

Michelle Wyman: Joining us today. My name is Michelle Wyman, and I work within the Office of Energy Efficiency and Renewable Energy and specifically Weatherization and Intergovernmental Programs. We're very pleased to have you all joining us and to celebrate with you the release of our newest publication that we hope you'll find greatly useful. The title of it is *Financing Energy Upgrades for K-12 School Districts*, and this builds on a foundational document that was released back when we first initiated our program. This guide will be available to all of you, and in the public building as a follow up to this webinar we'll be sending our an e-mail that will have links to the locations both on our website and for Lawrence Berkeley National Lab where you can download the document directly. As you all know, energy cost is the largest operational expense for school districts across the United States to the tune of approximately \$7 billion annually. The cost to operate non-instructional expense within K through 12 facilities continues to escalate, which adversely impacts instructional expenses. The federal government is engaging increasingly in the education sector through multiple channels like the U.S. Department of Education's Green Ribbon Schools, and EPA's Energy Star Schools. These programs are individual facilities-based programs.

Our work through DOE and this office focuses on the entire facility's portfolio, very specifically through something called the Better Buildings Initiative. We'll talk more about this in greater detail later in the presentation. DOE is positioned to disseminate resources to all of you and the market at large that are needed to implement practical solutions to reduce energy consumption in K through 12 portfolios. School district officials will appreciate the business aspect of energy efficiency, we believe, for example, through the financing of projects, the return on investment, and the budget reallocations that energy cost savings allow and enable. School facilities and operations personnel will appreciate the operations aspect of energy efficiency investments by seeing building upgrades, systems optimization, and facilities comfort. I realize that I am speaking to the choir here, but to underscore the importance and the value of this work, our hope is that this guide continues to accelerate uptake of efficiency.

The DOE subject matter experts are available to you both on this call and ongoing to provide technical assistance and resources for the entire energy efficiency project lifecycle in school portfolios, from financing all the way over to building construction, benchmarking operations and maintenance. Well, today's

discussion is about financing energy efficiency projects for buildings, we also have colleagues and resources here internally that are focused on the deployment of tools and guidance on programs and practices across other areas that energy touches upon including renewables, transportation policy analysis, infrastructure systems, communications, and outreach. The guide that you'll be learning about today is intended to be a practical tool to assist schools districts in scoping, financing, and implementing energy efficiency and renewable energy projects. The initial version of the guide describes processes for evaluating energy improvement project economics and provides an overview of the range of financing tools available to all of you, specifically school districts, to pay for these improvements.

The updated guide will again build on a foundational document by offering school districts a series of project-in-a-box case studies that deliver detailed resources on the range of energy improvement projects and financing options that are available. It's — I wanna take a minute first and acknowledge the great work of Lawrence Berkeley National Lab and our colleagues there, Merrian and Mark, I also want to take a moment and acknowledge the great work and ongoing efforts of our internal technical staff here, and with that, would like to introduce to all of you Molly Lunn, who is the lead for our Technical Assistance Program. Molly?

Molly Lunn:

Thanks, Michelle, and thanks to all of you for joining us today, taking the time to learn about this great new resource we have available in our broader technical assistance program. So today's webinar is a part of a series of webinars and resources that ideally makes available to state, local, and tribal officials, through something called our Technical Assistance Program. Many of you are likely familiar with this effort. It's been around for about a decade and our aim is to provide resources to help you all advance successful, high impact, clean energy policies, programs, and projects. So you'll see here in this graphic sort of the framework through which we provide assistance. First we focus in on 5 priority areas, strategic energy planning, program policy design and implementation, financing strategies, which obviously we're focused on here today, data management MEMMB, and energy efficiency and renewable energy technology. For each of those priority areas, we then focus in on resources, so again, like the guide we're going to cover today, we develop sterile education materials, case studies, tools for decision making, and protocols like how-to guides and model documents. Once we have resources

available for each of these areas we like to provide you with pure exchange and trading opportunities because we find that, you know, you all learn best from one another, you learn from talking to one another about the experiences you've had, and so activities we offer include webinars like the one we're hosting today at a national level; we also offer conferences and in-person trainings, a national summit we'll be hosting in May that we'll talk about in a moment, and then our better buildings project teams which are opportunities for smaller group peer exchange, which we'll also cover later on in the presentation. Finally, for when you're really looking to go in depth and have very specific-focused questions, we can also provide one-on-one assistance, and those are for fairly high impact efforts, and where we also see opportunities for replicability for other communities.

For the assistance we provide, you know, 1 school district or 1 state would be something that we could then help provide to turn around and use with other localities and states. So next slide, please. So honing in on the priority areas that we're here today to discuss, financing strategies, I wanted to just highlight for you all a couple of resources, peer exchange, and training opportunities, and again, just mention that one-on-one assistance in peer matching we have available. So, again today we're here to talk about the financing energy upgrades for K through 12 schools guide, which is live now on our online resource tool, The Solution Center. We also have featured there a Clean Energy Finance Guide, and many other finance resources that you might be interested in taking a look at, and an improved portal for our finance resources will be live later this year, but we welcome you to go check out what we have now, and then, you know, stay tuned for once the updated portal is available later this year. Within our peer exchange and trainings, we are specifically excited to invite you to join our Better Building Alliance, and participate in the associate project teams, which are you know sort of working groups, opportunities for small group exchange over a period of several months, and we'll be hosting two project teams that are kicking off in May.

One on financing strategies, and then one focused specifically on energy savings performance contracting, and we think both of these could potentially be of great interest to folks on today's call. Then we also are hosting a Better Building summit in May here in Washington D.C. at the end of the month, and that will sort of touch on the broad range of priority areas that we focus on, but specifically offer tracks on financing, and that event we welcome all state and local officials and K through 12 school districts to

attend — and to learn more about that, feel free to reach out to us. On the next slide we'll have an address where you can contact us for more information.

