

## The Pennsylvania Sustainable Energy Financing (*PennSEF*) Program

# Key Benefits



PENNSYLVANIA  
**TREASURY**  
Earn. Learn. Invest.



Drinker Biddle

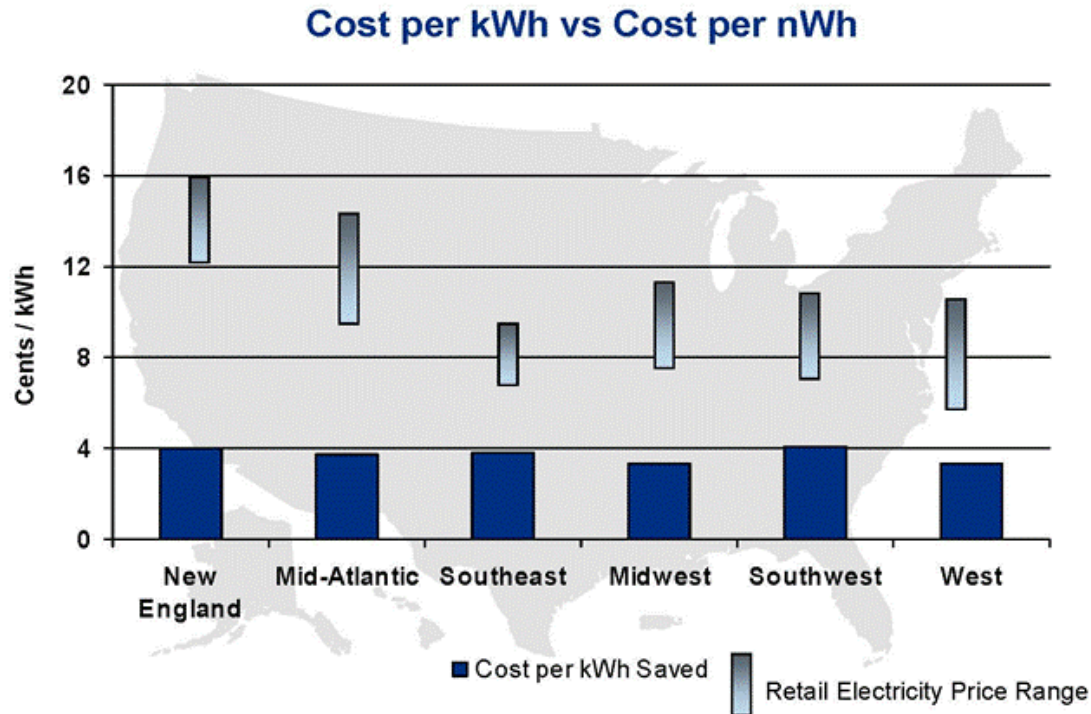


**WPPSEF**  
WEST PENN POWER  
SUSTAINABLE  
ENERGY FUND



# The Negawatt – not consuming

The cost of saving energy is significantly less than electricity rates throughout the U.S.



Source: Erhardt-Martinez & Laitner (2008) *The Size of the U.S. Energy Efficiency Market*. ACEEE.

# Sustainable Energy Financing Basics

Program assists governmental and non-profit entities to procure and finance sustainable energy improvements

---

Uses pooled tax-exempt financing based on the credit of the governmental and non-profit entities

---

Provides guaranteed dollar savings that exceed financing costs

---

Includes a wide array of energy & water conservation measures (electrical and thermal), CHP, distributed generation (e.g., solar PV), microgrids, smart energy management

---

Integrates deep energy retrofits with 'low hanging fruit'

# Benefits of the *PennSEF* Program

- ✓ Pre-Contract Audit Provided at No Cost to Participants
- ✓ Investment Grade Audit is then performed on the basis of the Participant's priorities and must offer self-financing improvements which total at least 90% of the savings quoted in the Pre-Contract Audit
- ✓ All Program Costs are Paid within the Bond Issue
- ✓ Project Pooling Means Economies of Scale for Document and Rating Costs
- ✓ No Cross Collateralization or Risk Associated with Involvement of Participants with Lower Credit Ratings
- ✓ Customized and Serialized Financing Optimization
- ✓ Economic Development Benefits Include Significant PA Job Creation & Use of PA Vendor Supply Chain

# More Benefits of the *PaSEF* Program

Fixed escalation of energy and water rates determined by the Program

---

Dollar savings are guaranteed as technical performance times escalated energy/water rates set by the Program

