

Energy Savings Performance Contracting (ESPC):

A Great Tool for Tackling
Infrastructure & Financial Challenges

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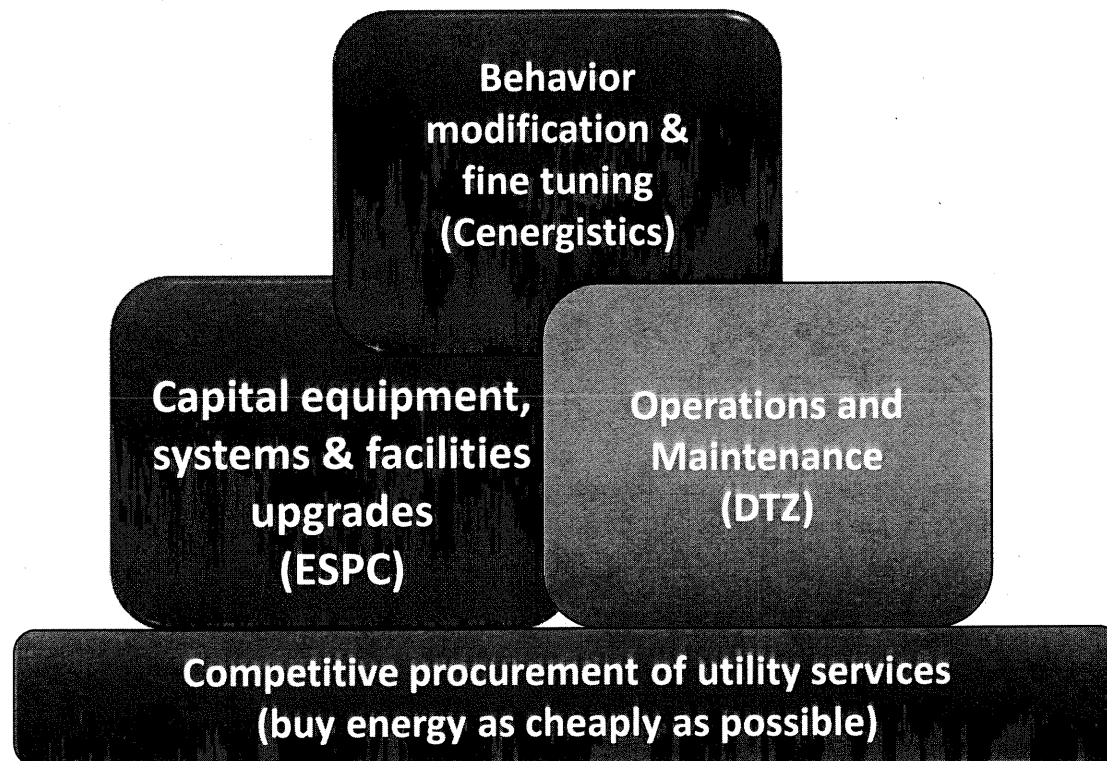
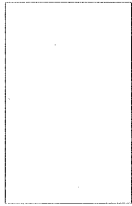
Opportunity

Cash Flow Illustration

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City Project Overview

One component of a comprehensive energy cost management strategy



Definition:

Energy Savings Performance Contracting (ESPC)

- ▶ A project delivery and financing method for getting energy-related work done through a single source (ESCO) that audits, designs, installs, and guarantees the results
- ▶ Annual energy cost savings are guaranteed to equal or exceed the debt service on the project
- ▶ I.e., Schools' annual energy budget decreases by at least the amount of the annual debt service undertaken to fund the work; thus no impact on tax rate
- ▶ Fuel & Technology agnostic

- Insulation
- Weatherization
- Lighting upgrades & controls
- Temperature controls
- Pumps, motors, drives
- Boilers
- Unit ventilators
- Windows
- Buried Tanks
- Related Hazmat remediation

ESPC: Used in all 50 states for past 30+ years

- ▶ Solves a problem common to public sector: large capital needs, insufficient capital budgets
- ▶ Invented in the 1970s, used first at federal level (military bases, federal office complexes), then adopted at state, local levels
- ▶ Authorized for NH state agencies, counties, municipalities and school districts by law since 1991
- ▶ Used by the state of New Hampshire for several large projects including the 1999 renovation of the Gov. Hugh J. Gallen State Office Park in Concord
- ▶ As well as by the cities of Dover, Concord, Keene, Lebanon, Portsmouth, Rochester and dozens of towns & school districts across the state over past 20 yrs.