So here is just a couple of different ways to tap into these different offerings. At the top is the link for our DOE solution center, again that's our online resource portal, and where our guide will be posted where you can check it out after today's session. You can also submit an application for that one-on-one assistance. Again, we have experts available to work with you on financing issues, but the whole range of issues that both Michelle and I have touched on that are likely of interest to K through 12 school districts who are interested in first doing clean energy projects. And then finally, to stay up to date on all of these resources and pure exchange trainings we have available, we welcome you to e-mail us at technicalassistanceprogram@ee.doe.gov, and this is our tap mailbox, and we have a monthly newsletter which you can subscribe for, as well as submit any questions or comments you have there. So if you have comments about or questions about anything you hear today we welcome you to send us an e-mail. And just one housekeeping note as we're moving along here in the presentation, there is a question box on the right-hand side where you can submit questions that we'll get to at the end, but we'll also be happy to follow up with you afterwards if we don't quite get to everything, and then one other piece that people often wonder about is yes, the slides will be available from today's session. We'll send those around after the webinar to everyone who's been registered along with that link to where you can find the guide, and then a recording of this entire webinar will be made available in about one to two weeks. That'll be posted on our Solution Center as well. So with that, just wanna thank you all again for joining us and also to the great representatives from the school districts who are going to be speaking about their projects today, and finally to Merrian and Mark from Lawrence Berkeley National Lab. Merrian?

Merrian:

Thanks a lot, Molly. And thanks everyone for being here today. I'm gonna go over some of the highlights from this guide with you. There's a full guide as both Michelle and Molly mentioned online along with six full case studies from around the country talking about different school districts' experiences, and we'll have the opportunity to hear from 3 of them today. So I'm gonna try to get through my part so you can hear from the folks on the ground about their experience. One thing I learned talking to different school district representatives around the country is that while

many of the opportunities are the same, there's always these little nuances in every place, but one thing that we do know, is that the opportunity for schools to save energy and to benefit from — have a range of benefits from making clean energy improvements is significant around the country. Hundreds of school districts have already done improvements successfully and are seeing amazing benefits, but it's just important to remember that this is really possible in any school district, and part of what this guide is trying to do is just to shine a little more light on the financing pieces that are needed to make these improvements possible. So as Michelle mentioned, school districts in the U.S. spend about \$6 billion to \$7 billion annually on energy. A huge expenditure, it's the second highest only to personnel costs, and it's more money than is spent on textbooks and computers combined, so when you think about the opportunity there and what you can actually accomplish in terms of meeting schools' educational missions by reducing some of the energy waste that's occurring, the potential impact is quite huge. And when we're talking about clean energy-related improvements, the types of things we're talking about just to give you a picture are things like replacing lighting, adding insulation, replacing heating and cooling equipment, installing energy management systems and controls, which can be a very important part of maximizing the efficiency of the entire system, and being able to better manage your building generally, adding solar voltage, and replacing windows, doors, roofs, et cetera.

So there's a range of improvements that this actually includes, and I'll be talking about them broadly as clean energy upgrades. In terms of the benefits that can be expected, certainly we're seeing lower energy bills across the country which is key at a time that school district budgets are under pressure, and any monies that are not spent on energy bills can be reallocated towards serving districts' core missions, including hiring more teachers, purchasing educational materials, or investing in other needed facility upgrades. Another piece that's very important and very relevant to the bottom line of school districts is the ability to modernize infrastructure and reduce facility maintenance costs. And so part of this is if you're able to fund let's say a new boiler as a part of a clean energy upgrade, you're not having to fix it all the time and respond to emergencies, and if you put in an energy management system, you're often able to control the systems in multiple buildings from afar, and be able to reduce the actual time and effort that you're facility managers are spending having to manage everything manually. So there's a lot of co-benefits that come along with just like the straight energy savings that you see on your

bills. We're also seeing improved comfort, health, and safety for both the students and the teachers in these schools. Environmental benefits, that can include properly disposing of old equipment and also getting rid of potentially toxic materials that are sometimes in older schools, and then there's the educational opportunities that come along with being able to talk to the students and the community about the importance of environmental stewardship and really smart energy management — smart research management — and schools really being able to set that example.

So today what I'm gonna do is talk about sort of some of the range of financing options available to most schools in the U.S. We'll talk also about a few of the more energy-specific financing tools that may be available in your state, and then we'll hear from examples from Washington, Tennessee, and Nevada. So I'd like to start off with just some clear principles, some sort of initial principles that are important to keep in mind for building a good project. This may seem obvious, but many schools kinda jump in and they say, "What's the easiest and cheapest thing to do?" We really encourage schools to start with broad objectives, to really understand what is the range of benefits you might be able to receive, and how might you think of this in a mid- or long-term way so that you are able to in addition to, let's say, replacing lighting, also modernize infrastructure, improve your overall operations of your facility, improve the comfort and functionality of your buildings, and really think about it in a long term way. So over the next 5, 10, 15 years, what will your school need and what will your school benefit from; how can you build that into your initial planning objectives? And the second principle is somewhat related to that; it's really encouraging schools to pursue comprehensive projects whenever possible. There's often cumulative benefits from doing multiple measures within one project, so in addition to replacing lighting, also replacing boilers, the air conditioning unit, and on top of that, having an energy management system that allows you to control your entire system more efficiently.

So if you're able to think of those things together, you often save time in terms of both staff capacity, and often you can bundle them together in terms of being able to finance them as a bunch and have them as a whole — a package, as a whole — pays for itself. Whereas if you did things through piecemeal, one after another, it both takes more time and energy of staff, you may not be able to finance as much — as large a package. And the third principle is really to focus on the lifecycle cost of whatever you're trying to do

in your buildings. So instead of just looking at ok, it's gonna cost half a million dollars to get this new lighting system in and get this boiler, what are the costs of the various alternatives you have in front of you over the lifetime of that equipment? So lifecycle of costs really looks at the cost and the savings of acquiring, installing, owning, operating, and then disposing of whatever it is — the building itself, a facility, a piece of equipment — so that you understand that what you're trading off and how it's really affecting your bottom line over multiple years. There's also — it's also extremely important to understand and measure the savings over time, and not just the savings as I mentioned earlier — just the bill — but you're also gonna be seeing other — potentially other — savings in terms of cost of maintenance and management, as well as other non-energy costs that can include things like safe water, which is a very common one for many schools. I also just wanna mention before I jump into the financing focus piece of this talk that making the case both financially but also organizationally, how this fits into the goals of the organization, who needs to do what, why it's really important for schools to be a leader in this, requires creating a strong team of champions, and really understanding why people sometimes resist projects like this.

