

Energy Efficient Product Procurement
Webcast Transcript
April 17, 2008

Slide 1: Title slide

Operator: Ladies and gentlemen, thank you for standing by. Welcome to the Energy Efficient Product Procurement web meeting. All participants will be in a listen-only mode for the duration of the conference. Should you need operator assistance at any time, please press *0. I would now like to turn the conference over to Andrea Denny with the U.S. EPA, please go ahead.

Andrea Denny: Thank you, and welcome everybody to today's webcast on energy efficient product procurement. As the operator mentioned, my name is Andrea Denny and I am with the U.S. EPA.

Slide 2: Webcast Agenda

Andrea Denny: I wanted to start by just going over some basic live meeting logistics, and giving a very quick overview of the Municipal Clean Energy Environment Network at EPA. This is the group that's hosting this call. And then after I do that we're going to hear from Kate Lewis at EPA about some of the resources the Energy Star program can offer to local governments to help with energy efficient product procurement. And then we're going to hear from two city representatives about the work their cities are doing on energy efficient product procurement and green procurement. And at the end of all of this we'll have some time for Q&A.

Slide 3: Live Meeting Logistics

Andrea Denny: During the call, as the operator mentioned, all the participants will be muted to minimize background noise. But you will be able to submit questions and comments in writing, and I'll show you how to do that in just a minute. Today's session is being recorded, and it will be available on our website within a few weeks, and the URL for our website is there. And throughout the webcast if you have any problems you can contact Nikhil at ICF at (202) 862-1145 and he'll be able to assist you with any problems you're having getting into Live Meeting.

Slide 4: View and Layout

Andrea Denny: If you press F5, the view on your screen will toggle between showing the presentation slides full screen and between the Live Meeting console. It's really up to you what you're more comfortable looking at, but you can use F5 to switch back and forth between the two. If you would like to restore all of the default tools – for example, if you close the question box by accident and now you'd like to ask a question – you can go to “View” shown here by the red circle, and select “Restore Default Layout” and that will bring back all of the various boxes so you can use any of the tools on the screen.

Slide 5: Questions

Andrea Denny: To ask questions you use the question box. You can see it in the screen shot here at the bottom of your screen. And just type in the little box that's highlighted by the red circle – you type your question in there and click on the “Ask” button and the question will be submitted. We will have a short Q&A session after each speaker, and then at the end during the remaining time, we'll open it up to any additional questions that didn't get answered. So those are the basics of Live Meeting.

Slide 6: Program Overview

Andrea Denny: I just wanted to spend a few minutes going over the Clean Energy Environment Municipal Network. Basically this is an informational and peer exchange network. The goal is to advance clean energy in local governments, both within government operations and within the broader community. It is very focused on established, cost-effective best practices – this isn't about testing new technology, this is about implementing things that have been proven to work. We try and serve as a gateway to other federal resources and programs, but we also develop new tools, resources, and guidance, and try and facilitate peer to peer exchange, and these webcasts are one way that we do that. You can see the URL for the program – if you go to that URL you'll be able to access a number of the different tools and resources we have to offer.

Slide 7: Clean Energy Strategy Guide

Andrea Denny: One of the primary resources we're pulling together right now is the Clean Energy Strategy Guide for local governments – it covers about 16 strategies in four areas, which are: energy efficiency, energy supply, transportation, and urban planning and design. And in each of those strategies we talk about the benefits; different measures you can do; who key participants are; mechanisms for implementation; costs; ways to fund it; how to interact with federal, regional, and state programs; and we give lots of case studies or examples of local governments who have implemented those measures, and resources and references. We are starting to launch draft chapters, and what we're doing is partnering these webcasts with the chapters that we have available. Many of you may have downloaded the Energy Efficient Procurement chapter already – it's on our website if you haven't – we hope you will, and we certainly welcome your comments and input on that draft chapter. And we will be completing the Guide and posting it in chapters on our website throughout 2008.