Authorizing Legislation (RSA 21-I:19-d)

Section 21-I:19-d Energy Performance Contracting

<http://www.gencourt.state.nh.us/rsa/html/I/21-I/21-I-19-d.htm>

TITLE I THE STATE AND ITS GOVERNMENT

CHAPTER 21-I DEPARTMENT OF ADMINISTRATIVE SERVICES

State Facility Energy Cost Reduction

- ▶ Was revisited and amended during the 2012 Legislative Session to extend maximum allowable term to 20 years

I. Any state agency or municipality may enter into an energy performance contract for the purpose of undertaking or implementing energy conservation or alternate energy measures in a facility. An energy performance contract may include, but shall not be limited to, options such as joint ventures, shared-savings contracts, positive cash flow financing or energy service contracts, or any combination thereof, provided that at the conclusion of the contract the agency will receive title to the energy system being financed, if the agency so desires. The agency that is responsible for a particular facility shall review and make recommendations regarding energy performance contract arrangements for the facility to the IEEC.

II. Notwithstanding any law to the contrary relating to the award of public contracts, any agency desiring to enter into an energy performance contract shall do so in accordance with usual contracting procedures and the following provisions:

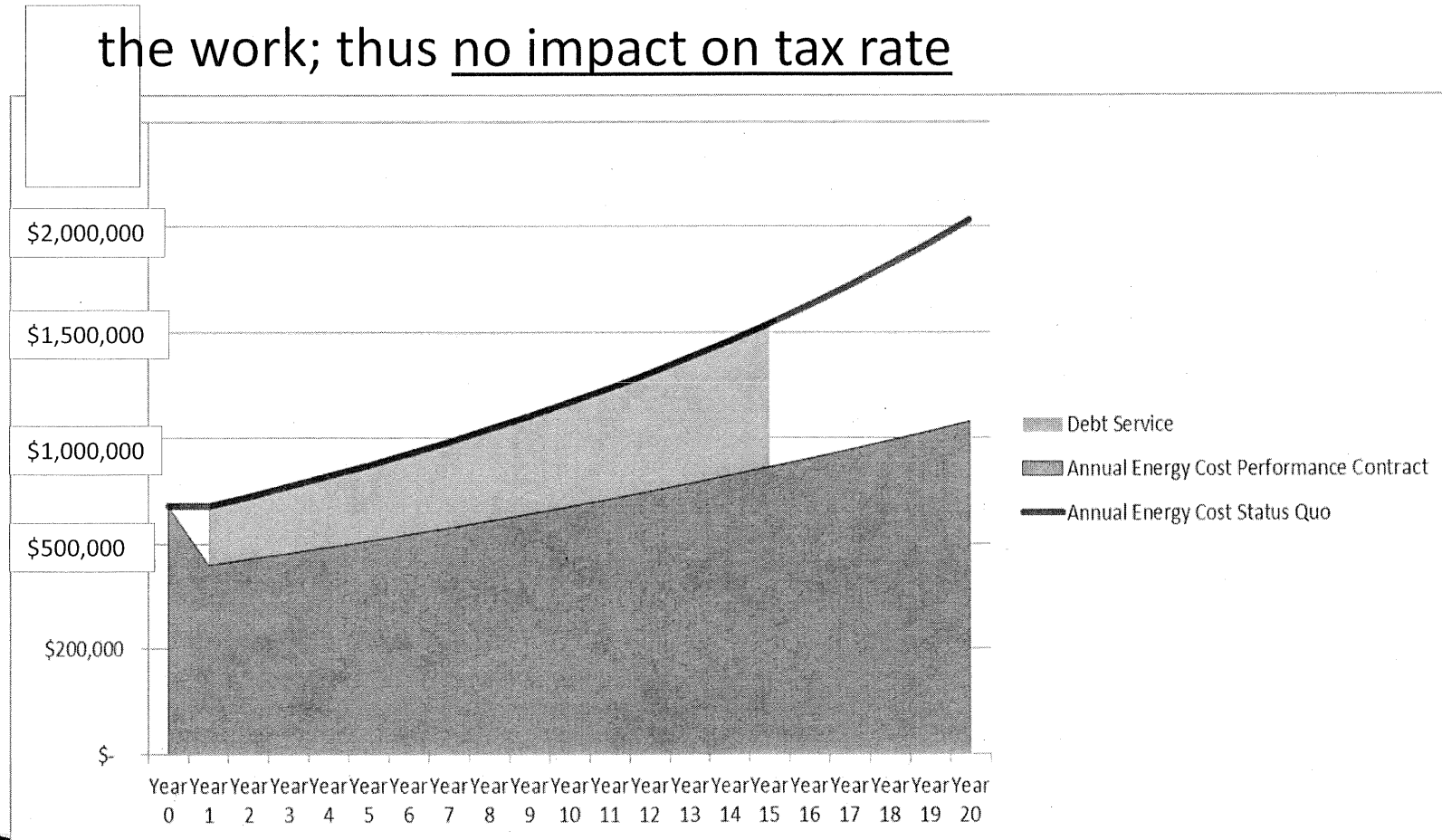
(a) The agency shall issue a public request for proposals, advertised in the same manner as other programs, concerning the provision of energy efficiency services or the design, installation, operation, and maintenance of energy equipment, or both. The request for proposals shall contain terms and conditions relating to submission of proposals,