They can be new, there can be many people are very busy in school districts, so how do you really make the case that this makes sense for schools. There's an excellent guide out that was funded personally by the Department of Energy called, "Getting to Yes," and there's a link to that on your screen that really walks through, "How do you make these arguments?" Whereas today, we're gonna focus on here are the financing tools that you can tap into. We'll be talking about the list that you see on your screen in terms of the financing options for schools, kinda going from the most simple to the most complicated or specialized. We'll start with internal cash, which I think most people can understand pretty easily. So this is when projects are paid for directly with cash from the school's operating or capital budgets. The school retains all the energy cost savings and often is able to quickly implement a project because they avoid needing to contract out, do negotiations for financing, et cetera. They basically can just make the decision and pay for it themselves. It's certainly simple and flexible and direct, however, any of you on the line who work for a school district or are working in a school district or for a school district know that this is extremely valuable money that most school districts don't have a ton of money sitting around. Most school districts will never see, you know, millions of dollars that are often needed to do the types of upgrades that we're talking about, and

there's often more urgent demands for that money, such as textbooks, and other emergency replacements for various things that might be needed — teachers' salaries, et cetera. And the good thing about clean energy upgrades unlike some of those other expenses, is they can actually generate revenue, they can have savings that will pay for most of their expenses. So it may be more appropriate to use other sources of financing to fund that work, but this is one piece that school districts use.

One thing I've seen school districts do is maybe pay a small portion of the larger project with internal cash just to lower the monthly payments, but in general internal cash is not going to be your best source for funds for clean energy improvements. The second source is grants and incentives. You know, great solution if you can get it. This is an external source of capital that neither schools or the local taxpayers need to repay. They can lower the total cost of the project to the school. However, when you accept a grant, it does obligate you to perform certain actions, and you know, finding and applying for grants can be quite burdensome. It depends on the process, depends on who you're getting the funds from. Grant money can come from a range of entities, including federal, state, and regional governments, utility-supported repair programs, and philanthropic organizations. Grants that schools are typically most familiar with are those that support through general investments in maintenance in infrastructure and renovations often through state agency.

One of our key studies, the Pentucket Regional School District did take advantage of the Massachusetts Green Repair Program, which in that state provided \$300 million in grant funding to school districts across the state to cover up to 50 percent of their repair or replacement costs for making improvements in K through 12 schools such as replacing roofs, windows, boilers, et cetera. So they were actually able to use some of those funds and do — for example, if they were replacing their boiler, they got some money from this program, and they were able to do extremely efficient boiler for their school district. The availability of these funds varies quite a lot. There are some state and regional programs as I mentioned. It's always good to check with the local utility that serves your school district. There are often efficiency incentives through those utilities, and if you end up working with a vendor, say, energy service company that's managing many of the improvements, those entities are often responsible and will kind of know what the programs are that are available to you. There is a national database to look at DsireUSA, which is a link on your

screen. If you look by your state, there will be a list of incentives, and schools are usually included under the business or commercial incentives piece of that. So again, a great place to start. Always maximize the grants available to you. But again, rarely can you depend on grants to cover most, certainly not all of your project costs. So now let's get into some of the other financing options available to schools. So although grants and internal cash are simple and attractive for many reasons, they're very limited, and so what most schools are using are bonds and lease agreements. Municipal bonds are a long-term debt obligation and are commonly used to finance construction and improvements to public infrastructure like town halls, schools, streets, waste treatments facilities.

The most common form of that will be a general obligation bond, which are tax exempt, issued by local governments of the school district itself. The bonds, general obligation bonds, are backed by the full facing credit of the issuing entity, so the school district or the local government, and because of this, bonds require usually voter approval, and there's often statutory limits on how much that through bonds school districts can have outstanding. Excuse me. In some states, school districts have a pre-authorized level of debt that they can issue without voter approval, and then usually a higher — and that's only in some states — and then there's another bar usually that limits the total amount of debt. So just as an example in the state of Washington, school districts are permitted to take on non-voted general debt obligations totaling 0.375 percent of the assessed property values within their district. And the voted general debt obligation, obviously a higher bar, and it varies on what percentage of the vote you need to get based on where you are in the country. So in Washington it's up to 5 percent of the assessed value of properties in their region. So there are limits to how much debt a school district can obtain, and in some places, and we'll hear a few examples today, the voters may not be interested in supporting an additional tax increase, and so that's another barrier. However, if you are able to get bonds, they're typically the most secure available debt instruments available for public projects, offer long terms and extremely attractive rates, and beyond delivering low cost, long term capital, general obligation debt has an attractive feature to schools in that it's actually the taxpayers that are repaying the debt, so the school districts are gonna be able to keep a lot of the benefit of the savings that they see.

In general, school districts will often wrap a clean energy project into a much larger bond initiative. Running a bond measure has a number of costs in addition to sort of the legal and other sort of administrative costs of setting up a bond issuance. You also have to spend some political capital, make the case to voters about why they need to support your project, and so a lot of times, smaller clean energy projects will be wrapped into a larger bond measure. So there might be, you know, a \$40 million bond issuance and \$1 million or \$5 million of that is going towards clean energy improvements for the school district. In some cases, school districts have signed stand alone voter improvable, usually for a package of projects, but in general, most bond issuances are going to be above \$5 million just because of the cost involved in issuing those bonds and getting voters to get excited about them. There's also a few federally subsidized bond options that are worth mentioning. These essentially subsidize the interest payments that are made either through a federal tax credit, or through a cash payment in the case of QECCBs, you can use cash payments, so qualified energy conservation bonds can be used for a range of qualified energy projects that includes projects that are done in publicly owned buildings like schools. QECCBs have been allocated to states and many states have allocations still available.

It's best to check probably with your state energy office to see where in the state are those allocations available. Some of those are at the local government level, some at the state government level depending on how they were allocated. There's also Qualified Zone Academy Bonds, which can be used for a range of both energy and non-energy facility projects in a disadvantaged community. They're a bit more complicated deploy because you need match support from a private entity that will make a contribution to the school worth about 10 percent of the total project cost. Two links on your screen will give you more information about those federally subsidized bonds. And then we get to lease financing. So leases are contracts that allow a school district to attain the use or purchase of equipment or real estate. They're similar to long term rental agreements, where a school district or the lessee, get to use the equipment for a period of time in return for regular payments to the third party, the lessor — could be a bank, could be some other financial entity. Leases usually come with a purchase option that can be exercised at the end of the lease period so that they're essentially renting to own. Leases have a slightly higher interest rate than bond financing, and require the school district itself instead of the taxpayers to repay the debt. However, leases are fast in terms of being able to set them up, and

fairly flexible as compared to bond financing, and you can do them in smaller increments more easily. The most commonly used lease arrangement by schools is called a Tax Exempt Lease Purchase Agreement, and when properly structured, lease agreements can be designed such that the payments that are required annually are about the same or less than the savings that are expected by the school.

