

Kate George, Adam Guzzo, Alex Dews, Jeannine Altavilla, Sarah O'Connell, Renee Hutcheson, Len Hoey

Kate George: Good afternoon, everyone. Welcome to the SEE Action Network Webinar Series on Strategic Energy Management. My name is Kate George from ICF International. I'm helping support the SEE Action Network.

I think we'll get started in just a minute. We're going to keep all the lines silent during the webcast. And if you have questions, we'll let you know when we're open for questions, but you can type those into the chat function on the webinar.

All right. It's just after 3:00, so I think we'll get started. And I want to turn it over to Adam Guzzo from the Department of Energy to get us started.

Adam Guzzo: Thanks, Kate. Good afternoon, everyone. Thank you for joining us this afternoon.

Kate, if you want to go ahead and move to the next slide, please.

So I'm just going to give a very brief overview here of the Technical Assistance Program. We've got a lot of great content to cover on this webcast and some great presenters, so I'm going to move through this portion pretty quickly.

This presentation and the audio will be available on the SEE Action website as well as the Technical Assistance Program website for your review after the case.

So, just quickly, the Technical Assistance Program, for those that are not familiar with it, it's affectionately known as the TAP. TAP supports one of DOE's Office of Energy Efficiency and Renewable Energy's key missions and that's taking clean energy to scale through high-impact efforts.

TAP's role in supporting that mission is to provide officials from the state, local and tribal governments with resources that advance clean energy policies, programs and projects.

Next slide, please. I think we may have skipped one. Yeah. Perfect. Right there.

So, as we transition to a post-Recovery Act framework, TAP will evolve as well and will be more focused on getting the biggest bang for each federal dollar, even more focused.

So what does that look like? Well, TAP will focus on key priority areas, which are noted in more detail on the next slide, resources around standardized approaches and best practices, facilitation of peer-to-peer learning and communication, and targeted one-on-one assistance.

Next slide, please.

So here are some more details. I'm not going to go through this at this point, but you can review it at our leisure. And, certainly, if you're interested in any of these areas and want to get more information – Kate, if you'll go to the next slide – the contact information for regional coordinators as well as the Solution Center website, which houses the Technical Assistance Program can be found on this slide.

Next slide, please.

So you can also submit an application for assistance at the website listed above or you can send an e-mail to the Technical Assistance Program if you want more information or updates.

Next slide, please.

Finally, if you're interested in getting a deeper dive into the Technical Assistance Program, there's a webinar scheduled for the public. It's going to talk in more detail about the Technical Assistance Program rollout and that'll be held tomorrow at 3:00 PM Eastern.

And then, finally, again, here is the e-mail address for questions.

So with that I'll turn it over to our moderator for today's webcast, Alex Dews from the City of Philadelphia, and he's going to give a brief overview of the State and Local Energy Efficiency Action Network and introduce our subject today, strategic energy management. Thanks.

Alex Dews:

Great. Thanks a lot, Adam. Thank you all for joining us this afternoon.

I know if you're on the East Coast, you may not have gotten a great night's sleep. I know I didn't, but happily I'm here in Philadelphia with the snow falling today and excited to talk through strategic energy management with the SEE Action Group

here today. We've got some great content to share with you from both Arlington County and the State of North Carolina.

And I'm just going to give a quick overview of the SEE Action Existing Commercial Buildings Working Group and some of the work that we're doing here in Philadelphia.

Next slide.

So just a quick agenda. We're going to talk through SEE Action, what we've been doing to date, what the plans are going forward, an overview of strategic energy management and then some of those specific local government and state government examples before we wrap up with questions and a little bit about related initiatives.

So a quick overview of SEE Action. State and Local Energy Efficiency Action Network was developed by DOE and EPA with a number of partners and the goal is to really extend the work that started to happen over the last couple of years through the Recovery Act. And this term of extending the down payment toward job growth and energy savings that's been made through the Act is really, I think, a great way to think about it.

So the main goals of SEE Action are really to advance energy efficiency policies and programs that can help to grow the energy efficiency sector and to knock down those barriers and disincentives wherever possible that prevent energy savings from happening. And, really, what we're talking about today is to grow the state and local level investments in energy efficiency and cost-effective energy efficiency, so we're going to hear about some great examples of that today.

Next slide, please. And you can skip ahead one more. Great.

So the SEE Action leadership consists of 30 stakeholders from across different state and local government, associations and then NGOs as well. And it's clustered into 8 working groups, all of which are driving towards this goal of cost-effective energy efficiency and reaching the 20 percent reduction goal by 2020.

So, within those eight groups, the Existing Commercial Buildings Group is one of those and we're talking today about how to advance cost-effective energy efficiency and strategic energy

management in that commercial building stock through the lens of state and local government.

Next slide, please.

So the motivation here is that, obviously, there's a lot of energy use by the commercial building sector. Fifty percent of the building energy use comes from that sector and most of the commercial buildings are not very energy efficient.

Then, on the public side, they tend to be about 25 percent more energy intensive than private building. There are lots of examples of that from the cities who have started to benchmark their own facilities and compare that against the commercial building sector. It's certainly true here in Philadelphia.

And then there's the fact that commercial building owners are spending a good deal of money on energy costs, but not really aware of the opportunities for energy efficiency, because it's not a top-line item on their balance sheet.

Also, there's motivation in that there's an economic development and job creation opportunity through investing in energy efficiency. And the buildings that do invest in it tend to have higher lease rates, sale prices and occupancy level.

Next slide, please.

So the priority policies and programs that the Existing Commercial Buildings Working Group is focused on right now include everything that you see listed here, but, in particular, benchmarking, rating and disclosure programs, retro-commissioning, strategic energy management, high-performance leasing. Those are some of the areas where there's been a lot of really exciting progress, a lot of good discussion recently, particularly around benchmarking and disclosure, but also those other top-level goals. And I think we'll hear about, as I mentioned before, some really good stuff is happening around strategic energy management today.

Next slide, please.

So just in terms of what's available to those of you on the call and to the SEE Action members, these are the products of the SEE Action Working Group – fact sheets; model policy; and then

peer support. And I know from experience in working through energy benchmarking legislation here in Philadelphia, it's hugely helpful to have access to all of that coming from a source that wasn't just a single source, but a consortium of people who were thinking through these issues and had learned from experience on them.

And I really encourage all of you to take advantage of the things that SEE Action has put together and to engage as much as possible with the group so that we know what kinds of resources we can put together to further support your efforts around commercial energy efficiency.

Next slide, please.

So, again, you're able to download and share the SEE Action resources and get in touch with us. All of the contact information is available here. Share your information with us and go ahead and ask for assistance as well as using the contact info that you see here.

Next slide.

So, the quick overview on strategic energy management here – you can go ahead and move to the next slide – I think the useful way to think about this regardless of the specific context that you're in, but, in order to be thinking about strategic energy management, it's important to think about it in a systems way and think about large portfolios of buildings or even if it's a medium or smaller size to think about the systems, think about the portfolio. And I'll talk a little bit about our experience with that here in Philadelphia and how we really learned a lot by being able to do that.