Slide 8: Webcast Series

Andrea Denny: The webcast series is going on, we started in spring 2008 – this is our second call that we did. Our first call was on Navigating the Grant Process, for just information on how local governments can apply for federal grants. Upcoming topics: we're planning to do green power procurement, and energy efficiency in affordable housing. We announce these through our State and Local listserv and also through our website. And the goal is really to have local governments be the main presenters so that you're hearing from local governments about what they did, and you have the opportunity to ask questions of your peers. There are some other EPA webcasts that you may be interested in. We have a Technical Forum, which is similar to these calls but with a state emphasis. And there's also an Energy Star Training Center – and Kate may mention this as

well – there are additional energy efficient purchasing and procurement trainings through that Training Center.

Slide 9: Clean Energy Resource Database

Andrea Denny: We also have a searchable database online that you can go to and search for different resources that are available. To do this you follow three simple steps. In the first box, you select “Local Government”, and then it’ll bring up a number of different topics like energy efficiency or renewable energy or building codes. Pick one or more of those that you’re interested in, press “Search”, and it will return a list of resources that you can access. These include things like funding, model ordinances, case studies, technical assistance, tools, etc. And the URL is listed up at the top of that screen shot, and you can also access it from our main website.

Slide 10: Contacts

Andrea Denny: And our main website is listed here on our Contacts page. I’m Andrea Denny, and my contact information is there. My co-manager of the program is Eva Wong, and her contact information is there as well. You can feel free to contact either of us. The main website for the local program is listed, as well as the website that will tell you how to sign up for our listserv if you want to get announcements about these webcasts and other news and training or funding opportunities for local governments. With that, I’m going to turn it over to Kate Lewis. Kate Lewis is the manager of sales and marketing activities for the Energy Star program at EPA. In that position, she conceives and deploys strategies to influence the promotion, stocking, and sales of Energy Star qualified products. Kate’s been with the EPA for 14 years. Before she came to us, she was a technical writer on power quality issues and greywater recycling. She has a Bachelor of Arts in Rhetoric and Communication from the University of Virginia.

Slide 11: Environmentally Preferable Purchasing: Reducing Our Environmental Footprint through Energy Efficient Procurement

Slide 12: Energy Star Purchasing

Kate Lewis: Good afternoon ladies and gentlemen, as Andrea said my name is Kate Lewis. And I thought I’d take about 15 or 20 minutes today to talk to you a little bit about the resources on government purchasing and procurement that Energy Star makes available.

Slide 13: What is Energy Star Purchasing

Kate Lewis: Energy Star purchasing – it’s not its own program, organizations don’t have to sign another MOU, they don’t really have to make a formal commitment to use our resources and our tools. We are committed to sort-of e-delivery – delivering what state and local governments need to advance strategic acquisition through the website. And so a lot of what I’m going to talk to you about today, and run through some examples, is available on our website which you’ll see the URL referenced throughout this presentation.

Slide 14: The Energy Star Label

Kate Lewis: So I was going to ask how many of you, by a show of hands, are familiar with the Energy Star label or logo. It is a trusted government-backed symbol that identifies products with superior energy performance. It's administered by the Energy Star program, which is a voluntary labeling program managed by EPA and the Department of Energy. And we currently have about 50 different product categories and close to 20,000 product models that have earned the Energy Star label. And I use the specific word "earned" because it is necessary for our manufacturer partners to demonstrate that the products that they manufacture actually meet this voluntary specification for energy efficiency. Energy Star is not a standard, and it's not a certification. It is a third party mark that seeks to identify the most energy efficient products in a particular category.

Slide 15: Benefits of Purchasing Energy Star Qualified Products

Kate Lewis: Some of the benefits of purchasing Energy Star qualified products – again, they're pretty cut and dry, and most of them are certainly the middle two – these products consume less energy, and that has the advantageous benefit of lowering utility bills and saving money. Energy Star, in moving forward as I said with strategic acquisition with Energy Star, is a great way for your state government, county government, town, municipality, to really publicly demonstrate your commitment to the environment through the use of this also public sector or government-endorsed specification.