So they can be self-funding and kind of — it can be something that the school is able to maintain over the term of the lease, and then at the end of the lease term they'll almost always own the equipment. So the tax-exempt lease purchase equipment is as municipal lease, and it really presumes that the school will definitely own the assets at the end of the lease term, that's the lease-purchase part of the terms. The interest rates are quite a bit lower than commercial lease purchase agreements, because the interest paid is tax exempt, and the terms are also usually quite good for clean energy projects. They can be as long as like 15 to 20 years, they're usually less than 10, and are always limited to the useful life of the equipment that's being financed. And probably most importantly why many school districts across the U.S. use lease financing is that from a legal perspective in many states, the tax exempt lease purchase agreement does not constitute long term debt. And so often even though there may be larger broad debt limitations on schools, it's usually around long term debt, and it's what limits some of the ability to bond and take on other forms of long term debt, most of the lease agreements are written with what's called non-appropriation language, and what that really means in normal language is that it limits the payment obligation of the school to their current operating budget, so that technically it's not a long term commitment.

So that, you know, if a school decides they can't pay, they don't have the money to pay, the lessor can actually remove the equipment, but they don't have access to future school budgets. Now to have the party that's offering you the lease feel comfortable offering, for example, to pay for a boiler and energy management system and a new roof, for example, for a school, they're gonna have to be pretty confident that the equipment, the full package, are things that the school district considers of essential use, and therefore is very likely to repay. There shouldn't be problems that they would actually need to come in and actually reclaim the equipment. In fact this almost never happens, so they have enough confidence that they're able to offer reasonable interest rates that the school district will make good on its promise.

However, the school district is able to get around this sort of long term debt limitation and be able to enter into agreements where they're really able to make investments that are gonna be paying for themselves over time, allowing them just more flexibility in the types of improvements that they can make and the access to capital that they can get access to. So there's 2 major methods of procuring lease financing. One is through a private placement agreement or a single investor lease. This is when one investor such as a commercial bank or a leasing company provides the capital to the school and you just make direct payments back to that entity. There's also something called certificates of participation, and certificates of participation, or COPs, are tools for obtaining financing from multiple investors. The COPs give investors a fractional interest in one or more underlying lease, and the lease payments are passed through to investors based on the fraction that they own. So it allows the school district instead of just working with one entity, to have multiple investors, which creates often-lower interest rates. So this is gonna work better if it's a much larger issuance.

One excellent example of using COPs is the state of Washington, and Mitch will be talking about his program later where they're able to through the state program aggregate the demands of many schools and other local governments in Washington, and together issue COPs to multiple investors which does reduce the costs. In terms of other clean energy financing options that are really focused on clean energy in particular as opposed to leases and bonds and some of these other tools that have been used for many things, not just for energy improvements, there's a number of options worth mentioning, and not all of them are available in every state. One that is usually available in most states where there are active solar _____ are there's a power purchase agreement. This is becoming a more popular agreement with the schools and many other entities where a third party actually owns and operates the photovoltaics on your school, a school's roof, and the school pays the third party a pre-negotiated rate for the power that's generated that they use. So this allows them to avoid a lot of the risk involved with, "Will it produce?" You know, "Will I be responsible for it; what will happen in a few years if something goes wrong?" And they get rid of a lot of that risk, but they are, and they know kind of what rate they will pay over time.

So however, power purchase agreements are also complicated contracts, and some — you know, and it requires a somewhat sophisticated negotiation process; you don't wanna be in that

process without having sort of any background to understand what the contracts really mean. There's also gonna be in some states the opportunity to have specialized either revolving loan funds or other financing programs that are really focused on clean energy improvements in particular. A number of states have state wide revolving loan funds for energy upgrades for example. In a few states there are utilities that allow schools and other entities to make improvements to their buildings and then repay them over time on their property tax bill. It's hard to talk about these broadly because they're not available everywhere, but I would recommend that folks use the DsireUSA website and just see what's available in your region. And I just wanted to make some concluding comments before we move on to our three key studies. So just on a high level I wanna emphasize that the financing options that are most available and that really offer a tremendous amount of capital already to schools are ones that schools are often already familiar with, and that because schools all the time are thinking about maintenance and renovations and new buildings and needing to maintain and deal with their built infrastructure, you could actually build efficiency and renewables into many of those existing processes.

So if you're already issuing a bond for renovating a school, make sure that every piece of equipment is the most efficient possible. You're going to be able to save money in the long run. In addition, once you start to understand the range of opportunities in schools, you can also be more aggressive about it, and you know, do more financing than you might otherwise, because you start to see how you're gonna get the savings and how you're going to lower your total cost of running your school district on the energy size of things in the long run. But I just wanna emphasize, these are not in general foreign tools for schools, they're tools that are already available and can be used for clean energy to large extent. The other thing I wanna emphasize is that oftentimes when we're talking to schools across the country, it's really internal capacity, expertise, and support that is a primary bottleneck instead of financing. Financing comes later, after there is that support, there is a plan, people understand what they need to do. Then you need to think about financing and what your options are, but it's really starting with that internal capacity.

You don't have to be an energy efficiency or renewable energy expert; you don't have to have one in-house, but you have to hire the right people. You have to have some capacity to apply for grants, to understand your financing options, to hire the right

vendors, and that does take time and effort, and I think that's where as policymakers and as school administrators, we really have to make sure we're giving the right amount of time to be able to enable these projects to get the savings that are possible. And then the third thing that I think is important to keep in mind as we think about risk for schools, there's two areas that I think are worth just noting. One is that it does take expertise to negotiate contracts appropriately with financial partners and with vendors, including energy service contractors, and it often is helpful especially if you don't have a staff that has that experience to hire a third party to represent the school district's interests, or at least have a third party look at the contracts before they're signed to make sure that the deal is there to the school districts. And then sort of related to that, there are performance risks. We do all these improvements to our schools and there's a range of benefits, but one thing we wanna see is the savings.

One way to reduce savings risk or just performance risk that we might not get to save anything, is to use an energy savings performance contract, and there's a ton of resources out there about energy savings performance contracts so I don't think I need to go into it here, but the bottom line is that that's when a vendor, usually an energy service company basically guarantees a minimum level of savings, and there's a number of our case studies that we highlight in the report where that was really needed for the school administrator to feel comfortable to say, "Yes, I'm going to be able to make my lease payments." However, they do come at a cost, so you know, sometimes schools that they've started to feel more comfortable, they have a more energy-savvy staff, they can start to not always have a performance contract, but there could be cases when you're taking more risk, you're less sure, it's a new thing, less experienced staff that you really want to have those savings guaranteed. So that's just something to keep in mind as we're thinking about how schools really mitigate their risk and make sure they're getting the benefits that they're looking for. So I'm gonna turn the microphone over to folks on the ground who are really doing this work directly. I'm gonna start with Mitch Thompson, who is the Director of Fiscal Services at Centralia School District in Washington State. So, Mitch, over to you.