Opportunity

- ▶ Address equipment/system upgrade needs at Elementary Middle, and alternative schools in budget-neutral way
- ▶ Eliminate energy inefficiency, get better visibility (alarms) and control (including remote) over building systems
- ▶ Improve teaching and learning environments (lighting levels and quality, classroom comfort directly linked to attentiveness, academic performance & test scores, teacher job satisfaction & retention)
- ▶ If HS/Tech Center decision is to *renovate*, ESPC can be a complementary tool focused on energy systems, building performance

Illustrative Cash Flow

- ▶ Schools' annual energy budget decreases by at least the amount of the annual debt service undertaken to fund the work; thus no impact on tax rate



Procurement Process Timeline

Task/Stage	Milestone	Time Required	Calendar
Full School Board City Council	Authorize Superintendent & Business Manager to pursue ESPC	1 month	October
Develop and Issue RFQ	Select Partner	2-4 weeks	November
Execute Project Development Agreement (PDA)	Sign PDA	1 week	Nov. 30
Conduct Detailed Energy Audit (Investment Grade Audit) (DEA/IGA)	Completed DEA Report	2-3 months	End of Mar.
Present project technical and financial overview to School Board & City Council	Approvals	1 month	April
Develop Project Contract	Sign Contract	1 month	End of Apr
Install/Construct Project	Weekly, Monthly Progress Substantial Completion	Summer/early Fall 2015	June-Sept
Guarantee Period - Annual "M&V" Reports	Satisfied Customer	Contract term	2015 thru 2030+

City of Dover ESPC Project Overview

- Contract signed Sept. 2009; Installation complete Oct. 2011
- Project cost ~\$2.2 million
- Guaranteed energy cost savings (Year 1) = \$271,943 + O&M cost avoidance of \$13,680
- 10 Year term; Budget neutral (guaranteed savings ≥ debt service to finance project)

Buildings/Facilities Included	Measures Installed*
City Hall	
Public Library	Lighting Fixture Retrofits & Controls
McConnell Center	Building Envelope – weatherstripping, insulation
Central Fire Station	Energy Management Systems
Public Works	Water Conservation
Ice Arena	Vending Machine Controls
Jenny Thompson Pool	Pool Covers
Indoor Pool	Chiller Replacement (↑ Efficiency)
Wastewater Treatment Plant	Transformer Replacement (↑ Efficiency)
South End Fire Station	Power Factor correction
Pine Hill Chapel	Boiler Replacement (↑ Efficiency)
	Aeration Blower Replacement (↑ Efficiency)
	Pump Replacements (↑ Efficiency)
	Variable Speed Drives
	(* not all measures installed in all buildings/facilities)