPs Approach: Synergy

- Effective Insulation
- High Performance Windows
- Tighter Construction
- Tighter Heat and Air Ducts
- Energy Efficient Heating and Cooling
- Efficient Water Use and Water Heating
- Energy Efficient Appliances
- Cleaner, Healthier Facility

Individually,
these approaches
all have merit.

Together, the
benefits are
multiplicative and
not simply a sum
of their parts



The Winning ESIP Equation

- A. New Financing Mechanism that leverages future savings to offset future costs UPFRONT, leading to viable projects in a tight economy
- B. ECMs that complement each other, and from an engineering standpoint are greater than the sum of their parts
- C. Support of diversified menu of NJ Clean Energy Program options to tailor ESIP to your particular situation

$A + B + C = \text{Benefits?}$ **NO!!!**

Rather, $A \times B \times C = \text{Benefits}$



Economic & Environmental Impacts

- Reduced costs over the long term
- Due to the diversified nature of the improvements, ESIPs can offer real resiliency benefits if carefully planned
- Offer ability to address issues that would be overlooked in a straight “payback period” economic analysis for individual ECMs
- Provide a framework for supporting behavioral changes in your facilities that can further potential energy and cost savings