Slide 16: Benefits of Purchasing Energy Star Qualified Products

Kate Lewis: So some of the non-energy benefits of Energy Star products are that because these products happen to be higher margin products they provide to institutions or consumers equivalent and often better quality than a conventional product that would be purchased. But obviously the foremost benefit of purchasing an energy efficient or Energy Star qualified product is the cost savings. And people tend to think of the cost savings – or we encourage our partners to think of the cost savings in kind-of a sophisticated model. Certainly there's the primary cost savings – the annual cost savings associated with obtaining and using a more energy efficient product, and also the product's life cycle cost savings (or LCC) associated with its usage over a conventional product. And then there are these secondary costs. Cost savings can also be thought of in terms of additional staff, and the reduced electricity use in terms of less pollution that it doesn't create, and lower A/C costs associated with more efficient products being operated in these spaces.

Slide 17: Energy Star Qualified Product Categories

Kate Lewis: As I said, there's about 40-50 different Energy Star qualified product categories. Some obviously are going to be more appropriate for state and local governments, whereas others are much more of a consumer focus and sold retail.

Slide 18: Energy Star Purchasing Tools

Kate Lewis: Some of the tools that we have on our website, which is www.energystar.gov/purchasing you can see at the link below, are product listings. And what these are – they’re probably the most straightforward tool we provide. We maintain and update, on a monthly basis, a list of qualified products, and that is basically just a list of the ever-broadening and ever-increasing number of Energy Star products. And we identify them by brand, model number, and features at these qualified product lists on www.energystar.gov. We provide product specifications – and the specification is, in effect, the consistent definition. The specification is what it is that makes a particular product meet Energy Star. And I have some examples of specifications so that you can kind-of cut away and really identify what it is about an Energy Star qualified residential refrigerator, or a piece of heating equipment, that actually makes it Energy Star. We also offer drop-in procurement language that several states have taken advantage of. We’ve sort-of pre-written it to fill-in-the-blank, and again, making it easy to really move forward and implement some of these changes. And then we also offer a series of, for all of our qualified products, these simple savings calculators. These are Excel spreadsheet-based tools that are really designed to show purchasers the benefits of looking at a purchase of an Energy Star qualified product based on its life cycle costing. And the tool is fairly easy to use. I promise you don’t need an MBA or PhD in order to get through it. It comes pre-populated with a series of defaults, which you can use as is or make specific to your region.

Slide 19: Procurement Language & Specifications – Exit Signs

Kate Lewis: Here are some examples of the procurement language and the specifications for exit sign products. You can see all of the content here from “the vendor must” down through the bottom of the box, that is our sample procurement language. The specification is, in fact, that content within the bordered box. That is the definition, if you will, of energy efficiency that Energy Star has developed with this group of stakeholders that the products must meet before the products can earn the Energy Star logo or label.

Slide 20: Savings Calculator – Exit Sign Purchasing Assumptions

Kate Lewis: And here’s an example of just how powerful the savings calculator tools can be. If you look at about 100 exit signs, and take the purchase price of an Energy Star qualified one – and this is just sort-of a national purchase price average; we gather data from a wide variety of sources – and then look at replacing existing incandescent exit signs. That’s why the cost right there is zero for non-Energy Star, because we’re talking about the replacement.

Slide 21: Product Calculator – Replacing 100 Exit Signs

Kate Lewis: And you can see, using the standard electricity cost of 9¢ per kilowatt hour – this is a table illustrating what the savings calculators really show. So you can see that the investment here – the investment cost of about \$6,000, you know \$5,700, is recovered in about one year using national average commercial electricity rates. That was that 9¢ per kilowatt hour, not residential.