But I think the last point here on this slide about institutionalizing the best practices to sustain savings is something that you can't emphasize enough, especially in the local government or even state government context.

We're in a term-limited administration here in Philadelphia. We're in the second term. So all of the sustainability and energy efficiency goals that we have in place have an endpoint of 2015, which is when our mayor will leave office after the completion of his second term.

So institutionalizing the work that we're doing is a really important focus of our work overall in sustainability, but specifically with energy management and energy efficiency and figuring out how to make this administration proof and just to build it into the way that we do business here in Philadelphia, building it into the capital process, zoning codes, building codes, so on and so forth. A lot of great examples of how that's happened, but I think, as an overview, it's important to think about systems and portfolios.

Next slide, please.

So there's a huge opportunity for public agencies to lead by example and I think that we started to be able to do that here locally in Philadelphia and, certainly, you'll hear from Arlington about how they've been able to do that as well as North Carolina. There are great ways to do that in terms of setting your own goals and reporting on them, but also to challenge the private sector to match your goals or to set up their own challenges by neighborhood, by business sector, so on and so forth. But those are some tools that are great for starting to build the relationships that are going to last beyond the administrative terms that I mentioned before, and, I think, has been really useful in just getting the conversation going with the commercial building sector.

Next slide, please.

So the chart on this slide is a really useful way to start your thinking about how to take on strategic energy management. I think it is really important to start by establishing goals and making a commitment.

And I can't emphasize enough from my experience how important it is to be really thoughtful about the way that you establish goals and make sure that you're able to get good historic information that you'll be able to measure again for years to come. It's not always easy to find access to that kind of information. But if you're going to set reduction goals by department or try to incentivize ways for energy reduction to be rewarded, it's really crucial to think from the get-go about how you're going to do that down the road.

But, again, here are the steps beginning with starting at the top and finishing up with making sure that you're publicizing your successes and being flexible about it, monitoring your

performance, but also be willing to review and reassess your goals and make adjustments as needed. I think that's a crucial part of it as well.

Next slide.

And, again, the goal here is to influence the private sector to adopt strategic energy management. And I know from experience here there are a lot of private-sector partners that are really good examples, so trying to hold them up to the rest of the private sector and to learn from them is a really good way to do that. But sharing successes is, I think, something that local and state governments have a great platform to be able to do, but we also can serve as an important resource to the private sector and to help them to understand what their opportunities are. And then, again, as I mentioned, to set policies that encourages energy efficiency and strategic energy management.

Next slide.

So, specifically, here in Philadelphia, we've launched a number of strategic energy management goals – you can go ahead and move to the next slide – that are all part of the Greenworks Philadelphia program. So the mayor launched Greenworks, which is our sustainability framework in 2009.

And as I mentioned before, all of the goals that are set out are set for an end date of 2015. So in the energy section, we have both municipal government goals as well as city-wide energy goals.

And, as mentioned before, it's important that we lead by example and we've set pretty aggressive goals for reducing our energy consumption, 30 percent reduction for municipal government by 2015 and then a 10 percent reduction for the private sector or the city at large by 2015.

And we've seen some really good progress on the municipal side. And while there are a lot of really exciting projects and programs in place on the private side, not as much progress there. It's been a little bit more difficult to get traction on that, although I think we're starting to see some good things happen now.

But one important note here is that it does take a while to get these systems in place. In Philadelphia here, we've had, historically, a very strong energy management office through about the

mid-1980s, at which point, it was essentially dissolved down to one person and at times no one at all who was really serving an energy management function. So we started with the Office of Sustainability by rebuilding that, putting back in place an energy manager, an energy analyst. And we were really amazed at how quickly we were able to get some processes in place that allowed us, first of all, to evaluate where the opportunities were for savings and then to start thinking about making strategic investments in energy efficiency across our portfolio.

Next slide, please.

So we, like most cities, have a very large portfolio of buildings. We're by far the largest owner of real estate in the city and manager of real estate, 1300 facilities and a really diverse group of facilities. So the energy management challenge is a very complex one. But it's one that we enter, first of all, by trying to aggregate and analyze all of our information in a smart way so that we can make strategic investments that are really going to pay out, first of all, quickly so that we can show the value of those energy efficiency conservation measures to both our stakeholders internally and city government as well as to the residents, but then to also think about over the long term what kinds of policy is going to shape energy management in Philadelphia for a long time to come.

So, just a couple of the stats here that help to understand the context. The top 10 energy users make up almost half of all of our energy use and half of the cost and then the top 40 energy users make up 70 percent of the overall energy use and over half of the cost. So when you're talking about everything from rec centers to the Philadelphia Museum of Art to prison facilities, again, it's a very complex portfolio of buildings. But when you approach it by building sector and building type, you can make some pretty interesting interventions that start to pay back really quickly.

Next slide, please.

So I mentioned before one of the first things we did was start to build back our energy management function within city government. And an important part of that was to invest in a utility bill management system.

Prior to adopting that system, we were essentially paying our bills off of the paper bills that came in. And when you have

1300 facilities, you can imagine how many bills that is to track down and pay off. It's almost impossible to do any kinds of strategic analysis of what your opportunities are to reduce and save.

And once we got that system in place, we were not only able to see those opportunities internally, but to start to issue energy consumption reports and energy budget reports to all of the facilities managers across all the different departments that we work with. So that presented a really important opportunity for us to start to educate people about opportunities for saving and how they were doing against their so-called competitors in other departments who were in facilities of the same size and type.

So we tried to offer that technical support and brought on a consultant to support that effort and then provide training on the utility bill management system for all of the capital program divisions as well as for operation and maintenance.

And after having that in place for a year, we were able to start to do some acknowledgement of the folks that were doing a really good job of energy management by facility type and by department. And that acknowledgement, you'll hear more about that from some other examples in a little bit, but that really goes a long way, just having an opportunity for facilities managers to get their photo with the mayor and a little plaque acknowledging their work. It was really important for us in terms of getting buy-in to extend the program further.

A behavior change program is another part of that. All of these elements that are listed here, but getting people engaged really started with us being able to present information in a clear way so they understood what we were talking about.

Next slide, please.

So, that's all for Philadelphia. And I want to go ahead and pass it off to Arlington County, Jeannine Altavilla and Sarah O'Connell.

I have to say that Arlington has been an inspiration for us here in Philadelphia. We followed a lot of the work that you've been doing for a while now and I think that the programs, obviously, are working really well for you. I think we're really lucky to have you here today. And, with that, I'll pass it over to you.

Jeannine Altavilla: Great. Well, thank you. This is Jeannine and I'm here with my colleague Sarah.

If you could go to the next slide for us –

So, today, we're going to talk about our county government commitment to energy management and greenhouse gas reduction. We're going to talk about the county activities that we do to reach our goals. And then I'm going to pass it over to Sarah to talk about our community engagement. And then we'll take questions at the end.