Mitch Thompson:

Hi, just a little background. My school district is a very high poverty school district, so in terms of running a bond or a levy with the requirement of meeting 60 percent voter approval for bonds, it's really tough for us here to pass a bond, and so when the state put out money for energy efficiency grants, our best option as far

as financing was not to run a capital projects levy or a bond, it was to actually turn to the state with the local financing program. And so a few years ago we hired an energy service company, which is part of the requirement of the state's grant, and they were able to go through all of our buildings and assess what changes we needed for energy improvements and what gave us the best payback. And so we were able to take that to our board of directors and show them they were able to pick projects out of the entire scope and say, "This is what we wanted to do." And so the project from a few years ago was \$1.3 million and the state puts you into this pool and they say the maximum you can get is \$500,000 for your grant, and so \$1.3 million we still gotta come up with the extra money, and so we decided as a district we were gonna put in X amount of dollars and we were gonna have to finance the rest of it. And our state's local program here is a very easy program. We've been using it for years to finance our buses, and when we inquired and they said yes, they do the energy efficiency pieces as well. We were very happy to jump in and it's basically the exact same process, the exact same application, and so the first year you apply for it, that's when you've gotta do all the history research on your financials and everything, but then consecutive years, you're just adding the previous year, so it becomes an easy, very user-friendly process, and it goes to our state's treasurer's office, and they have a very knowledgeable staff. They work with you every step of the way, and it's just a very amicable process.

So we financed approximately \$700,000, looking around, we actually at the time got one of the best interest rates at 2.97 percent interest, and the simple payback on it, 6.5 years, and one of the other things that the energy service company actually provided us was these are the utilities that the thing is, that if you do turn around and pass a bond by chance in 5 years and you're gonna replace the school, you can pull all of these fixtures out and put them in the new building. So it saves us in the future as well. We actually just went through the process again on a second go at an energy efficiency project, and we were just given the approval and they issued the payments and this time the interest rate that we got this year was 1.92 percent, and when I went out and sought out other bids and other percentages, the best rate I could get out there was 3 percent. And so it really is a great program in Washington State. The payments we have for the energy efficiency projects, we picked a 10-year process, and while the one from 3 years ago was a 6.5-year simple payback, the current one is 6.25-year simple payback. So the projects that we've taken on that the utility

savings actually that are guaranteed more than pay for the loan costs.

Merrian: Mitch, I have a question here from an audience member. You know, one of the things that I've also heard about schools is they're able to finance some of the non-energy improvements in addition to the energy improvements together, allowing them to take care of a range of their costs, you know, sort of their most burning, sort of facilities needs. Were you able to do that or is that part of what your plan has been in terms of financing through the state program?

Mitch Thompson: We actually didn't include those costs because there was that portion that the school district is paying out of pocket. On our current financing part of it includes our pool, and we actually partner with the city and the independent contractor to manage the facility with us, and so we were able to actually - for those costs that basically aren't utility-beneficial, we were able to use partner's money.

Merrian: Great, great. So you're pulling money from all sorts of different sectors or sources to be able to get what you need done. So that's great.

Mitch Thompson: We are, and after our first project — it was after we were done — that my facilities director went to the local utility company and basically brought us in \$200,000 in BPA, Bonneville Power Association, rebates. The current project we're budgeting in just over \$100,000 in BPA rebates, and that really helped us out and it's something to look into definitely when you're doing these kinds of projects.

Merrian: Great, thank you. I really encourage anyone on the line to look into this Washington State program. Generally, it's called The Local Program, and if you go to the guide there's some more detailed information about that program and also a link to the contact person there, and their website. I think it's a really effective way of making it easier for schools to finance cheaper, and also just to organize that process for school districts and local governments in a way that you know, helps everyone out. So it's something that you could do at a state level, so if there's anyone on the phone working at the state level, that would be a really interesting model to check out. We have one other question here on the line. Are there, let's see, are these energy upgrades — when

you do the lease financing, are the energy upgrades subject to a public bid process to select the contractors to do the installation?

Mitch Thompson: In Washington State they are — we have a dollar threshold that we have to bid for. Now, we bid the entire project out to the ESCO, and then the work is being done by the ESCO sub-contractors. So we bid it out as one entire project, and then our ESCO is Ameresco Quantum, and they then go out and hire the sub-contractors.

Merrian: Ok. Great, and we have a few questions here. Just what was the program that I had recommended? It's Washington's LOCAL program. Mitch, can you remind me what "LOCAL" stands for? I always confuse the letters.

Mitch Thompson: It's funny because it's Local Option Capital Asset Lending. If you Google Washington State LOCAL program, it will come up.

Merrian: Great. And Mark is putting the link out to the whole group if you'll look at the right-hand side of your screen you'll see the actual URL. Great. Well, thanks, Mitch. Now let's hear from Dawn from Tennessee. Let me just get my slide, next slide here. Dawn are you on the line?

Dawn Johnson: Yes, I am.

Merrian: Great. Go for it.

Dawn Johnson: All right, so at Williamson County School District, we — I think we've talked a little bit earlier about the fact that you need to have a clear objective, so it did start with the superintendent and his goal objective to really determine who the best partner was and the best avenue for the county to determine how they could do infrastructure modernization and reduce their facility maintenance costs. And in that landscape review they settled on performance contracting, and the reason that they looked at this was due to the fact that their district was growing rapidly, and they wanted to reverb their bond dollars to build new buildings. However, they still were motivated to modernize their existing equipment in order to save energy and better manage their true energy usage, because prior to the superintendent's coming in, they really didn't have a full grasp of what they were spending and why. So as one of the participants had asked earlier, the in the state of Tennessee for performance contracting they do have to go out and look at doing an RFP, and so they did go out for their RFP and they narrowed it down to a small list of opportunities, and in that opportunity came

out a behavioral only program, and then there were typical ESCOs who were able to give them a more comprehensive program that they were actually looking for. So they eventually settled on Chevron Energy Solutions, and this was important for them because as they were going through the process to try and get the approval from the board on a \$5.7 million municipal lease. It fell apart many times, and in the state of Tennessee, they have to pass both the school board and the county commission when you're incurring long term financing. And the term of this lease was for 10 years.

