

## Partial List of Services Provided by the TST BOCES Energy Management Service

	Service	Description of Service	Examples
1.	Energy Watchdog/Utility Bill Tracking	Provides a centralized database of utility bill data (cost and usage) for multiple years. Allows for easy tracking of changes, both positive and negative. Also allows you to analyze and compare performance by fuel or by building. The database is maintained by the EMS.	Our utility tracking databases are frequently used for initial grant applications, post retrofit performance reviews and NYSEDA grant compliance.
2.	EPA Portfolio Manager Tracking - Energy Star Buildings	Using tools provided by the EPA, EMS continuously evaluates district buildings to determine their current Portfolio Manager Score. The PM Score is a 1 to 100 rating that shows how your buildings compare to similar school buildings across the country. A score of 75 or better means that your building out-performs more than 75% of your peers and qualifies for an Energy Star Building award.	7 buildings achieved Energy Star ratings
3.	NetZero - "Mini EPC (Energy Performance Contract)"	Uses the SED \$100,000 capital project and EPC rules to deliver a series of fast moving energy saving projects. Over a string of 5 projects, combining state aid, grants and energy savings, the NETZERO program can deliver \$500,000 in necessary capital work, at a \$0.00 cost to the district.	Successful NetZero Project - catastrophic controls failure - \$27,000 savings 1st year with ongoing savings of \$9,500 per year
4.	Renewable Energy Projects	Support the development and delivery of wind and solar PV (electric) projects. EMS can assist with evaluating projects and funding options including PPAs, Leasing and standard purchase arrangements.	Five 50kW systems in progress with 2 more schools considering this option
5.	Professional Consulting via in program PE	As part of the fixed program cost, EMS provides access to professional engineering services (PE) for problem resolution, solution evaluations and independent 2nd opinions on critical issues.	geothermal system - issues evaluated, identified and resolved by P.E. - \$55,000/yr. savings
6.	Increase District/Community Conservation Awareness	EMS can provided newsletters, poster campaigns and staff development trainings intended to highlight district success stories as well as opportunities for additional district related energy saving improvements.	Behavior modification through walk-thru inspections, newsletter articles, presentations
7.	Retro-Commissioning	EMS provides support for district personnel to verify performance/operation of all HVAC related equipment. Any identified deficiencies are corrected and equipment is restored to original design specs.	- Using this model, one school saved \$35,000 in their first year of operation

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8.	Energy Procurement Negotiations	Support is provided during negotiations for purchasing any and all utilities (oil, propane, natural gas, electricity, etc.)	- We assisted one of our schools in obtaining a fixed price contract for their electricity after their floating market rate jumped to \$0.25/kwh.
9.	Facilities Committee Support	EMS helps the District's facilities team to evaluate projects based on their energy impact and grant funding options	Analysis of the utility impact of both retrofit and new construction work on campus
10.	Energy Conservation Recommendations	Outside of the formal process of an EPC, EMS can help the district to identify potential projects based on district goals and funding opportunities.	Time shifting of 3 <sup>rd</sup> shift clean in crew resulted in \$80,000/yr annual savings
11.	NYSERDA, NYSEG Grants	We handle grant submissions and post award compliance paperwork,	Block warmers, NYSERDA Existing Buildings program, etc.
12.	Energy Performance Contract Management - Work scope Planning M&V Reports	During EPC project scope development the EMS service provides assistance in work scope development. After the project during the M&V phase, EMS provides verification of the vendor's report and continuously reviews District staff compliance with the recommendations adopted.	Planning work scopes in an effort to maximize potential energy savings while considering the long term needs of the district. Also verifying that recommended measures are being accurately implemented by the District.
13.	Utility Bill Management	On behalf of the district, EMS will identify and work with vendors to correct utility billing issues, including over-charges, misapplied payments, late fees, improper taxes, etc.	Direct Energy issues working with DE and consortium
14.	Classroom Sessions - Green Teams	We can provide grade appropriate classroom presentations highlighting various energy related topics. Additionally we can work with Green teams to make district and community energy conservation a major theme for their activities.	Caroline ES 2 <sup>nd</sup> grade class session on LED lighting.
15.	Walkthrough Audits	Physical walk-throughs of district buildings in coordination with facilities staff can identify both energy saving opportunities and potential maintenance issues.	Unannounced audits are conducted over holiday breaks and extended weekends under the direction of District senior staff.
16.	Service Contract Negotiations	EMS has been supporting district in reviewing and fine-tuning their HVAC support agreements.	- With support from EMS, one district is about to sign an HVAC maintenance agreement that reduces their annual cost from \$45,000 to \$12,000.

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