So if you can go to the next slide –

Energy management in Arlington started in 2000. Our energy manager was hired. He was located within the facilities management department. And so that went along for a while.

And, in 2007, the AIRE program was created and that was a county board initiative to create a broader energy management and sustainability program throughout the county operations.

And so that, in 2007, established our 2012 goal, which is a 10 percent reduction in greenhouse gas emissions from county operations including our buildings, traffic lights, parks, transportation fleet from 2000. So we set the goal in 2007 with 5 years to achieve that 10 percent goal down from our 2000 greenhouse gas emissions levels.

Just last month, we joined the DOE Better Buildings Challenge and that program has a goal for a 20 percent reduction in energy use intensity of buildings. So that goal doesn't include the parks or the street lights, just the buildings. And that is a 2020 goal. And our baseline for that goal is 2009.

And, finally, looking out further into the future, we have a 2050 goal for a 76 percent reduction in our county operations' greenhouse gas emissions and that is part of our greater community energy plan. And the headline target for that plan is to reduce greenhouse gas emissions per capita for the whole community from 13.4 megatons per capita to 3 or I'm sorry metric tons per capita – 13.4 to 3 metric tons. And that goal is going to our county board this month as part of our comprehensive plan element and implementation plan for that community energy plan. And that is

related to the 2007 baseline that all of the community energy plan targets align to.

We can go to the next slide, please.

So, today, we spend a lot of time tracking energy use in all of our facilities and across our county operations. So we have access to all of our accounts online with both our electric and our gas utilities. That gives me very easy access to see how everything is going on a very regular basis.

We have all of our buildings in Portfolio Manager from EPA, so we're able to share our information with others. We use the Master Account feature of Portfolio Manager to run some of our programs, which is very helpful. It also allows our buildings to be eligible for the ENERGY STAR. We have two buildings that are labeled with ENERGY STAR right now.

And then, lastly, we also use EnergyCAP software, both the install version and the online version, to do more analysis and tracking of each of our specific buildings and across departments and the whole portfolio of buildings that we have.

We have a lot of relationships and partnerships with other departments. All of the billing is done through each department, so there's a lot of work to make sure everybody knows what's going; if something is changing, what to look out for. Just a lot of coordination there, so we have a lot of relationships that way that work very well.

And a relationship with facilities maintenance. There are actually two construction managers that are part of the AIRE team that help with our projects. And, like I mentioned at the beginning, the energy manager was originally located in the facilities maintenance group, which really helps our relationship there with ongoing maintenance and assessing problems in our building.

Next slide, please.

So an example of part of our transparency and how we're tracking everything is on our website, which we have a link at the bottom. We have building report cards. And there's a page for each category of buildings, so offices, libraries, public safety. And we have the libraries page here as an example. So we show each of our libraries and their 2007 energy use intensity as well as the 2011

to show progress. And this website is updated annually. So you can see across the categories of varying performance and comparisons for buildings.

If you go to the next slide, we have about 60 buildings and we have a page like this for each and every single one of them. It talks about what the building's function is, any interesting things about it that might be related to energy management. It also mentions any projects that the AIRE program has done to help reduce energy use in the building, make it more comfortable.

So this example page that we pulled is one of our community centers. It's actually a building that's relatively new. It's first real year was 2007 and it's a LEED-rated building. But as you can see by the graph, we show each year from 2007 to 2011. Even with this brand new building that was LEED rated, we did a lot of work on retro-commissioning and we were able to find really big savings here that helped us out to reduce energy consumption.

And we also have links to energy performance labels. Each of our buildings that the public uses have a label that people can see how it's doing compared to others in its class.

And then pictures of the energy projects that we mentioned just to kind of put a face to what those things are.

If you go to the next page, please –

So achieving these energy savings in the buildings, we've done extensive lighting retrofits in many of our facilities. Upgrading heating and cooling systems when it's time or when they're extremely inefficient. We'll do kind of a premium on the new systems rather than just replacing them with the basic system that they could have. We've used a lot of building automation systems to help schedule different parts of the buildings and make sure that they're only running when needed. Retro-commissioning, like the example in Walter Reed Community Center that we saw just before.

And we also have a street light replacement program that's helped show a lot of savings in our street lights. Even while we're adding more lights on our streets, we're seeing reduced energy consumption. And part of that initiative was funded through an ARRA grant, so that got us on our way, but we are continuing to replace them at our own cost.

So just a couple of pictures of things that we've done. We also have done one performance contract for our largest facility, which is our courthouse and jail.

The next slide, please.

So this is just an example of some of the pictures that we put up showing how we had an old boiler in this building and we moved to new energy efficient boiler. And so, these are the types of pictures that we put on the website. So if the public goes to see something, they're not going to be in a maintenance room, but they can see that we actually are putting time into getting these savings and what the insides of the buildings look like behind the scenes to give them the comfort and everything at the end.

The next slide, please.

And one thing that we've done for several of our buildings that we've put a lot of projects and funds into are case studies and so those are available on those building report card webpages. And this is an example of one of them. And this center happens to be ENERGY STAR rated as well. We just sent in the application for its 2012 label. So we're expecting that soon. But we put out information about the projects we've done and the results that we've seen just to show how our programs have worked.

And I think that's it for our county activities and I'll pass it over to Sarah.

Sarah O'Connell: Thanks, Jeannine, and hello everyone.

So if you could put the next slide, please, Kate.

So the Arlington Initiative to Reduce Emissions or what we're calling the AIRE program, as Jeanine mentioned, was launched back in 2007 and it has been very successful in terms of not just the projects and the savings that have been yielded from that program, as Jeannine talked about, but also publicly. And with our board and manager's office here at the county, it has been very well received. And so that has really allowed us to expand our programming more formally into the private sector.

So while community outreach has always been a component of the AIRE program since it was launched back in 2007, it really hasn't

been until recently where we've had a little bit more formal structured programs that have been sort of borne out of that program.

And so just to give you a little bit of context, the pie chart on the slide here is a representation of the percent of greenhouse gas emissions and where they come from in Arlington County. And as you can see, only about four percent of emissions come from government operations. And so all of the work that we're doing is yielding great results, but that's just four percent of the emissions pie. And so we see that as a great opportunity for engaging the private sector and the broader community in helping to reduce emissions even further that will benefit the entire community.

And you can see in part of that pie chart, the blue section, which is commercial buildings is quite substantial and quite significant. So what we know about that sector is that there's about 44 million square feet of commercial space in the county represented in that blue section there. And that's really more square footage than L.A., Denver or Dallas, so it's a pretty significant amount of space here. So we wanted to target this one specifically for a program called the Arlington Green Games.

And, Kate, you can go to the next slide, please.

So we modeled this program, the Arlington Green Games, loosely after a program that was launched in the City of Chicago, I think it was back in 2009. And it is a year-long competition for businesses. We had what we called our Inaugural Season or our first year back in 2007 and again targeting that commercial office sector, so that 44 percent of the emissions high or went out to the community with that sector first.