Slide 22: Product Calculator – 300 Computers

Kate Lewis: And here's another example illustrating the Product Calculator for a large purchase of computers. The default on the conventional or non-Energy Star computers do not have sleep settings activated. Because it is necessary – to maximize the cost and energy savings from a new computer purchase it's necessary to do two things: 1) specify and purchase Energy Star; but 2) make sure that when that computer is implemented in the enterprise, that the power management savings are activated on both the computer itself as well as the monitor. So this life cycle costing example seeks to show the difference between using a non-Energy Star computer with replacing with an Energy Star qualified computer to the new specifications. That's also important – this was one of our specifications, one of our product specifications, that has just been updated after a long period of inactivity. What that means is that there's basically the new version of the Energy Star specification for computers and for imaging products, which means that those classes of products are finally beginning to bring savings to institutions and consumers far greater than they were even 2 or 3 years ago. You run the inputs through the Product Calculator – you can see that, as I said, the example assumes that the conventional monitors are...sorry, this is an example that we're doing the same thing with a monitor purchase versus a computer purchase. The non-Energy Star are assumed to be conventional monitors that are non-CRTs. I don't know if anybody has...I picked this for this example because obviously it's pretty promising in terms of the savings. But I should say, in all honesty, the conventional monitors that I chose here were non-CRTs and do not have sleep settings activated. And I don't know who might have that situation still, in this day and age. But there are, as you can see, tremendous savings opportunities associated with upgrading to Energy Star, and then obviously having the sleep settings enabled or activated.

Slide 23: Product Calculator – 100 Vending Machines

Kate Lewis: This is the last example. These tables are designed to show you how the inputs of the savings calculator tool work. For vending machines, it looks at replacing 100 vending machines with software that increases the energy savings, so it's replacing vending machines with both Energy Star qualified and then having – much like monitors and computer – extra sleep settings activated on an Energy Star vending machine.

Slide 24: Calculation Summary

Kate Lewis: What is this basically designed to show is a summary that outlines the business case of energy efficiency because we're business people and this is sophisticated. In order to get these changes made, we need to be able to articulate the value proposition and what this will bring back to our town, to our state, to our government. These tools are designed to do that in a very financial way for individuals who don't necessarily have a financial background. You can see when you role all of this up in the form of a calculation summary, you're looking at \$40,000 a year in aggregate. Getting back to my earlier point about the non-energy benefits, \$40,000 a year can be thought of as an additional FTE (full-time equivalent). It's another teacher; another librarian, another government staff that the investment can be plowed into; just by minimizing the waste associated with running these products that we're all using.

Slide 25: Procurement Language – Electric Steam Cookers

Kate Lewis: Here is another example about the sample procurement language. Again, that is what we make available for organizations of any type to drag and drop in to their contracts. You can see this narrative here in the box is the specifications for our electric steam cookers.

Slide 26: Savings Calculator – Electric Steam Cookers

Kate Lewis: You make an assumption that you purchase one steam cooker. Listed here are the assumptions we provide to you to put into the item savings calculator. I mentioned they come pre-populated with assumptions; these are some of those assumptions.

Slide 27: Savings Calculator – Electric Steam Cookers

Kate Lewis: You can see when you put a non-Energy Star qualified steam cooker out and compare it to the proposed purchase of an Energy Star cooker you can really get a sense of the total life-cycle cost efficiency of Energy Star; especially looking at the energy cost and the associated water savings of this product. The way the specification was written (back to slide 25) – I'll go back a minute here – of the idle rate, with that specification (back to current slide), brings a tremendous amount of not only energy savings but water savings as well. This is one of those Energy Star products that's a "two-for," where you get two different kinds of savings in one product.

Slide 28: Energy Star – Additional Resources

Kate Lewis: Now that I've been through the drop-in procurement language and the savings calculator, here's a summary of some of the additional resources we have available on our website. You put a strategy together for doing this as the government, as Energy Star. You develop the right tools and resources to assist in the implementation, and then the critical part of this circle is communication. We feel that in order for this idea to plant and sprout and grow and spread, you have got to promote best practices and help educate and train other enterprises that want to do this. We have some communications, some public relations, some sample fact sheets and case studies, PowerPoint presentations and articles about organizations, and state and local governments that have been successful to "tame this tiger," if you will, and have been strategic at making acquisitions. We also do, as Andrea mentioned at the beginning of the presentation, a variety of internet presentations. There is one other Energy Star tool that is fairly new. I know we have a number of you on this call today and you may be very familiar with Energy Star. But, you might not be very familiar with Quantity Quotes.

