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Performance contracting... a legal, proven way of accomplishing energy efficiency projects and making building improvements.

RESOURCE CONSERVATION MANAGER

Factsheet

Performance contracting for school districts

Performance contracting makes it simple for Washington government agencies, including school districts, to finance capital projects that save energy. Under a performance contract, the district and an energy service company agree on the project scope and expected utility savings. Payments from the district to the ESCO are contingent on those savings.

Since the Washington State Legislature authorized performance contracting more than 20 years ago, the state Department of General Administration has helped school districts avoid millions in utility costs while improving their facilities. The department's Clint Lougheed answers questions about performance contracting:

Clint Lougheed



Is performance contracting practical for school districts?

It's not only practical, but it's a legal, proven way of accomplishing energy efficiency projects and making

South Kitsap School District benefits from performance contracting

Project managers estimated replacing the heat recovery system in South Kitsap High School's pool building would save the district almost \$79,000 a year in utility costs. Instead, savings totaled \$93,000 a year, said the state Department of General Administration's Roger Wigfield, who oversaw the project.

The success of the quarter-million-dollar project sold district facilities manager Tom O'Brien on performance contracting. With a history of failed bond levies, the South Kitsap School District in Port Orchard, Washington, had fallen behind on maintenance, said O'Brien. "For us, it was a godsend to be able to play catch-up so quickly and not have it come right out of our operating budget."

Over about five years, the district has executed performance contracts worth \$2.9 million. In addition to the pool project, the district replaced the heating, ventilation and air-conditioning system at one of its junior high schools, and the lighting in some two dozen buildings. Smaller utility bills

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building improvements. The real question is: Is it cost effective? That is the test because most districts borrow money and have to pay the loan out of the savings.



Do you normally work with the whole district, or with one school?

It just depends on the school district. A school district like Seattle School District... they identified a school. They sort of wanted to test the waters. You couldn't possibly do that entire district as a project, it's just too huge. So it really depends on what they want to do and the size of the district.

Have many districts taken advantage of this opportunity?

Many dozens statewide.

What is the state Department of General Administration's role in performance contracting?

First, let me make it clear that school districts have the

authority to use performance contracting without working through GA. We have worked through every kind of building and every kind of system you can imagine. And every project that we have managed has been a success. But I could identify many projects – and some of them in school districts – that were unmitigated disasters, because they have had insufficient management.

What we have done for school districts is we have pre-qualified energy service companies. So if they work through us, they can go through a very shortened selection process and pick one of these firms. They can save a lot of time and a lot of money going through our program. We provide complete project management services. We help them select the energy service company that is most qualified for their operation; we help them negotiate the scope and fee for the audit; we review and approve the audit; we negotiate the final proposal for construction; we review and approve the design; we monitor the construction process and the commissioning process; and we decide when the job is done. So we know they get a complete product and they're going to be satisfied.

What is GA's role in financing?

Financing is really the easy part. A typical project will have three sources of funding: Some funding from a utility company, some capital dollars – the third source would typically be the Washington State Treasurer Program.

South Kitsap (continued)

aren't the only rewards. The pool project reduced humidity, and the lighting project eliminated ballasts containing hazardous polychlorinated biphenyls (PCBs), and enhanced classroom lighting through improved color rendition.

The GA helped the district get utility grants, and worked closely with the energy service company responsible for the projects, said O'Brien. "We never, ever felt we were being taken advantage of on a change order because we had GA involved in accepting that change order."

The GA streamlined the contracting process and helped the district avoid pitfalls. "It's nice to have an honest broker there, so you aren't over-promised by a contractor who is eager to get your business," said O'Brien. "Nothing is risk free, but it's certainly a low-risk way to get a lot of work done."

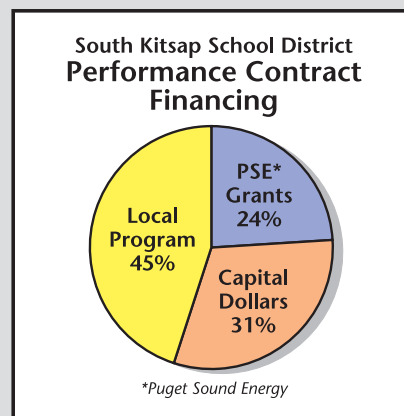


Chart information courtesy of the Washington State Department of General Administration.

How does the state treasurer's program work?

It's pretty simple. Once the audit is complete and there is an approximate value identified for the project, then school districts can file what is called an intent to borrow. Then after the project is done and they actually need to borrow money and pay off the energy service company, they fill out some forms, none of which are very difficult. The last time I checked, the interest rate was 4 percent on a 10-year term.

What are the main benefits of performance contracting?

If you are a facility manager, the benefit would be that you are getting old worn out equipment replaced. If you happen to be a business manager at a school, it's that you are going to save on your utilities bill. So there are a lot of benefits.

What are the benefits of performance contracting over traditional kinds of financing?

First of all, it doesn't affect your debt limit – that's important to some organizations. One of the benefits of performance contracting is that everything is negotiated. In the typical design-bid-build scenario it's low bid – doesn't matter if it's the highest quality or lowest quality. [With performance contracting,] school districts are not required to select low bid. Typically, the school district has more control over the subcontractors, the kind of equipment that goes in, and typically they get to work more closely with the general contractor. What they tell us is

they are getting a higher quality product.