We have just now expanded into the retail sector and the restaurant sector, and so those have just recently launched as of last month. So we're in the midst of recruiting for those two business sectors right now.

The Green Games is really what we're calling a friendly year-long competition for businesses at the moment to reduce costs while reducing their emissions.

It is a highly interactive program. We get very engaged with our participants. We do quite a few trainings. We share best practices.

We provide technical assistance through different events. And we meet with them quite a bit one-on-one in person as well.

Next slide, please.

And so what I wanted to do today is just share a little bit of the results that we found with our inaugural season of the program just to give you a sense of how that went.

We had over 100 competitors in the program. We got over 150 actually offices and buildings that competed in this program. Those competitors represented about 15 million square feet, which is about a third of the commercial office space here in Arlington. So our penetration rate with the program was quite high.

Over the course of the year, we held 66 trainings and trained over 300 people.

Next slide, please.

With the office program, we had what we called Two Tracks. So we had a track for property managers of commercial office buildings to participate. And so with this track, primarily, they were using Portfolio Manager, which also happens to be the tool used here internally to track and manage our buildings. And their participation is going to be measured in four different categories. So those are listed in that graphic on the right there, which is energy reduction, water reduction, waste diversion and tenant engagement.

And so, in each of those areas, property managers were to set a goal, and you can see that there's a base goal or a stretch goal that they could choose for each of the categories. And at the end of the program year, depending on how many of those goals they met, they would be eligible for either a gold, silver or bronze award.

And, again, we did have them use Portfolio Manager for energy and water. And so what we asked that they do is to share that information with us into a master account in Portfolio Manager, so not that we would have the rights to edit the information, but just to see it. And so that allowed us to get a lot of great information about how impactful the program was and how these buildings are actually performing over the course of the year.

Next slide, please.

For the buildings that participated in the program, you'll see a few different stats on the slide here. Most significantly, we saw a 10 percent decrease in energy and water use in about 20 percent of the buildings, so that was pretty good and significant for those participants. Overall, based on the reported savings that these buildings achieved, over \$2 million in avoided costs.

Also, another great piece of data that we got out of Portfolio Manager is the energy performance rating for those buildings. And so the average building energy performance rating for the portfolio of our participants increased from a 73 to a 76. So we thought that that was quite an improvement as well.

Next slide, please.

The other track of the office program was specifically for office tenants. And for these participants, they completed an online Green Action Scorecard. And this is basically a series of questions broken down into these different categories that are listed on the slide here – energy, transportation, waste, *et cetera*. Questions in each of those categories, each question had a point value.

They would take the scorecard at the start of the competition in order to essentially get a baseline for their performance and see which of these categories they might be doing really well or where there might be opportunities for them to improve and earn more points. And then they would work throughout the year to essentially add points to that scorecard.

They would go back in at the end of the year, take a scorecard again. And based on where those final points fell out, they would then be eligible for a gold, silver or bronze award as you see on the slide there.

Next slide, please.

And so here's a snapshot of the office tenant results. The blue bars on the chart here are the total possible points in each category of this scorecard just to give you sort of a point of reference. Each of the red bars indicate the average baseline points that our participants earned. And the green bar shows the average final points that are participants earned. So you can see in each of the categories, there was a pretty sizable increase in points earned, actions achieved over the program year.

So, overall, that's an increase by over 55 percent over the year. So we felt that that was quite good as well.

Next slide, please.

And so here's just a breakdown of the different award levels and how many awardees we had in each of the different award levels. We did commission a local artist to make poles out of recycled glass for both our gold and our silver award winners. Our bronze award winners received a certificate.

So a little bit about how did it work, background on the program.

What we learned from Chicago and looking into other business outreach and education programs, we know that competitions are really a motivating factor for businesses both in getting their attention, keeping their attention and getting them engaged.

Certainly, the awards were a big motivator, also getting recognition from the county. So when we gave those awards out, we had a big event that was covered by the press as well to give them a little bit more acknowledgement and recognition locally.

I mentioned a lot of one-on-one face time. That was a huge component and continues to be a huge component of this program is really just getting out and in front of these people and talking with them and providing assistance, regular communication, lots of e-mails, lots of reminders definitely needed.

We also had a pre-set schedule of trainings and events. So once a participant had either set their goals or taken their scorecard, they could go to our training and events page and quickly identify the events by topic and by date they needed to hit in order to earn points in their given category.

Also, we had great support from the property managers. There are a lot of large property management companies located here in Arlington, Vornado, Monday Properties, *et cetera*, that have a significant amount of square footage here, but they were also real helpful in helping to engage their tenants in their participation.

Definitely, the baseline reporting was huge as well. I mentioned on the scorecard specifically that we had our participants do a

baseline and final scorecard, and that was really for their benefit and it proved to be useful and helpful for them.

Next slide, please.

A few of our lessons learned.

Keeping up with all the different contacts and reaching the target audiences, it is a challenge. And what we did early on with this program is – well, from work that we had been doing in the country, we already had relationships with the chamber of commerce here, economic development and our business improvement districts here in Arlington of which there are five, I believe. And so we really brought them into the fold in this program when we starting to launch. And all of those entities were supportive of this program and helping to get the word out. So those partnerships were really critical in keeping this program out in front of the community and in front of the businesses.

Also a little bit of peer pressure was helpful. So we listed all of our participants on our website, most with their logos if they provided it. And so, a lot of times, if offices or property management firms would see others of their same sort of sphere of influence, they would be a little bit more inclined to participate as well.

Twelve months is a long time. I mentioned this is a year-long program. But we feel very strongly about giving businesses the time that they need to give it the attention and to take time to do an upgrade. We acknowledge that that can't happen overnight. And these folks have other things on their plates. So we still feel like that's a good length of time to run the program, but it does mean that we have to work hard to keep it fun, to continue with the one-on-one attention face time and to continue to do lots of reminders.

Staff turnover was a challenge for us and it's especially prevalent in the property management world. So we found ourselves kind of having to do a lot of reeducation about how the program works and what their business has sort of committed to doing.

Next slide, please.

A couple of other lessons learned, because we run this program on an annual cycle, we did have to sort of turn some potential

competitors away. And we did that sort of to their benefit to give them the time to devote to the program and do the different actions and activities that they felt they really wanted to do. But we continued to invite them to any of our events and let them come. And all of our events were free and that kind of thing. So they could still sort of be engaged with us as much as they wanted to, but it just was sort of the official participation that was a little bit of a challenge.

Websites are very, very hard. If any of you have worked on websites at all, you'll know exactly what I mean when I say that, but doing customization can be quite difficult. Figuring out the proper way to collect all this data from folks was a challenge and continues to be for us, because our scorecard is online. The goal setting for property managers is online. All of that is an online tool. So keeping up with that can be quite difficult.

There are a lot of federal agencies and contractors here in Arlington being so close to D.C. So we did experience lots of high-security buildings and that kind of thing, so that was just sort of something that we had to work through in a few cases. We had a couple of participants who wanted to play, so to speak, but did not want anyone else to know that they were playing. So just a thing to keep in mind given our location.