Slide 29: Energy Star Quantity Quotes

Kate Lewis: This is a tool that is available on our purchasing website. It's a web-based tool, and it is basically a transaction tool. The object is to connect large-quantity buyers, like you, with suppliers of energy-efficient products. These suppliers are about 20,000 manufacturers who are working voluntarily with Energy Star. It's a linkage tool designed to put buyers in touch with suppliers. It does not cover at the current time all of our Energy Star qualified products. The 7 categories bulleted on the right side of the slide are the types of suppliers you are registered and willing to supply products through this site.

Slide 30: Energy Star Quantity Quotes

Kate Lewis: Basically, you as a purchaser put in a request to this community of suppliers through Quantity Quotes or through the Web site. Interested suppliers respond to you through the Web site, and they do so individually. And then you as the purchaser can follow up with suppliers and choose one to negotiate with. Before you get started there is somewhat of a registration that has to have been started. You can walk through the ins and outs of it on our Web site, right here. This is available as a direct website. You can also get to Quantity Quotes from our purchasing website, the URL I gave you earlier.

Slide 31: Energy Star Products

Kate Lewis: Of the purchasers on this Web site, I would say probably a third of them are state and local governments because of the benefits, some of which are listed here. It's a really interesting business model. It's basically moving forward within a government structure to whole-sale purchase energy efficient products. If you are interested in this, I definitely encourage you to take a look at the site. The URL is on this earlier slide here (back to slide 30 briefly). Then at the conclusion of this presentation I am happy to answer any questions. I can put you in touch with the right folks here at Energy Star who are responsible for making this site run day-to-day in a seamless manner.

Slide 32: Enabling Energy-Efficient Purchasing – State Level

Kate Lewis: I'm getting a little short on time and I want to leave time for the other two presenters who are going to talk about how they translated these theories into actions. I'm hitting the end of what I planned on presenting today, but I just thought I'd drop in some examples of state-mandated Energy Star purchasing. This is from an Indiana executive order that was passed in 1999. It only applied to office equipment, since, which I think, has been broadened. It was brought to implementation by that state's general administration.

Slide 33: Enabling Energy-Efficient Purchasing – State Level

Kate Lewis: Maryland has had an executive order applied fairly broadly to all energy-using products. This is worded very specifically. Again they say that the State shall purchase products or products in the top 25 percent in energy efficiency. The reason that was written that way was because there are other energy efficient products that are not Energy Star qualified and those are FEMP designated, or Federal Energy Management Program designated. There are not too many, but it's probably another topic for another webcast. We can talk about Energy Star and FEMP, so we could define the field of energy efficient products.

Slide 34: Enabling Energy-Efficient Purchasing – State Level

Kate Lewis: This is Hawaii's energy purchasing language. They mandated Energy Star purchasing through an act of legislature and this is unique. Again, three different examples of state language that are all unique in their own way. They actually explicitly in their purchasing

language called out life-cycle cost effectiveness. By doing so they basically negated the wrong decision, being made on partially incomplete or first-cost information.

Slide 35: 5 Steps for Procuring Energy Star Qualified Products

Kate Lewis: In summary, if you would like to use some of the tools and resources I've spoken about today, you should review your purchasing policies and identify areas for optimization. Please feel free to visit our website. There are also some email links, there to our small team and me if you have any questions on the product listings or the savings calculator. Then there is this sort of "walk the walk" with energy savings strategy: inform, educate, and talk up all the appropriate offices within your organization about what's possible. Include Energy Star outlined as a requirement and specification. Be sure, as if you don't already have enough to do in implementing those first 4 things, to track, evaluate, and communicate success. That is how this type of activity continues to move forward.