What are the most significant risks? What can go wrong in performance contracting?

There are a number of things that can go wrong. If you are unfamiliar with performance contracting, you may not be able to negotiate the best deal. Probably the primary risk, and what would be most common, would be a technical risk. The energy service company does a poor job of estimating costs – they underestimate costs or over-estimate savings. The owner is unable to pay back their loan out of the savings. Or the equipment was designed poorly or installed poorly and so it doesn't operate correctly. Now, if a contract is written properly, the responsibility lies with the energy service company to make it good. In a worst case scenario, when a school district is borrowing money from the state treasurer – and this has happened once or twice – the school district borrows money with the assumption that they will be able to pay for it out of savings, the savings aren't there, and then the energy service company doesn't live up to the guarantee, or they go bankrupt and they are not there to stand behind it. Then the school district is holding the bag, because they financed it. So by financing it through the treasurer, you are shifting more of the risk to the owner, and everyone has to understand that. When you do public financing, you have to do a much better job of oversight and due diligence, and that is where we come in.

Can school districts expect to pay off the loans and make some additional money?

In the Northwest, with very low utility rates and low operating hours – because schools typically have very low operating hours – it's not easy to find cost-effective projects. Typically, it requires 100 percent of the savings to pay



off a loan. So business managers have to think long-term: Yeah, when the loan is paid off then that entire payment is on the table. When we talk to school districts, we are very quick to tell them...

...This isn't the answer to your budget problems.

Right. Exactly.

What kind of expertise should school districts have in-house to do performance contracting?

Well, if they are managing it on their own, they need engineering expertise. If they do not have engineering expertise, then they

need to hire it. They need to hire a consultant, because there is absolutely no way a non-engineer is going to understand everything that is going on in this process. So that would be the first thing. At a minimum, they



need somebody on the staff who can help coordinate on-site. And, even if we are managing it, they still have to have someone to manage it and coordinate all the issues on-site.

Would a resource conservation manager be that on-site coordinator?

Perfect. That would be a perfect person. Someone who knows the facility; knows the people; knows the building schedules; can inform people when there might be an outage or when work is going to be done in a building, that type of thing. We always rely on the owner for coordination on site. If they're doing it on their own, my recommendation is that they hire some technical expertise to review everything that the energy service company is submitting to them.

What kind of energy projects are not appropriate for this type of financing?

The key really is: Is the project cost effective? It's very simple when you are borrowing money, you have to fit into that 10- or 12-year loan term. The other test of whether or not a project should be done using performance contracting is: Will it be cost effective within its useful life? Now, it may improve the facility. It might solve indoor air quality problems. But it shouldn't be done using performance contracting if the payback exceeds its useful life.

What about building envelope projects?

Typically they don't work. The payback for envelope items is probably going to exceed 25, 30 years. I have yet to see an envelope project that is cost effective.

What are stipulated savings and why should they be avoided?

Stipulated savings is simply when there is an engineering calculation that is predicting savings, and the owner and ESCO agree that prediction is real, that will happen. Now, you can use stipulated savings with a lighting project because it's very simple, the only thing that will affect the savings on a lighting project is operating hours. But that is about the only kind of project we want to use it on because we want to see metering and monitoring, and we want actual proof, data, that the savings are happening.

How long must savings be measured and verified?

That depends on the project and the comfort level the owner may have with what is being done, and whether or not there is a utility company involved that may require it. Our recommendation to a school district is to verify savings for... well, probably two to three years. We will not enter into an arrangement with a school district without verification of savings. We won't do it.

And, I would say that limiting it to two years is important because after a couple years there is so many changes in a campus, that readjusting the baseline for changes in operating hours, new buildings, added plug load – it just becomes very, very difficult.

Are projects involving conservation of water and other resources included in performance contracts?

We expect that during the audit phase the energy service company will not only identify electric and gas savings, but water, garbage – anything to do with utilities. Even though the statute is not clear on that... we believe it should include anything to do with utilities.

What is the expected or required payback time on these projects?

The key is: How is it being paid for? If the money is being borrowed from the state treasurer under a 10-year loan scenario,

then the package of projects needs to have a simple payback of not more than seven years. If you take a seven-years-simple-payback project, add the interest payments on top of it, then you have a 10-year term. If it's being



paid with capital dollars, then the simple payback needs to be less than the useful life of the equipment.

Anything else you want to add?

Schools need to be very familiar with the statutes: what their intent is; what they allow. Many of our clients, not just school districts – but state agencies and colleges – once they become familiar with the process and see the kind of quality they get, they ask about using it for non-energy kinds of projects. And we simply can't do that.

For more information...

To find out more about performance contracting, contact Kathi Fyfe at the Washington State Department of General Administration. Fyfe matches callers with the staff engineer most qualified to handle the kind of project proposed. The engineer then contacts the client to discuss feasibility.

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Resources

Chapter 39.35C – Revised Code of Washington (RCW)

Energy Conservation Projects
[http://search.mrsc.org/nxt/gateway.dll?f=templates&fn=legpage.htm\\$vid=rcwwac:leg](http://search.mrsc.org/nxt/gateway.dll?f=templates&fn=legpage.htm$vid=rcwwac:leg)

General Administration: Energy Saving Performance Contracting

www.ga.wa.gov/EAS/epc/espc.htm

Case studies including Washington school districts

www.ga.wa.gov/EAS/epc/convinced.htm

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