The next slide, please.

So I mentioned that the office sector was our first program, but, right now, we're in the midst of Green Games Retail and Green Games Restaurant, so both of these programs are separate. So the restaurants have a different scorecard from the retailers. But they both launched back in October and they will run for the calendar year of 2013.

So we're in the throes of those two programs right now. We're definitely looking to put the office program out again. We want to spend a little bit of time updating and revising that program. So that will be coming around the bend again soon, but, right now, retail and restaurants are high on our list.

And that was pretty much all I had. The next slide is our contact information, mine and Jeannine's. E-mail addresses here, we definitely invite you to check out our website. The AIRE program is <http://www.freshaireva.us>. [Http://www.arlingtonreengames.com](http://www.arlingtonreengames.com) is for the Green Games. And, of course, we've got a presence in

social media as well and would love to have you guys check us out there. But we're happy to take any questions now.

Alex Dews: Great. Well, thanks so much, Jeannine and Sarah. Again, we have some time for questions right now, so go ahead and get those in and we'll try to get around to as many of those as possible.

Kate George: You can submit questions into the chat feature or the questions feature on the webinar.

Alex Dews: Jeannine and Sarah, this is Alex. I was going to go ahead and just start by asking, you mentioned that 12 months is a long time to keep people engaged and I can certainly appreciate that and it seems like you've come up with some good ways to work around that. Just thinking more long term, what are some of the strategies you're looking at to keep the programs running over more than just a year or two so that you can continue to drive towards those longer term reduction goals?

Sarah O'Connell: That's a great question. The office program was our first go at this really. And so it did go really well. We want to make sure that when we continue to roll out the programs year after year that we are able to incorporate any changes or if there are some questions that were particularly challenging or nobody answered this question or everybody got this one, I mean we're trying to have a program that's a challenge for participants, but it's not overly complicated or complex either. So we want it to be sort of reasonable, but also push them a little bit, be a little bit of a challenge. So we feel like there's a need there to continually reevaluate them year after year and not just the questions on the scorecards and that kind of thing, but also just events and other things.

I mean we've changed our structure for retailers and restaurants, because they're clearly quite different sectors from the office sector. And, most critically, they're not sitting at a computer or at a desk all day and getting e-mails from us and able to log into webinars and things like that at random times throughout the day. So we've had to do a lot of thinking and collaborating to figure out times of day that make the most sense and frequency and that kind of thing. And we're still sort of figuring a lot of that out, but that's a big consideration for us.

We want to be able to continually add value to the programs and provide something that's useful and helpful.

We're also a little bit limited in terms of staffing, because it's mostly myself and a colleague of mine, Kelly Zonderwyk, that co-manage the Green Games together. So that's a big factor as well.

Kate George: So I have a couple questions from – oh. Thanks so much for your question, Alex. We have a couple of questions from the audience here. So one question about Green Games was this just a pilot or is it intended to have some long-term results? And, if so, what happens after kind of the 12-year or, pardon me, 12-month period with those businesses?

Sarah O'Connell: Well, each program is sort of concluded with an awards ceremony. So, for the office sector, we had a big event that all of our participants were invited to come to. Media came to the event as well. And other of our partners, such as the business improvement districts and economic development and all of those folks attended the event as well. So that was like sort of the big topper at the end of the season.

But, again, we do want to give ourselves the time and opportunity to evaluate those programs, both of the tracks, specifically on office, and see how we might be able to improve them and change them. We've gotten some feedback from our participants about what worked and what didn't. But we'll need to spend some additional time to really tweak that, but we definitely plan to do so. So I would not consider it a pilot program.

Kate George: Uh-huh. Fantastic. Thanks. So we have another question here. Who is providing the energy software for tracking for the Green Games? And is this a customized or a standard software package?

Sarah O'Connell: Right now, we are working off of a WordPress platform. We had been in Drupal previously and that had some challenges of its own. But we shifted over to WordPress and it's a custom application that a developer did for us. And we can add and create scorecards for any number of sectors with that application. And we wanted to go to WordPress, because our primary website <http://www.freshaireva.us> is in WordPress and the county overall is moving in that direction. So we felt that that consistency would make for a good move.

Kate George: Great. Thanks. So we have another question here. How do the Green Games fit into the county – I think you kind of touched on

this somewhat before – but how do the Green Games fit into the county's long-term strategic energy management plan?

Sarah O'Connell: Well, one of the components that Jeannine mentioned at the start of her presentation was this community energy plan, which is essentially our next – really our next sort of phase of community engagement with the ARRA program. It's setting broader community-wide goals for emissions reduction amongst other things. And so this fits right in there in terms of the energy reductions that we're hoping to see with that plan, which gets us out to 2050.

Kate George: Thank you. Do any of the businesses that you've been working with have trouble inputting data into Portfolio Manager? Do you have a way of assisting them if they are having trouble using Portfolio Manager?

Sarah O'Connell: We do. And speaking from the office program, most of our participants, most of our property managers were already using the tool, so there really wasn't a whole lot of education that we needed to provide other than showing them how to share their account with us, with the master account. And Jeannine is our in-house Portfolio Manager guru, so she can help. She's helping us with that.

With retailers and restaurants, we're also asking and encouraging them to do the same. The process is quite different for them. And we're still not sure how many may even be using the tool. So we are expecting to have to do a little bit of education there with some support from ENERGY STAR in the trainings that they offer and that kind of thing. But there will be a little bit of handholding and we're expecting to do that on our end a bit.

Kate George: Uh-huh. That makes sense. Given some of the differences in the sectors, did you use specific strategies to recruit restaurants versus retailers?

Sarah O'Connell: Between those two, we are trying a few different avenues. Advertising in local publications is something that we're doing. We're doing a little bit of what we like to call like the push-pull marketing. So we're out there promoting the programs to the businesses, but we're also out at community events encouraging residents that live here and others that hang out in Arlington to encourage businesses to participate in the program and that kind of a thing.

And we have giveaways like tote bags and Tupperware to encourage folks to bring Tupperware into restaurants to pack up their leftovers in Tupperware as opposed to using a disposable container that they might get from the restaurateur.

So we're trying it from both angles or working it from both angles, but we're also looking to some of our partnering organizations like ___ the biz and AED and the chamber just like we did for office and getting them to help sort of spread the word too.

So there's some multi-tiered strategy in all the sectors and each takes a little bit of a different avenue, a little bit of a different twist, a little bit of a different message.

Kate George: Yeah. That makes sense. I think we're getting close to the end of our question period for this presentation. I think we're going to do one more before we move on to hear from North Carolina.

So you mentioned a number of challenges related to data. Could you explain a little more about how you maintain data integrity in the program?

Sarah O'Connell: Specific to the Green Games?

Kate George: Yeah, to the Green Games.

Sarah O'Connell: Well, that's a good question and a good point.

As far as the Portfolio Manager goes, again, we encourage them to share their account with us. And since most of those businesses had been using the tool already, we felt pretty confident that it was going to be relatively good quality data, because they were using it for other purposes. It wasn't just for us. There was sort of another internal reason for them to be using the data.