So, they did have to go in front of both boards. Like I said, it was wavering multiple times and it took several months and it took a lot of time and patience to attend board meetings and committee meetings and responding to questions, and just as I think Merrian talked about earlier, it was garnering the champions that helped them get through this to get both parties to agree and pass this \$5.7 million municipal lease. Some of the benefits that came to the district through doing their performance contract, and one of the things you just talked about was to guarantee aspects. That was very important for the school district because it truly did reduce the risk to themselves, and since they were going into a lease opportunity, they really were focused on being able to know that they were going to be able to meet that service, and it actually was important to them because in the first 3 years of the performance contract, it did not meet the guaranteed savings that the ESCO had said that it would meet. And they actually paid out \$155,000 to the school district to meet that deficit, and it actually turned into an exceptionally long relationship between both entities.

They worked on and off for over 10 years which was the term of the contract, and there were several things when the school district was looking at going forward with the performance contracts that one of the participants asked about earlier — did you get anything that wasn't necessarily energy related? And the school districts did get a lot of energy-related items and some big ticket items that they would not have been able to put underneath a normal capital project for themselves such as some cooling towers and boilers that were very expensive and had a very long payback payment. And they did lighting retrofits, but most importantly, they did energy management systems across the district that took it down to one energy management control system, but in addition, they had an energy manager that was myself paid out of the program because they knew that they could not garner an additional position for the school district at that time, and so the position was paid for out of

the actual contract, and that was extremely beneficial to them. They had so much success through the energy manager program, that they actually funded a position last year that was internal to the district themselves. They had great success with the program.

They, over the 10 years, they were able to save an additional \$6 million over and above what they paid out in their debt services, and the interesting part about the financing portion for the county was that in the beginning, they had a rate of 4.53 percent, an interest rate on their 10 year lease that they had — the municipal lease — and after one year, they had a very savvy finance director, and she just decided to convert that municipal lease into a banknote because it had a better interest rate of 3.9 percent, and then she also continued to look and in 3 years into the program, she actually had the opportunity to pay off that bank note by a general obligation bond, and that — so the first 2 opportunities they had were actually paid directly by the school district. So they were on the hook for that, they had been paid back through the guarantee, but by the third year she was able to pull that over, and then the taxpayers of course were part of that general obligation bond, and it was no longer the debt service to the actual school district themselves.

Merrian: Yeah, I think, Dawn, that's a very important point for everyone on the line. The ability of the business manager, the CFO, or whoever's managing the finances of the school district to kind of stay in touch with what the best rates are, and for example, if you're able to do a lease agreement first, but you know that in three to five years you can issue a bond and you can roll the project into a larger bond issuance, if you can do that, the school's really gonna benefit, and you can just wait until the timing is right based on what the opportunities are that arise for the financing potential in your region. So that's a really great example.

Dawn Johnson: One of the other great benefits that they received out of having the program and having the great success that they had, is that it garnered them a lot of invitations to speak across the state and nationally, and they had multiple local articles and national articles that they were able to promote their success, and it was extremely beneficial for the stakeholders of the county to understand exactly what their taxpayer dollars had gone toward, and really show those successes.

Merrian: Great. We have a few questions, including, Dawn, what's your last name. So I didn't actually appropriate introduce you. So,

Dawn Johnson is speaking, she works with Chevron Energy Solutions, and she was the Chevron employee who was actually embedded at the Williamson County School District as their energy manager through their performance contract, because they couldn't get the internal headcount, and I think that's another really interesting element to this story. A lot of times school districts lack the capacity and they were actually able to bring the capacity on through the agreement that they did with the energy service company, and once they saw the benefit, Dawn, how many years until they hired the internal staff person?

Dawn Johnson: It was on the 12th year, so they decided that they would bring it in-house.

Merrian: Yep. So, they had that experience under their belt before they were able to say, you know, "This is clearly benefiting us and is worth the funds." But in the meantime they're able to kind of creatively get the capacity that they needed. So one of the questions we have is what activities did you perform as an energy manager? What does an energy manager do on a day-to-day basis?

Dawn Johnson: That's a great — I actually love my job. I had the opportunity — so the first three years when the program was not making the numbers that it needed to, it was really the opportunity to go out and commission buildings and walk buildings and do walk-throughs and determine why were those buildings using the most buildings? Auditing utility bills, looking for anomalies and providing reports. As the — when the job turned positive, the building automation system, we had tightened that system as much as we possibly could through schedules, through different control strategies, then the maintenance manager that was there at the time, he was a real proponent for having student involved engagement. So it gave me the opportunity to then go out and work in the school and give presentations and start energy teams and get kids involved, and that was by far one of the reasons why we garnered so much attention throughout the state with more of the opportunities we had like that. We also — Williamson County was able to have the first Energy Star school in the state, so it started to provide a benchmarking for themselves as to how they really wanted to continue to operate.

Merrian: Great, great. Thank you. We have a question about what did you discover in the first few years about why the energy performance wasn't as expected? What was going on that you were able to kind of find out?

Dawn Johnson: Well, there were some commissioning items that needed to be taken care of. So the building automation system, although it said it was turning things off, was not turning things off. A lot of it was tightening up the schedules and changing the control strategies. It was truly related to the air conditioning systems, and as soon as we got those under control, everything came back into line. We also did something really innovative there, which was — it garnered a lot of water savings for the district, and that was installing irrigation wells. So we were using ground water for irrigation.

Merrian: Oh, interesting. Do you have a sense of how much of the savings that Williamson County ultimately got was from the behavioral student engagement piece that you were mentioned versus all the other pieces that they implemented?

Dawn Johnson: Yeah, I can give you a specific year. It was 2008, 2009 when the economic downturn really started to hit the school district hard. They were expecting to have a deficit in funds, and so we were tasked by the superintendent to do whatever we could to try and reduce costs, and so we started out hard on an aggressive campaign to really go back and do behavior measures, and really focus on it for that '08, '09 school year. And so I did a lot of calculations to try and determine what we could do, and it was very simple things. It was you know, the very easy things we could do. Make sure you're turning off lights no matter when you're leaving, any appliances — we didn't mandate that they remove the appliances, but we gave them an opportunity to, and we actually watched some of them walk out the doors. They unplugged them when they could, and we did some things with building automation systems too — the air conditioning, set it to set points, and optimization and things of that nature, and we said that we would save about \$200,000 and we actually — the true dollars that we saved that year were \$300,000, and we saved on average 10 percent that year.