Slide 36: Summary of Web Resources

Kate Lewis: This slide is a summary of our web resources and I hope I have been able with the time allotted to give you a good overview of those. We talked a little bit about FEMP, the Federal Energy Management Program. There is a direct link to FEMP for our purchasing website as well as Quantity Quotes. If you have any other questions, here's our website both for Energy Star and FEMP. Here is my contact information. My phone number, should you need it is 202-343-9024. Thank you.

Andrea Denny: Thank you, Kate. We have time for a couple of questions for Kate.

Lauren Pederson: Okay, we just had one question come through. Regarding Quantity Quotes how does this fit in with government bidding requirements and will we still have to go through our normal bid process?

Kate Lewis: That is a great question. I would be eager to explore that personally with the author of that question. I can also query the existing family of purchasers; many as I said are state and local governments in an attempt to do some linkage and some peer-to-peer exchange on how they are able to do that. I would think it's possible to use Quantity Quotes within your bid requirements because you're essentially doing the same thing. You're just doing it in this community over the internet.

Andrea Denny: The person who had that question can feel free to follow up with Kate via email or phone and she will be happy to walk through that with you.

Lauren Pederson: We have a couple more questions that just came through. Do you have information on the Climate Savers Computing Initiative? Someone was asked to look into that and was just curious if you had any information about that.

Kate Lewis: I do have some information on it. If the author of that question would like to provide their contact information I'd be happy to follow-up and give information on Climate Savers.

Lauren Pederson: The next question is: Is there an interface with the NIGP?

Kate Lewis: The National Institute of Government Purchasers? Yes, we have a relationship with them that we are continuing to build. In that way we are trying to attend their upcoming conferences and speak at their upcoming conferences.

Andrea Denny: Great. Thank you so much, Kate. We're going to move on and we will come back to any remaining questions at the end of the session. I just want to be sure that all of our presenters have time to get through their presentations.

Slide 37: Title Slide – Environmentally Preferable Purchasing: Reducing Our Environmental Footprint through Energy Efficient Procurement

Andrea Denny: I'm going to turn it over to Liz Paulus. Liz Paulus is with the city of Phoenix. She has twenty years of environmental programs experience and has helped launch several successful programs. With the city of Phoenix she is the Pollution Prevention Coordinator, which is a program she started in 1995 focusing on reducing hazardous material use, and resource conservation, and city operations. The Pollution Prevention Program supports over 500 facilities and over 16,000 employees. She coordinated the development of and is the lead in the city's recently adopted Environmentally Preferable Purchasing Program for greening the city's contracts. She has a Bachelor of Arts degree in chemistry from Arizona State University. Take it away, Liz.

Liz Paulus: Great. Thank you. I would like to start with a bit of broad background information as soon as I can figure out how to toggle down here. I want to start talking more broadly about how the city views environmental purchasing. I borrowed this definition from the Federal Executive Order. Basically, it is when you have two products that do the same thing and you can find one that has less environmental impact, we take a closer look at that one, and that is how you start greening your contracts. We have a new program and it is one of 70 in the city's Sustainability Report. There is a website provided there is case anything the city is doing might be of interest and our EPP program has a link at that website as well.

Slide 38: EPP Products Can Include

Liz Paulus: So we're looking at the broad range of environmentally preferable products. As you can see there are a number of initiatives that it could include; recycled content and park benches, certainly energy-conserving lights. There are new bio-based products and non-toxic cleaners.

Slide 39: Historically, EPP Focused on:

Liz Paulus: What has happened is it has morphed over the last fifteen years or so. In the early 1990s, our city was one of many that had one of several resolutions focusing on recycled content in paper and maybe some low-toxicity products, but now with all the changes that have occurred the range of EPP products has expanded. The ecological stress of greenhouse gases was never in the crystal ball back in the early 1990s. Now we have renewables starting to show up in our

home products like carpets, carpet-backing and wood. We have a whole new range of areas to explore.