That being said, we did do some scrubbing on our end sort of checking, where if we saw data entries that looked completely out of the range of what looked normal. And we were looking over a two-year time period. So Jeannine was very helpful in reviewing that data to say like, hmm, well, and it looks like you missed a data entry here or something like that. So we did do a little bit of that on our end and going back to the property managers to say can you confirm this or can you double-check? Like, this meter started in the middle of the year. Like, what is that about? Or this entry

looks really high or really low, that kind of thing. So we did do a little bit of that on our end.

As far as the scorecard, that was truly a self-evaluation. And because we did a lot of one-on-one meetings with our participants, we did meetings with them before and after they took the scorecards. And, actually, what we found is that in that baseline reporting, most folks underreported what they were doing, which actually surprised us. But I think by the time that they did the final scorecard – I mean some came in, like, right on the cusp of the next award level. They could have answered one question differently and things could have been different and they didn't.

So we felt like, just like property managers in Portfolio Manager, they were really using that as a tool, the scorecard as a tool to sort of drive other things within their business and within their operations and getting other people onboard.

So I think we feel pretty good about that, but it was a self-evaluation. We did not do any audit of the data.

Kate George: Great. Well, thank you so much, Jeannine and Sarah, for presenting here today and answering our questions. I want to let everyone know that if there are any questions in the queue that we didn't get to for Arlington that we'll follow up with you after the webinar.

Jeannine Altavilla: Sounds great.

Kate George: Yeah. Well, thank you both so much. I know you have to drop off, but we're looking forward to hearing from Renee and Len in North Carolina.

Sarah O'Connell: Great. Thanks for the opportunity. Take care.

Jeannine Altavilla: Bye.

Alex Dews: Great. So next up we have Len and Renee in North Carolina to talk us through the Utility Savings Initiative. Are you guys ready?

Renee Hutcheson: Hello. This is Renee. Can you hear me now?

Alex Dews: Yes.

Renee Hutcheson: Okay. Okay. Hold on a second. Okay. Can you still hear me okay?

Alex Dews: Yes. Go ahead.

Renee Hutcheson: Okay. Okay. Well, good. Thank you for inviting us to participate on the webinar too.

This little piece is going to be presented by my boss, Len Hoey, and myself, Renee Hutcheson. We're with the North Carolina Energy Office.

And I'm going to start off by giving you a little introduction into the program, the Utility Savings Initiative, which is basically a lead-in to the Strategic Energy Plan that we use as our cornerstone of managing the energy that we are tracking and working towards reducing in state and public buildings.

So, next slide, please.

All right. So the Utility Savings Initiative is a program that is mandated by general statute in North Carolina. Well, it was created in 2002 and it went into effect in 2007.

This particular bill had two components. The first part was with new buildings, had to do with higher standards of energy performance for new buildings. And the last part had to do with improving energy and water in existing state and university buildings.

The goal is to reduce the utility use by 30 percent by 2015. And our baseline for that is 2002-2003.

So that reduction applies to all the state agencies and all the state universities. The community colleges, though they need to submit their use to us each year, they actually aren't required to show a reduction. But they actually by being a participant in it, they're volunteering. I mean they just think it's a great program and are also working to manage and reduce their energy use. And when I say energy use, it's both their consumption and cost.

Okay. Next slide, please.

So the purpose of the program, it was created to both – obviously, on the economic front to reduce the amount of energy that is used

in state buildings, but it was also to set it up so that the state could lead by example. And the program now serves all public buildings, even though, as I said, it's really the state agencies and the state universities that have the most stringent requirements in the program to actually show reduction towards the 30 percent.

Now, so we're very fortunate in North Carolina, because the state university system, it's got a central administration. So when we work with them, we're able to work with them as a whole group.

One of the things that we're getting ready to do is go out with a lighting and lighting control PC just to sort of one little thing on the side, where the building typically would not qualify for a traditional PC.

And then we've got 58 community colleges and they all report their energy use to us each year. And we're really expanding our services and outreach to the public school system and the counties and cities. And as you can see, there are number of them across the state.

So you can go to the next slide, please.

So in the program, it's all about customer service. It's all about us getting out there working with them, finding out what their situation is, tailoring whatever services that we can provide to them based on what their need is, what kind of technical level of service knowledge they have on staff and then just trying to fill in the gaps and help them move in the right direction.

So we do that by offering several different kinds of services. And the ones that are on these slides are just sort of ones that we do a lot. There's, I'm told, other things that we did.

But we have a very extensive communication and training component to the program.

We're out there on the road all the time to go out and look at their facilities, do energy audits. If they need something more involved than that, sometimes we can provide some additional technical assistance from third parties.

And we do a lot of speaking at different functions, whether it's conferences or speaking to boards or county commissioners, whoever it is that asks us to go.

And another thing that we've been doing recently is putting together focus groups of people in a similar geographic area so that they can share lessons learned, best practices, challenges, how they've overcome them.

And then we offered the Energy Management Diploma Class, which is a class that everybody takes that is pretty impressed with what information they walk away. We are able to provide that at no cost to employees of public facilities, so that they can take information about things that they can be aware of to operate a building back to their facilities and actually implement them.

Next slide, please.

And then, of course, performance contracting is a very large part of what we do especially in these days and times with limited financial resources. It's sort of the best game in town for getting infrastructure, aging infrastructure replaced, which has an energy component to it.

So, for a lot of our folks, they need a lot of handholding through the process. So what we'll do is go out there, explain how it works to them, to their boards, whoever needs to kind of get that background information. And then we actually guide them, take them through the whole process so they know that we're there to support them.

Then we also administer the program from the beginning to end. So we've got very specific guidelines and statutory requirements with performance contracting to make sure that it's done well and everybody gets the best value out of it.

Next slide, please.

And then, the last part I'm going to talk about is what we've got referred to up here as the data collection. So we're working with all of these groups, the state agencies, the universities and the community colleges. And each year, we collect from them their energy use and costs. And there's a spreadsheet, a template, that we use that has each of those agencies or whatever the owning agency is – we've got from their baseline year up through all the years that they've reported up to current. And so, at any point in time, you can see what they've used in each of the different fuel

sources and how they've reduced their energy per square foot over time.

We also are encouraging them to use Portfolio Manager as a collection tool and then they share that with us. And then, when it's time to report at the end of the year, they call us. They say we're up to date. And then we can download their information from Portfolio Manager.

And then another major service that we provide to people is to help them write their strategic energy plan, so that they can keep track of where they've been and where they're going with very, very specific details.

And I'm going turn it over to Len Hoey and he's going to walk you through the next part.

Len Hoey:

Thank you, Renee.

Next slide, please.

I won't spend too much time on this. I think that both Philadelphia and Arlington did a great job in showing how they use strategic plans. Ours is not a lot different.