Merrian: Wow. Great. Yeah, I think it's important to emphasize that while a lot of financing is focused on the high cost items, because that's why you're getting financing, to buy the large equipment, you can never stop there if you really wanna get the savings that are possible. Just like reducing, you know, for example, if you reduce it several hours earlier, adjust it slightly or change the set points as Dawn just mentioned, you can save a lot of money without even making a large capital investment, so those should always go together. So this is an excellent example of that. Great. So let's move on to Nevada, and Holly, we have Holly Luna, who is the

Chief Financial Officer with the Douglas County School District in Nevada. Holly, are you there?

Holly Luna: Hi, thanks for having me. Yes I am.

Merrian: Great.

Holly Luna: Can you hear me?

Merrian: Yeah I can.

Holly Luna: Oh, ok. Thank you for having me, and unfortunately I wasn't able to join earlier so I apologize if I repeat some of the important topics or segments that other folks have already hit, but I am happy to share our experience here in Douglas County. Douglas County is a small rural — Nevada, generally, people think of Nevada, and they think of Las Vegas, and that really is just one segment, and that's in southern Nevada, and really the rest of us end up being more rural and smaller school districts. There's only 17 in Nevada, and we're currently in declining enrollment, much like the rest of Nevada, and so as a school district, obviously our revenues come on a per pupil basis. And so our concern at the time that I joined the school district about 7 years ago, was that we were in this declining enrollment environment. We had increasing costs, and yet in the '07, '08 time frame is when the economic crisis hit, and we started really taking a look at general funds declining with no hopes of increased funding or revenues, and we were looking for solutions, and I think the thing that's neat about our story is that this actually came internally from our facilities folks. It wasn't a suggestion from the outside, it wasn't a superintendent or school board, this really came internal from the folks on the ground that work on these systems, and the more I looked into it, the more that an ESCO project just made sense. In Nevada we have specific legislation written that it is a guarantee for us that if the improvements do not pay for themselves, there is a guarantee that you'll get that check written from the construction company that manages the ESCO.

So what we needed up doing as an incentive, really, to incentivize our local community that we really needed additional dollars to fund major improvements. This wasn't — we weren't looking for Band-aids, we were looking for true replacements of major programs and everything from our socialized energy management system to boiler replacements, and it wasn't a good time. The timing was poor. Additionally we had a very conservative county.

It's very tax-averse. We actually have one of the lowest taxes in Nevada, which is already saying something, and so we were looking at this to be incentivizing to say, "We are doing everything we can as a school district, and yet we still can't meet our infrastructure replacement needs." So we started out with ESCO, working off of about a \$5 million project that was set as a payback period of 15 years, and based on our ability to successfully accelerate the actual ESPC process, we were able to get the selection of the actual company and our financial grade audit, which generally would consume between a year to 18 months on a need to do a request for a proposal or an RFP, to the actual execution. Generally beyond that, there's 6 to 8 months that are spent in development and design of the actual projects ECMs or the Energy Conservation Measures, where you pick your lighting improvements and your centralized managements systems and those types of things. And what we ended up doing based on the fact that we had a limited time frame in which to present a bond to our local community, we couldn't take the normal contracting time of 3 years to get this ESCO up and off the ground. We ended up doing it in less than 6 months, and I have to tell you that the kudos went to the people on the ground that helped get this implemented and we all bought into it, and I think that's one of the things that was exceptional about our team is we all saw the needs and we picked it up and just ran with it, and we actually ended up winning over the voter base here in Douglas County. They ended up approving a 10 year bond program for us which then to that we obviously added to our initial \$5 million investment in the ESCO, and ended up adding another \$5 million plus that allowed us to move into those — they weren't the low-hanging fruit, they were the boilers.

They were the ones that the payback period was beyond the 15 years that we could have done in our original installment purchase agreement plan, and at the end of the day, we continued to see ongoing operational and maintenance savings. I just completed our fiscal outlook budget for our next year, and I reduced our utilities again in projections by another \$200,000 in general fund monies. And so we are more than exceeding the requirements of the original installment purchase agreement, or the ESCO. We continue to see those savings year over year, we've been able to create best practices in our maintenance area, and as an ongoing, we've been able to not only implement the initial energy conservation measures, but we've gone on to create standard materials and standard equipment which just to give an example, the actual lighting that we had in our school district, rather than

stocking or trying to replace about 15 different types of light bulbs, we've gone onto 2. That in an of itself makes life much easier not only for our maintenance crew, but just as a stocking and replacing values, but — so we've gone onto implement standard materials and equipment, and that continues to result in additional savings and operation ease, and it is adding to our bottom line. We have yet to see an increase in funding come back to Nevada schools on a per pupil basis, so we continue to struggle with increasing costs but declining revenues, and so this has been just pivotal in our school district to ensure that we are able to continue to fund the monies that we do have towards the educational programs that are so important.

We really just run in the background with this, and I think that we just have a really successful ESCO program to the point where the Nevada legislature is looking at implementing ESCO as a requirement for school districts to go to at least if nothing else, the requirement could be that they do a financial grade audit up front to find out if they indeed have relevant ability to provide that payback period and do an ESCO. So we were asked for input on that, and I can't tell you how excited I am that we've done an ESCO, how good it was to do the additional financial grade audit so you can see all the needs and it's right there. It's laid out for you by that contractor so that even if I can't do that up front, and I was hearing Dawn mention that earlier, that even if I can't pick up that piece of equipment right now, and do that replacement, I now know of it, I'm aware of it, and if I can look forward to creating savings or setting aside funds from these efficiencies, I can pay for that replacement of aging equipment over time. And with our standardized materials, anything that goes forward now, we're not just going on, say, an architect or a contractor's recommendation of you know, what might be the cheapest today. It's looking at that long-term operational maintenance and efficiency perspective that has changed the viewpoint of how we do business and how we do operations and maintenance here in Douglas County. So...

Merrian: Thank you. I really love that you were able to — oh no, is everyone hearing feedback? It may be that, 'cause you're on a computer, Holly. I think there's a little feedback. I'm gonna just kinda push through it —

Holly Luna: I can go ahead and mute every other —

Merrian: Ok, great. So just a question, I think it's really interesting that you're in a fairly conservative district in terms of the voters'

willingness to say yes to a ballot measure to do bonds, and I'm wondering how were you able to communicate the voters to get them on board. Were you telling them about the details of your projects and your success and how were you getting that word out there so that then they were able to pass this quite large bond measure?