---

Only energy/water savings are counted, not operational savings or deferred maintenance

---

Companies\* installing measures agree to use best efforts to attain dollar savings through additional work (payment to cure shortfall, if needed)

---

Internationally recognized Monitoring and Verification (M&V) protocols are used

---

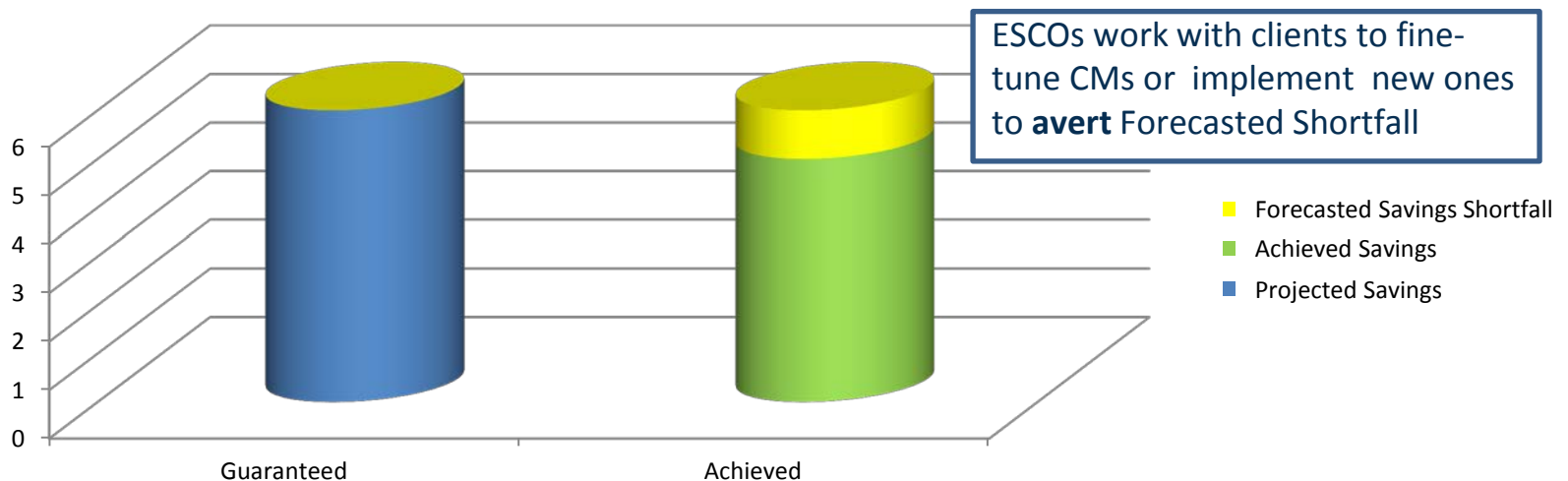
\* Sometimes abbreviated as ESCOs, these include construction, engineering, energy service and other companies prepared to sign performance contracts in accordance with *PennSEF* Program requirements.

# FREE's IMPROVED M&V

## Purpose

Diagnose Progress by Quarter – Will the Project annually meet its \$\$\$ Guarantee? Contractual remedies implemented as necessary.

- ✓ Uses the same DOE Sponsored IPMVP
- ✓ Based on FEMP Guidelines: Measurement and Verification for Federal Energy Projects Version 3.0
  - Option A** – ISOLATE RETROFIT-MEASURE KEY PARAMETER
  - Option B** – ISOLATE RETROFIT-MEASURE ALL PARAMETERS
  - Option C** – WHOLE BUILDING DATA ANALYSIS
  - Option D** – CALIBRATED SIMULATION







Foundation for  
Renewable Energy & Environment

630 5<sup>th</sup> Avenue

Suite 2000

New York, NY 10111

[www.freefutures.org](http://www.freefutures.org)

Program Manager: Pam Hague

[pam@freefutures.org](mailto:pam@freefutures.org)

(212) 705-8758 / (215) 494-7383

## Drinker Biddle

One Logan Square

Philadelphia PA 19103

C. Baird Brown

[Baird.Brown@dbr.com](mailto:Baird.Brown@dbr.com)

(215) 988-3338



BECKER CAPITAL & FINANCE

Suite 134, The Sanctuary

100 Riversedge Drive

Atlanta, GA 30339-2949

Kenneth Becker

[kbecker@beckercf.com](mailto:kbecker@beckercf.com)

(302) 740-6795