I would like to start off by commenting. I think in many instances when people hear the word create a strategic plan, they're thinking of something that if they went out and paid a private consultant to do, they would get pounds of documents that would sit on a bookshelf or act as a doorstop. When we talk about a strategic energy plan, we're talking something that is in the neighborhood of five to maybe ten single-sided pages. So our documents are short, sweet and to the point.

Each participant agency and university has to create their own SEP and update it each year and submit it back to us.

Key performance indicators are reported and I will show you what they look like in a couple of slides.

We collect all of that data and analyze it and then establish our schedules to go out and work with these agencies, universities, all the public sectors to help them achieve the results and goals that are in their plans.

Next slide, please.

I think one of the keys to a plan is to have S.M.A.R.T. Goals and a S.M.A.R.T. Plan.

And S.M.A.R.T. is a nice acronym for a plan, because everything in it should be specific.

Everything in it should be measurable. If you can't measure what you're saying you're going to do, how do you know you have accomplished it?

So, specific, measurable, action-oriented, you're going to take some action or somebody is going to take some action.

Realistic, I don't know how many times we have gone out and looked at a plan and all it is is a make-work list for the facilities group. Everybody in the organization has a role to play in managing and controlling energy use and cost. So don't let this document become a make-work list for the facilities group. It is doomed to failure.

Everybody in your organization probably has a full-time job and when you create a plan and start giving them additional tasks to do, you've got to make sure that they have the time to do it. Make sure that your goals, your activities that you're going to do are realistic and can be done.

And then time dependent. Set a deadline for when you're going to accomplish the goal and move onto the next phase.

Now we can do the next slide.

Our plan starts off with an overview that is about a half a page long and we state the statutory reference that tells us that we have to do our plan and some of the goals that are in there. And then we have a purpose statement. What are we trying to achieve?

Key performance indicators make up the next page. So I'm only on Page 2 now. And that second page is nothing more than an Excel chart, table that shows where we are, and you'll see that in a couple of slides here. I'll actually show you our KPI.

And then the next step is what are the focus areas in your plan?

For the Energy Office in North Carolina, there are three areas that we concentrate on that we feel assist everyone else in achieving their goals – communication and training, which Renee went into; initiative implementation, how they're going to implement their plan; and then performance contracting.

When you deal with as many institutions and buildings as we do, and like Arlington, we have gone ahead and signed up with BBC and we pledged the entire building stock of North Carolina, all the state buildings, all the university buildings and agency buildings, about 11,000 buildings and 129 million square feet. So we've established beyond our 2015 goal of 30 percent reduction. We're now out to 2020. So we're using the Better Buildings Challenge as a way to create a stretch goal.

Next slide, please.

After we have a brief narrative overview, purpose, the chart showing our key performance indicators, the narrative showing the key focus areas, we create a little chart for each focus area. And we'll have two or three, maybe, four strategies that we aim to look at for that focus area. And then we get down to the actual activities for the coming year and then we look at the past years whether we achieved it.

So we've got a brief description of the activity and then the measurement. What do we expect; what is the actual? It can be units of energy. It can be dollars. But some sort of measurement.

Savings, expected, and then, in the next year, we'll put what we actually achieved.

The cost.

Jobs created or people employed.

Accountability, who is responsible? If you don't assign responsibility, things don't get done.

And then a funding source. For the Energy Office, a lot of what the cost is is our time. The time of the employees, and the funding sources are salaries.

So this is the key to making the plan work. You can say that all we require is three charts, one for each focus area. It sounds simple.

It maybe is simple, but it is not easy. It is very difficult at times to put down in a single statement what you're activity or task is going to be.

Next slide, please.

So what have our results been? Well, we started the program in fiscal '02-'03. And for all of the agencies and university institutions, we were at 164,000 BTUs per square foot and a cost per million BTU of \$12.57. This past year, we have reduced our BTUs per square foot to 119,000, which is a 27 percent reduction, which we could applaud and say that's great, except for the fact that our costs have gone up by 47 percent. So we use the term avoided cost when we look at this. And we're right at a half a billion dollars in avoided costs cumulative since we started the program. So that's pretty good.

On the water side, I don't have a chart, but we're at about \$57.3 million in avoided costs with a 26 percent reduction and 166 percent increase in costs.

Next slide, please.

The nice thing about energy efficiency is when you track your reduction, you can either multiply those units of energy that you've reduced by their unit cost or you can multiply it by the greenhouse gas factor and you can see how many metric tons of greenhouse gas, CO² and equivalents, that you have reduced by.

Now, when you look at this chart, on the right-hand side, that is just pure CO² emissions per year, and if you notice they have gone up by 45 percent. That is due primarily to increases in our building stock. We have gone from about 85 million square feet in 2002-2003 to over 129 million this year.

We're not quite at the point where we can build net zero energy buildings, so they do use energy when they come online, but they're coming on more efficiently than the existing building stock and that is why in the previous slide you saw that we had a 27 percent reduction in BTUs per square foot.

If we look at metric tons of emission per thousand of square feet, you will see that we actually have avoided putting into the atmosphere almost 2 million metric tons of CO².

The last slide is just our contact information, and I'll open it up for questions.

Kate George: All right. Thanks so much, Len. Everyone, please submit your questions to the question box in the webinar.

Len Hoey: I guess we dumbfounded everybody.

Kate George: Maybe you covered everything. Actually, I think, maybe, what we'll do right now is Adam wants to come back and talk a little bit about the DOE initiatives. And we'll give people a couple of minutes to submit their questions.

Len Hoey: Sure.

Kate George: And then we'll come back to you guys.

Adam Guzzo: Okay. Thanks, Kate. If you start getting a number of questions, please just interrupt me and I can come back to this. I want to make sure that we save time for questions if people have them.

Kate George: Sure thing.

Adam Guzzo: Okay. So if you move to the next slide, please. And then, we'll go one more.

So just about a couple of the related DOE and EPA initiatives. Just quickly, the Standard Energy Efficiency Data Platform also known as SEED, it's a low-cost data management system developed by DOE for state and local governments that are using Portfolio Manager for benchmarking and disclosure of energy performance data.

What is SEED meant to do? Well, combines data, so energy audit data with EE project data, energy efficiency project data, excuse me, and benchmarking data. And it allows users to easily publish data in a standardized format.

The open API piece of the puzzle, so the application programming interface, enables third parties to develop additional tools that can be used by the various SEED users.

SEED is currently in the beta stage. It's being tested with a few cities. And our hope is that Version 1.0 will be released sometime early next year.

And, as with all these tools that I'm about touch on briefly, if you wish to be involved or are interested in more information, please e-mail me. My address is on the last slide if we get there and we'd be glad to talk through these more with you or get you involved.

Next slide, please.

Kate George: All right. Thanks, Adam. We have a couple of questions here from the audience.

Adam Guzzo: Okay. Perfect.

Kate George: So I think we'll pivot back to those.

Adam Guzzo: Okay.

Kate George: We had one question for Alex from earlier today wondering what type of energy management software you're using in Philadelphia.

