

The Remedy Schools Need During the COVID-19 Pandemic:

How to Utilize Energy Savings Performance Contracts to Fund Increased Disinfection Measures

By Tom Walther

For nearly forty years, Energy Savings Performance Contracts (ESPC) have assisted public and private sector entities to address their deferred maintenance and facility recapitalization projects. The objective of this type of program is to reduce energy and operating costs sufficiently enough that the savings pay for the cost savings improvements over an agreed-upon term. The funding for these projects (while cash is always an option), typically is provided by a third-party lender eliminating the need for out-of-pocket capital. The project is implemented by an Energy Services Company (ESCO) that specializes in this type of program and assures that the savings are achieved.

ESPCs have evolved considerably over the past two decades. What was once a highly specialized “go to market” approach is today largely viewed as a modified design/build retrofit construction project. Growth in the number of ESCOs, lenders, and the increase of sophistication of those tasked to purchase these solutions are some of the reasons for this development. Many ESCOs have begun to adjust their market approach to include retrofit aspects that originally were not included in ESPCs. Buyers in a variety of facilities do not make a distinction between savings “types”. Although some states specify which savings may be included in ESPC projects, some buyers feel that savings are savings and so long as the savings can be measured, the retrofit that creates them should be included in the project.

The COVID-19 pandemic is changing how ESCOs position and implement ESPC projects. This is a direct result of the changes needed by facility operators to open and keep the building safe. Advanced thermal and tracing applications can also be incorporated into the building’s control/management platforms. These additions increase cost – or do they?

There is also considerable discussion throughout the entire facilities industry today about how to “get back to normal” while dealing with the continuing increase in coronavirus cases across the US and globally. To look forward, it is helpful to look back at the 1918 (H1N1) Pandemic so we can better understand how the coronavirus may fully impact our lives.

According to the Centers for Disease Control, the 1918 Pandemic appeared in Kansas in April. At least three (3) waves of disease occurred in the US. Worldwide, the disease was still rampant in areas of Europe in April 1919. The so-called “Spanish Flu” finally subsided in May 1920.

We are now seeing evidence that COVID-19 may behave in a similar manner as the Pandemic of 1918, with ebbs and flows until it finally subsides.¹ For this reason, it will likely be necessary for commercial, industrial, governmental and especially educational entities to establish disinfection strategies to mitigate the impact. These strategies should include: (1) surface disinfection (chemical and/or using ultra violet – UV lighting); (2) suspended particulate air filtration; and (3) thermal screening (temperature) of entering individuals. The first two strategies offer preventative and reactive mitigation for disease control and the third strategy offers a more aggressive option.

Together, these three tactics establish an important level of confidence for building occupants and visitors that can help these enterprises begin to “return back to normal”. Additionally, the benefits of these strategies will survive the COVID-19 for many years to come by minimizing the effects of seasonal contagion outbreaks (seasonal flu, etc.) to maintain productivity, reduce absenteeism, and improve occupant comfort and safety.

¹ Smithsonian Magazine – “Compare the Flu Pandemic of 1918 and COVID-19 With Caution”, Mari Webel & Megan Culler Freeman, University of Pittsburgh, June 5, 2020.

These approaches have been in use for decades – especially in the healthcare industry where contagions are particularly concerning. For commercial, industrial and governmental/educational facilities, the challenge is to identify a method to fund the facility improvements in order to best implement the strategies. The ESPC approach to facility retrofits is the ideal method to implement disinfection strategies particularly in funding-strapped governmental and educational buildings.