Slide 40: Phoenix EPP Resolution 20519

Liz Paulus: With that in mind, we went through passing a resolution, which is in effect now and serves as our vision statement for a city organization. It is really just a few key concepts where we want to focus our efforts in greening our products and services through contracts, revisions, or specifications.

Slide 41: How to Buy Green Products

Liz Paulus: How we got there was we did research on what had changed over the last few years. You'll see those icons on the left-hand side are so familiar; the Energy Star we just explored and more. There's just so much more out there. We recognize that if someone has done that kind of work to help clarify what is meant by green then we're all on a more level playing field, and we can communicate that much more clearly. We got that concept through the city council and we were approved to do a program.

Slide 42: Council-Approved EPP Program Framework (Dec. 2007)

Liz Paulus: what this slide represents is that you have got to have a mechanism. You have to have a process that you can implement. Having a resolution is a start, but you certainly have to have a process to move through the whole program. We are implementing these elements that you see at the bottom of the slide. Meeting with different departments; giving them training and outreach to see what the different processes in the program look like. We have 6 evaluation teams in progress right now that test some of the products that we are interested in right now, but that we're not sure if they are going to work or we're not sure of how cost-effective they are, so we are going through a lot of review at this point. The real clincher is having annual goals that we want to reach as an organization. We just started the program in December so it was pretty new for us.

Slide 43: EPP Program: Greening Contracts (44:00)

Liz Paulus: How we work is really jointly with our Finance Department. We have a very strong partnership. It takes two because they have their procurement area and their expertise and look upon us for our technical expertise in, "what is a green product?" Our approach is that we look at expiring contracts on an annual basis to see which ones marry up with some of those icons I mentioned earlier, and there are dozens of them. So we go through the expiring contracts and look to see if any have, what we call, EPP potential. Then we find a department that is part of that expiring contract to show them there are alternative products out there. Can we test these together and see if they might work? When we get through the test process, we then combine their purchase order with the specifications they have written for the product. They can jointly submit it to our finance department for a request for quotes or those kinds of processes.

Slide 44: EPP Program Detail

Liz Paulus: A little bit about our program detail here: we have 7 staff that work in the office and we're not doing just environmentally preferable purchasing, though it is the most fun part that we do. We also do facility assessments. We have a Pollution Prevention University that trains people on hazardous waste management; those kinds of things. When it comes to EPP we started back in '98 looking at a low toxicity program for the city. Since then we have identified over 1,000 products that are environmentally preferred. We list those on an intranet site and that helps the facilities when they are going out for purchases where they might find the green products. In 2006, we began tracking the contracts and which ones had environmentally preferable information in it. We just started that in 2006 and you can see we're at a \$4 million annual. That's our baseline so we're going to go from there and see how it increases over time because in 2007, right now, that's when we started coordinating our expanded program. When we looked at all the things the city buys, we identified 55 commodity areas that seemed to have EPP potential. They might be janitorial contracts. They might be printing contracts; any range of things that we know when the annual comes up we should look at an alternative for that contract. It's going to take awhile to get through it no doubt, but you have to have some kind of framework to work within. We do some training. We have a class; it's 1 of 7 that we offer citywide.

Slide 45: U.S. Greenhouse Gas Sources

Liz Paulus: I took this slide from our Arizona Department of Environmental Quality just to show that now we're going to narrow down into energy efficiency and why it's so important. You can see that nationally electricity is such a huge component of our greenhouse gas emissions at this point in time. How we can minimize those is of extreme importance out here in the West.

Slide 46: Energy Efficiency Options

Liz Paulus: What I found by looking through some research is that the Rocky Mountain Institute found that our energy efficiencies can be heavily improved in these areas. They all can be improved through this procurement process that we are discussing today, and that is the exciting part that this can be reached through the language in our contracts.

Slide 47: Energy Efficiency

Liz Paulus: For me energy efficiency is – and I'm not an engineer so it's important for me to have something simple to understand – what is the best performance we can get with the least wasted energy, such as heat which might come off of that particular appliance or product. What that does upstream is that it minimizes your energy production to run that same piece of equipment. Because you are using less energy, it is also less costly in its life cycle.

