



Guaranteed Energy Savings Program (GESP)

Peter Berger, GESP Manager



Guaranteed Energy Savings Program (GESP)

- Master Contract and Technical Assistance Program
- Provided by the Minnesota Department of Commerce
- Including 11 Energy Services Companies (ESCO's) as Master Contract Holders
- Utilizing Energy Savings Performance Contracting (ESPC)
- To Identify, Develop, Contract, Finance and Implement EE/RE Projects in public facilities



What is Energy Savings Performance Contracting (ESPC)?

Before Improvements



After Improvements



"The use of **guaranteed savings** gained from the maintenance, operations and utilities budgets, **as capital to make needed upgrades** to your building environmental systems, that is financed over a specified period of time."

U.S. Department of Energy



Typical EE/RE Measures

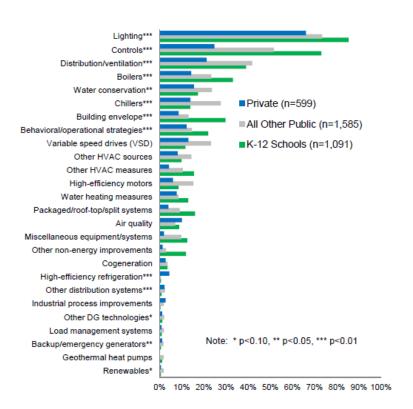


Figure 6. Percentage of projects installing different types of measures

- Interior and Exterior Lighting Upgrades
- Retro Commissioning
- Aeration Upgrades motor's, VFD's, DO Sensor's
- Boiler Upgrades steam to hot water, biogas
- Anaerobic Digesters
- Combined Heat and Power
- Solar PV

Source:

Lawrence Berkeley National Laboratory https://emp.lbl.gov/sites/all/files/lbnl-5447e 0.pdf

Guaranteed Energy Savings Program (GESP)

- Makes existing systems more efficient
 - Retro-commissioning
 - System additions and enhancements
 - Operation & Maintenance improvements
- Renews facility infrastructure by performing deep energy retrofits
 - System re-design
 - Equipment replacement
- Assures intended results continue to be achieved
 - On-going savings Measurement & Verification
 - Performance Guarantee



Program Renefits

Why Use GESP?

FSCO (Contractor) Benefits

100% of Savings Credited to Owner

Low Cost Lease Purchase Financing

Annual Savings Guarantee for Term of Project

Annual Savings Measurement & Verification

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Master Contract Vetted by Attorney General's Office, Dept. of Admin., and Dept. of Comm.	Turn-key Responsibility for Project Development, Design and Implementation
Open Book Pricing	Guaranteed Maximum Price
Maximum Mark-ups and Fees	Site-Specific RFP with lower proposed fees

iviaxiiiiuiii iviain-ups aiiu fees Competitive Bidding of Trade Work and Equipment with Pre-qualified Subs and Spec's

each year of the guarantee

Contractual Assistance

Competitive Bidding of Project Financing

Savings Guarantee requires savings be met

Measurement & Verification Guidelines

All Costs and Savings Identified Up-front

Financing

6

Startup & Commissioning Guidelines **Pro Forma Assumption Guidelines** State Provides Technical, Financial &



Key Drivers of GESP





GESP is a Strategy to ...

Reduce

Energy Use

Operation & Maintenance Costs

Renew

Facility Infrastructure

Compliance, Safety & Reliability

Achieve

GHG Emission Reduction

Job Creation

Use of Renewable Energy



GESP Simplifies Implementation

- Vetted Contracting and Procurement Process
- Pre-qualified Contractors (ESCO's)
- Single-Source Responsibility for Project
 Development, Financing, Implementation and
 On-going Performance Guarantee
- Technical Support provided throughout by the Department of Commerce





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http://mn.gov/commerce/industries/energy/technical-assistance/gesp.jsp