Alex Dews: Sure. The software that we're using is developed by a company called HARA based in California. And we've had that in place for about three years now and continue to customize it specifically for our needs. It's been working really well for us. And we're now also using it interfacing with our efforts to benchmark all of our municipal facilities using Portfolio Manager. We'll also be releasing a public report like Arlington did on all of the municipal facilities in advance of the legislation which requires all commercial buildings to do the same beginning in 2013. So that's Hara spelled H-A-R-A.

Kate George: H-A-R-A. Great. Thanks, Alex.

We have a couple of questions for North Carolina as well. One question that we just got in is how much are you using performance contracts in North Carolina?

Len Hoey: Currently, we have about 300 million contracts. 160 million that are where the ESCO has been selected and we're either performing an IGA or completed construction or in the guarantee period. And then another 140 million where the RFPs have been released and we're just starting the process. So, right now, it is for agencies and universities. It is a growing tool and being used significantly.

And that same is held true also in the local government arena. Our treasurer's office tracks those. We do not, although we see a report once a year. I have not yet seen it for the end of this last fiscal year, but it is growing in number there too.

Kate George: Oh, good to know. Thanks.

So one more question that we got in is you said that your energy use went down, but costs went up. Do you attribute this to something specific?

Len Hoey: Yeah, the utility companies. Yeah. I mean if you look, I don't know of many utility companies that don't ask for an annual increase in their rates and that's usually where it comes from. Of course, the volatility in natural gas prices over the last several years, it's been up and down. So there have been times where our actual costs were higher than that 47 percent increase today when natural gas prices spiked. So it's just the pass-through in cost based on our utility companies.

We have many in the state. We've got three investor-owned utilities, well, two now. We had Duke, Progress and Dominion. We now have Duke, since they merged with Progress. But we also have Electricities, which are municipally-owned utilities, and their rates tend to be much higher. And we also have a fair number of co-ops.

So it is very difficult to keep track of unit costs, but they are all increasing.

Kate George: Thanks. Going back to the SEPs that you mentioned earlier, do you have an enforcement tool that you use to require submittal?

Len Hoey: No, but we get 100 percent. We just go out. And it's similar to what Arlington was doing. I can't express strongly enough the one-on-one face-to-face. It's hard for them to say no when you're out there and you'll actually help them put their SEPs and their consumption reports together with them. So we've been doing very well. We get about 100 percent participation every year. We may have a straggler.

This year we've had a couple of problems, because our agencies were reorganized in the last session of the legislature and there were many mergers and some split offs. So people are having

trouble just trying to get their arms around their new building stock and be able to report it properly.

Kate George: That's amazing that you've got such high compliance.

So we're getting close to 4:30. I think we're going to do one more question. As I mentioned, we'll follow up with any questions that we weren't able to answer on the webcast today.

With all of your experience with performance contracting, what are some of the new challenges that you're facing with expanding the use of performance contracting in North Carolina?

Len Hoey: I guess it's just the matter that on our office staff it takes a considerable amount of time to review all the documents. And we do not want the energy office to be an impediment to the process moving forward. So it just increases our workload significantly to try and keep the process moving and to be able to review all the documents that are being generated during the performance contract to make sure they're accurate and correct.

Kate George: All right, good to know. Thanks so much, Len.

I think since we're just about at 4:30, I think Adam is going to come back and talk a little bit more about the related DOE initiatives.

If you need drop off, we totally understand. Thank you so much for joining us today. And thank you to Renee and Len in North Carolina and Alex in Philadelphia for presenting here today. It was a lot of great information.

You want to hop back on, Adam?

Adam Guzzo: Yep. Thank you, Kate.

So if you can move to the next slide. Great. Thanks.

So DOE obviously supports transparency and access when it comes to energy data. And, certainly, those with energy management plans and programs or those who are trying to establish them know the importance of access to data.

So I want to point out the link at the bottom of this slide, which is a utility survey that asks utilities to share how accessible their

electricity use data is for both residential and commercial customers. And what you see on the map there is the results of that survey. And you can see it's still early on in the process there. We've got approximately 25 percent of utilities have completed the questionnaire at this point. But, obviously, as that continues, we believe it will be a useful tool as more and more utilities participate.

Certainly, anything you can do at the state and local government level to encourage utility participation would be great. And we certainly believe that would only be helpful to you and other jurisdictions in the long run.

I also want to quickly point out the top-right corner, Green Button. The Green Button is an industry-led effort to provide electricity customers with easy access to their energy usage data in a consumer-friendly and computer-friendly format, so via a Green Button on electric utilities websites. So it creates a standard format for utilities to transfer data to its customers. And thus far, 33 utilities across 17 states have committed to participate in that effort.

Next slide, please.

Okay. So the Commercial Building Asset Rating Program is intended to provide information to building owners about the inherent energy efficiency of their buildings allowing them to do a comparison of the energy performance between buildings while controlling for differences in building operations and tenant behaviors.

So those familiar with Portfolio Manager know that it helps building managers look across their portfolio and get some sense of which buildings might have a problem.

When it comes to the Commercial Building Asset Rating Program, especially when used in combination with Portfolio Manager, it gives building managers a way to differentiate buildings that have low-performing assets that are good candidates for capital investments from those that just might need more training for the building operators.

At this point, this tool is in its – the first pilot has actually been completed. And then the next pilot for the tool is scheduled for the spring of next year.

And, again, we certainly welcome feedback on all of these tools.

Next slide, please.

So, finally, the Buildings Performance Database, also known as BPD, is a national resource of anonymous empirical data that can be used by anyone for improved analysis of actual results of EE projects. So that's sort of broadly what the BPD is. Some of the key words there, it's anonymous, right, very important. We're talking about actual results here of real projects with empirical data. And like SEED, the open API allows for private third-party developers to create various tools and applications to utilize the data in the BPD for enhanced analysis of energy efficiency upgrades in buildings.

So those are just some of the tools that the Department of Energy and the Environmental Protection Agency have developed and will be available or are already available for use.

And the next slide, please.

Just wanted to make you aware that we will be doing another webinar in the early December timeframe. Stay tuned for the exact time and date. That webcast will be on High-Performance Leasing Strategies. And we hope that you'll attend.

Next slide.

This is all the contact information for the various folks that participated and led our webcast today. Thank you again to all of those folks.

Feel free to reach out to me, Adam Guzzo, at the Department of Energy with any questions or if you're interested in further information about either strategic energy management or the State and Local Energy Efficiency Action Network.

So, with that, I will say thank you and wish you a good afternoon and a good rest of the day.

Len Hoey: Thank you, Adam.

Adam Guzzo: Thank you, guys.

Kate George, Adam Guzzo, Alex Dews, Jeannine Altavilla, Sarah O'Connell, Renee Hutcheson, Len Hoey

Kate George: All right. Thanks, everyone. We'll be sure to follow up with slides from this webcast when they're available online next week.

Alex Dews: Okay. Thanks.

Kate George: All right. Thanks, everyone. Bye-bye.

Len Hoey: Bye.

Adam Guzzo: Bye-bye.

[End of Audio]