Holly Luna:

That's a really good point. And what I can tell you that we did, I think one of the hardest things to do is to ensure a single point of communication, making sure that everyone on your team is saying the same thing. There's no doubt about it, you will have the people here and there that are the nay-sayers, you know, this can't work, or that's too hard, or look what you're expecting us to do. So, I think the first is that you have a single point of communication. The second is that when we initially started this, obviously, we'd hold board meeting in public, so we were doing some small advertising just by the sheer fact of the meeting laws, but then what we ended up doing — again you know, part of the beauty of this is that it is a small town. Everybody does know everything, or at least they think they do, and we all can you know, hold up the local newspaper. They do run good pieces for us. So one of my suggestions is that you make sure you make yourself available to your local papers and news agencies, because you know, when they don't have an exciting news week, they do come, and they do ask you questions, and you may get the ability to do the plugs, you know, asking for the help, asking for the inputs, and ultimately what we ended up doing was we actually went and did a grass roots campaign for the bond, and what I mean by that is we specifically sat as an administrative group with our superintendent and our financial consultant for our bonds, and we said, "How can you influence people in this town?" And we looked for the leaders in the various areas, so we looked for someone in the construction industry, we looked for someone in education, we looked for someone in the engineering world, we looked for someone in the local county, someone in financing and banking, and in essence, we invited them to the table. And we ended up having approximately about 30 people start off and we actually did meetings in the various sites and school sites the remote sites, and we said come to this school.

One of the good examples would be Gardnerville Elementary that is shown on our better buildings challenge website that we're linked into, and Gardnerville Elementary is a very old school built back in the early 1900s. Much of the infrastructure was well outdated. We invited them to that school, we held the meeting on

site, and we walked them through the physical campus and said, “Here are our problems, here are our needs.” And by the time we got to about the third meeting, and therefore, the third site, school site, they said, “Stop. We see your needs, we see that there is a lack of funding, and we’re willing to help.” So if you get the locals who are your leaders, specifically those that other people respect, that you see them in the local community, they are addressed in the newspaper, or they’re their leaders in their industry, we got them on board, and it didn’t take much convincing, because the needs are pretty apparent. We then focused on how do you come up with the solution, and they ended up taking it from there. We presented them with, “Here are our issues.” They said, “We see ‘em.” And they took it to the local community, and we have never in Douglas County history had a bond that would pass on the first go-round and with overwhelming support. Normally it would barely make it by the 50 percent plus 1 vote type of a scenario, and we had in the 61 plus percent range of approval, and so the things that you have to be willing to do is you do have to be willing to be open. You have to be willing to be open to criticism. People may look at that, but when you’re willing to take them and show them for themselves, or be willing to be transparent, be willing to provide the information, people are reasonable, and people were willing to help, and they saw the needs and they helped provide the solution.

Merrian:

Great. That is an excellent example. Thank you so much, and I think we’ll close on that from the three case studies. Mitch, Dawn, and Holly, thank you so much for your example, and I encourage folks to check out their full piece of these online, and to try some of these important tactics that they’re demonstrating. I feel like each of them have talked about some of the key tactics that schools need to be successful. We’re now gonna just close with some information for you guys on our Better Buildings Challenge Program at DOE, and Crystal McDonald will speak about that for a few minutes before we close. So Crystal, I’ll turn it over to you.

Crystal McDonald:

Great, thanks, Merrian. First of all I just wanna say thank you to all of the presenters and to the participants. Just quickly I wanted to share two levels of engagement with DOE under the Better Buildings Initiative. The Better Buildings Initiative is a call to action to executive leaders across all sectors, and we’re asking them to make their buildings 20 percent more efficient by 2020, and so you can read the bullets on the first slide regarding the details, and I’d like to advance to the next slide in the interest of time, and just pull out with the commitment to the challenge, we’re

asking partners basically to share compelling showcase projects, we're asking them to share their data to track and verify energy savings, and we report out on an energy use intensity basis. And then finally, we're asking our challenge partners who we recognize as sector leaders to share their implementation models, which essentially are road maps for overcoming the barriers to implementing energy efficient and renewable energy projects. Moving onto the next slide, I think one of the key components the challenge partners should be aware of is that — or prospective partners, I would say — is that the partners, we know that partners do provide evidence that efficiency works. It saves money, it creates job, and it's good for the environment. So partners also lead by success, they inspire action, and they drive results, and we believe they transform the market by delivering replicable solutions. So that's what the showcase models and the implementation models are all about demonstrating — replicable solutions. So therefore, we provide as much exposure as possible to promote all of the great work the partners are performing. Next screen, please. This is just a screenshot of most — not all — of our current partners, and while it's not all-inclusive, it does give you a sense of the reach to energy leaders across the industrial, commercial, and public sectors.

Next slide? Another level of engagement is the Better Buildings Alliance, and I like this alliance extending to the public sector because it's an opportunity for local governments to work collaborative with DOE, it helps members to sustain their success of the AERO Fund at work, and then it also leverages DOE's expertise and provides a forum for peer exchange and actionable items. It also expands on a successful DOE platform that was previously focused on private and commercial properties. You may be familiar with the Commercial Building Energy Alliance, and it's now been renamed under the Better Buildings Alliance, but that is still out of our Better Building — I'm sorry, the Building Technology Program Office. Next slide? This level of engagement is a lighter touch program than the challenge, but it does allow for peer exchange, and again, sharing replicable solutions and participation in the project teams. The project teams were mentioned earlier, but I just wanted to reiterate that we have the Energy Savings Performance Contracting Team, the Community Strategic Energy Planning Team, the Finance Strategies Data Management Approaches, and we're looking to move full steam ahead after the summit with most of the project teams. We've already had a kickoff with one team, but it's still not too late to join.

Next screen, please. And then the next one. The one with the enrollment form. Ok, I'm sorry — back up a little. Back up one slide. That's it, thank you. So I wanted to bring the Better Buildings Alliance to your attention in hopes that you consider joining either at the challenge level or the alliance level, and here's the sign-up form. Just wanted you to see what it looks like, and there you'll have an opportunity to select a project team of interest. But one of the things I wanted to mention today is that we're especially looking for more school districts to participate in either the alliance or the challenge level, basically so we can showcase the diversity of issues across urban, suburban, and rural school districts. So with that said, I just wanted you to know that we appreciate your time and attention, and we hope that you've learned something or picked up something useful that you can take back to your organization. And we expect the follow-up e-mail, and we look forward to a continuing engagement with the K through 12 community. And with that, I wanted to thank you, and if you have any other questions or concerns, there's an e-mail address there, and we will definitely respond to you. Thank you very much. I think this is going to wrap us up.

Merrian: Yep, thanks everyone for being here. Take care. Bye.

Crystal McDonald: Bye-bye. Thank you.

[End of Audio]