There are several key indicators that the ESCO approach is well suited to the implementation of COVID-19 mitigation strategies. Recently, several articles have been published discussing the financial impact of COVID-19 disinfection mitigation strategies in facilities throughout K-12 school districts. The financial model included in one of these articles estimated that the disinfection activities and materials required by the cleaning (custodial, faculty and other staff) may cost upwards of \$450 per student, per year at a total projected annual cost for the school district of nearly \$1.8M!² At the same time, the impact of COVID-19 on school funding can only be speculated at this point. There is widespread expectation among administrators, school finance experts and education associations that state and federal funding levels will drop considerably, adding to the challenge to reopen schools.³

Along with the health benefits, there are also financial benefits associated with the disinfection activity. Reducing absenteeism increases the budget for schools that receive funding based upon average daily attendance. This can be a significant contribution to the budget. The projected cost of the additional needed supplies, materials and labor is obviously a consideration. Do student achievement scores improve because of lower student and teacher sick days, contributing to the financial benefit model? It is evident that many considerations must be evaluated. ESCOs are experts at identifying the potential savings streams associated with facility improvements. They present their findings to the decision makers who determine which of the facility improvements and associated savings streams are best suited to their needs.

When there are sizable savings generated from broader facility improvements and virus response solutions can significantly reduce the need for physical/chemical sanitization of schools, the ESPC model is an ideally situated procurement vehicle. In this case, the ESPC program (to include a bundle of facility improvement measures that produce savings streams) is likely to be funded through a third-party lender. The term of the agreement would be determined by the period required for the entire savings stream to recover the entire investment to implement the program – this is typically between 10-15 years. As a result of the ESCO program, the facility reduces its utility consumption and costs and can channel those savings to address the disinfection requirements with no capital requirement.

The COVID-19 pandemic is causing facility operators worldwide to reevaluate the safety of their occupants. It has already caused a worldwide reaction to improve the health environment and meaning of the term “indoor air quality”. If the ESCO model becomes a delivery method for the improvements needed to address the disinfection needs that bring the human race back to “normal”, it may very well turn out that COVID-19 serves as the vaccine for the ESPC business.

About WESCO Energy Solutions

WESCO Energy Solutions is particularly well positioned to help address the COVID-19 mitigation in commercial, industrial, governmental and education facilities through a stand-alone approach and especially as part of a broad ESPC project with an ESCO partner. This is because the upgrading of an existing fluorescent lighting system to LED technology with a wireless advanced control system reduces energy and operating costs by 50% to 70% annually. These savings are the financial engine that can be harnessed to pay to incorporate the UV

² American School & University Magazine – “Reopening means an additional \$1.8 million in costs for average-sized school district, administrators estimate” Mike Kennedy, June 10, 2020

³ Education Week – “How Will Coronavirus Affect School Spending? 9 Questions Answered” Daarel Burnette II, April 13, 2020

lighting and added filtration systems. The savings off-set from avoiding the costly manual disinfection labor and supplies can further justify this approach. A potential bonus is the availability to utilize the lighting control systems network (lighting will be needed everywhere there are people in a building) to incorporate thermal measurements and movement tracing.

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Tom Walther has been in the commercial facilities maintenance, improvement and energy efficiency industry for more than 35 years. Mr. Walther is currently the Market Director of ESCO Solutions for WESCO Energy Solutions. In this role, Tom leads a team of professionals that support National and Regional ESCOs delivering value-added solutions that complement the ESPC program delivered to the ESCO's client.

Tom has served on the Board of Directors of the National Association of State Energy Officials (www.naseo.org) and is a past President and current member of the Board of Directors of the Energy Services Coalition (www.energyservicescoalition.org).

WESCO is a Fortune 200, US company and global leader of electrical, industrial, and communications MRO and OEM products, value-added solutions, construction materials, and advanced supply chain management and logistics services. With a strong portfolio of businesses and a high-performance continuous improvement culture, WESCO's value proposition is founded on developing solutions to satisfy the complex challenges our customers face every day.

WESCO Energy Solutions (WES) is a business of WESCO International. WES delivers comprehensive energy efficiency programs to a variety of verticals including municipal, university, K-12 schools and hospitals, as well as Federal agencies, industrial and commercial clients. While a global business, WES works through local branch offices around the globe.

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