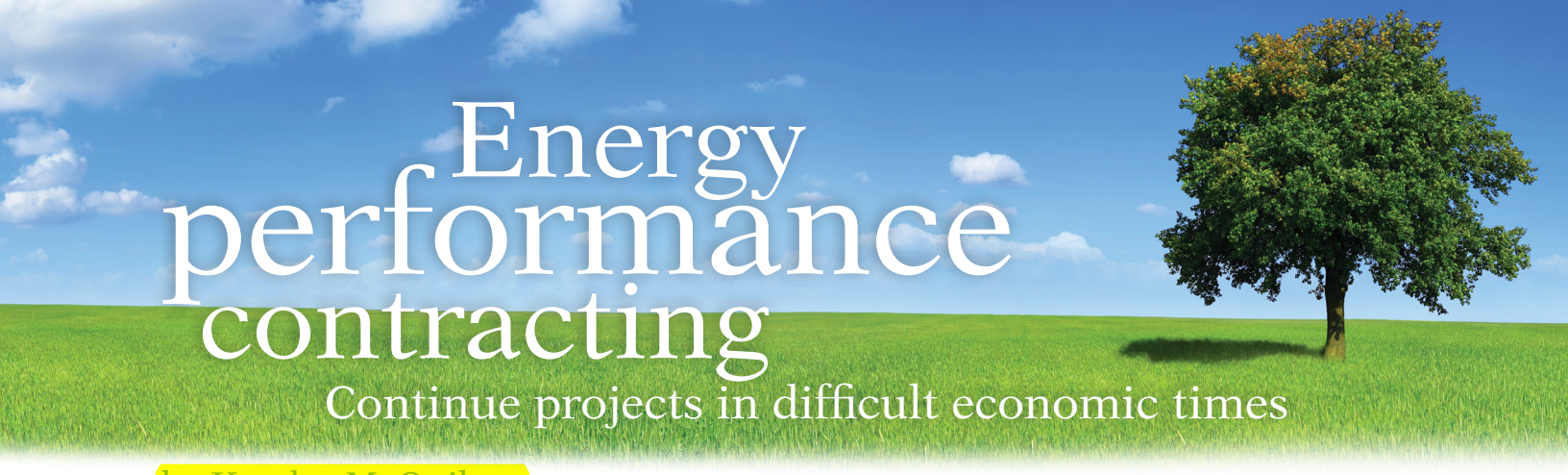

Energy performance contracting

Continue projects in difficult economic times

by Kendra McQuilton

As budgets tighten and pressure mounts for school district administrators to deliver innovative, cost-cutting strategies, Pennsylvania school districts are increasingly turning to energy performance contracting (EPC) to address needed building upgrades, lower operating costs and save energy – all without any out-of-pocket costs.

EPC, a government-sponsored incentive program, allows school districts to partner with an energy services company (ESCO). The ESCO performs a detailed energy audit, presents a package of recommended energy-saving building upgrades that include strategic capital projects specifically requested by the district, builds the project and guarantees the energy savings will cover all costs.

EPC has already enjoyed widespread popularity across the state of Pennsylvania, due largely to the government's passionate support of the concept. In 2008, former Gov. Edward G. Rendell challenged the Department of General Services (DGS) to reduce energy use by 20% in all DGS facilities (compared to the 2004-05 baseline year). DGS met that goal within only six months – 18 months early of the deadline – by employing EPC.

Bruce Stultz, director of Energy Management of the Pennsylvania Department of General Services and Energy Management, is a strong advocate for the EPC approach to facility upgrades. "We're using performance contracts to establish long-term savings opportunities through more efficient buildings," Stultz commented on his department's strategy for fulfilling its mission.

For many districts, EPCs represent a lifeline in their struggle to keep up with needs of their aging buildings during a weak economy. The unique financing mechanism of EPCs allows districts to move forward with millions of dollars worth of energy-saving, needed capital upgrades, without having to pay any out-of-pocket costs. The financing is often structured as a tax-exempt municipal lease, payments on which are due in arrears after the project is constructed and the energy savings have been realized. Further, the project is risk-free, as it is guaranteed by the ESCO to save, at minimum, the amount of the annual lease payment.

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Although districts may take various different approaches to initiating and conducting an EPC, the following approach has proven successful for many districts, due to its emphasis on transferring responsibility for the analysis and verification of the many complex calculations involved in the project to a third party engineering consultant. Consultants are available to assist your school district with EPC program management and to provide the critical technical expertise that administrators are often either unfamiliar with or unable to perform in-house:

1. Preliminary Energy Audit (PEA): It is recommended your district enlist an independent engineering firm experienced in EPC to perform a PEA to determine if sufficient energy savings can be realized to justify pursuing an EPC.

2. Request For Proposals (RFP): ESCOs will develop proposals and present a comprehensive plan for energy savings throughout the district. The consultant will impartially evaluate the proposals received

Kendra McQuilton *is the director of Business Development at ECG Engineering LLC, a Strategic Associate of PSBA.*

to determine which ESCO is offering your district the greatest value for its savings.

3. Investment-grade Comprehensive Energy Audit (CEA): The successful ESCO will conduct additional inspections and financial evaluations to produce an investment grade CEA, which will be used to support the financing of the project.

4. Contract negotiations: Your district will negotiate a contract that reflects the scope of work and ensures your district is free from cost or liability.

5. Project design and approval: Project is designed to reflect the scope of work identified in the CEA; required approvals are sought and secured.

6. Financing: The financing vehicle for EPCs is typically a tax-exempt municipal lease. Quotes from qualified lenders are obtained through a separate RFP.

7. Construction phase/substantial completion: Construction will depend on scope of work and timing of approval.

8. Monitoring and Verification (M&V) Phase: ESCO will coordinate a detailed, comprehensive M&V plan to ensure ongoing savings, which includes ongoing monitoring, for the term of the contract. This is a critical element because it provides the basis for the energy savings guarantee and debt service payment.

Pennsylvania school districts need not defer needed building upgrades until a stronger economic climate emerges. Energy Performance Contracting is a tested and proven method by which school districts can perform necessary capital work, and at the same time reduce energy consumption, in a comprehensive, turnkey and risk-free manner. **b**

Advantages of an EPC

- **Improve the learning environment** through enhanced lighting, better ventilation and balanced temperature controls.
- **Zero taxpayer impact.** All costs are paid out of future, guaranteed energy savings.
- **Address capital needs now.** EPCs do not require districts to wait until economic conditions improve to address millions of dollars worth of needed capital projects.
- **Comprehensive approach to energy conservation.** EPCs are a hybrid of "low-hanging fruit" (lighting, controls) and "high-hanging fruit" (boilers, windows, roofs), which maximizes the overall capital benefit to the district.
- **Performance guarantee.** Full commissioning is a major component of EPC to ensure the equipment performs optimally and the guaranteed savings will materialize. It is in the ESCO's and school district's mutual interest that the equipment not only be installed properly but that it also perform as intended.
- **Turnkey service.** ESCO must deliver entire project, from scope development and construction to savings measurement and verification. No low bidding, change orders or multiple contractors needing coordination.
- **Environmental stewardship.** Educate staff and students about the importance of energy conservation.
- **Renewable energy.** Enjoy the latest innovations in technology (solar, wind) without the need for out-of-pocket expenditures.