Slide 48: Alternative HVAC Systems

Liz Paulus: I found this from a presentation recently that shows a life-cycle case for air conditioning systems. I think that is one of two systems that is a major draw of electricity nationally. What I noted when I looked at this is here we have electricity cost for a typical HVAC system, whereas when we go to one that is more energy efficient the electricity cost is

much less. What these tables show is a case for a product that is a little more expensive upfront, which is here versus here. But when you look at it over its life cycle which, here, is estimated as 20 years and then you bring it back using today's dollars, what it results in is the evaluation down here where you are actually paying less over the lifetime of that system than if you had bought the less expensive item in the first place. Remember we're also having emissions reductions and overall cost savings in other areas, so this is just one way in which you can use the figures to make a case for a green alternative.

Slide 49: City of Phoenix Energy Efficiency Initiatives

Liz Paulus: So relative to the energy efficiency initiatives the city has done, we have had a long history with the traffic signal conversion to light emitting diodes. We have also looked at and I will show you contract language for air conditioning. Your city pools have huge pumps they use to run their operations and there are alternatives in that area. We've already looked at a few Energy Star appliances. Our city used a tool available on the web that's called EPEAT to make a recent procurement for computers, monitors, laptops, those kinds of things; and I will show you some statistics about how that worked out. Other parts of energy efficiency that we have embarked on include retrofits in existing buildings. We do have a green building program for our own city facilities, which helps with high performance buildings meaning high energy efficiency.

Slide 50: Phoenix: 2007 Green Electronics Champion

Liz Paulus: Here's what we learned from using EPEAT which is an online organization, a third party if you will. It uses less hazardous materials in the manufacturing, but we really keyed in on the fact that we bought so many computers that met their silver criteria. Look at the energy reductions we had in a single year, and the cost savings. We're just continuing to role with that. We've past July '07 at this point, so we continuing to garner those energy efficiency savings and cost savings. We went out to bid for this and you know what that means. We got the lowest priced item, but it happened to work so beautifully. You can achieve both objectives, and there is language on the website you can drop into your procurements or your requests for quotes and I can help you with that.

Slide 51: Resources

Liz Paulus: We lean heavily on the Energy Star program when those kinds of contracts become available. Here's some sample language we have included in the past. I counted up the product categories and there are 50 different ones. I just saw recently that they are going to do it for water heaters and that should come out in 2009. Also, copiers are going through another iteration of specifications. It's ever changing. It's not static at all.

Slide 52: Resources

Liz Paulus: I noticed in my research, and this was already mentioned, FEMP has a purchasing page and has sample language that can be used. It ties a lot back to Energy Star too. They work in tandem. They're both from the Department of Energy; a collaboration there. They just have websites with sample contract language. It's pretty easy to implement.

Slide 53: Resources:

Liz Paulus: One of the other things that we use – because as I mentioned we have a green building program for our new facilities – is when contracts come up for our existing buildings we go back to LEED and pull those specification forward into our procurements for our existing buildings. What we have found in HVAC, again the air-conditioning area, is that it is a huge energy user. The Energy Star standards only go up to 250,000 Btu and we have some rather large facilities. But there is another standard out there that we pulled from LEED and that's through the Consortium of Energy Efficiency (CEE), a third party. We use their standards in order to make the specifications for the equipment that we are going to be purchasing for our existing buildings as well. And this is what the language looks like.

Slide 54: Related Efforts

Liz Paulus: I wanted to mention that there are some related efforts to energy efficiency. When you buy items with recycled content and they are more and more becoming available. You can see EPA has identified over 50 categories where they have recycled content. You can plug that into an EPA calculator and you can learn what energy efficiency is achieved when you use recycled content; meaning it's already been manufactured and sold once, but now you are using it as a new feedstock in a new manufacturing process and you use less energy when you do that. Don't disregard that recycled content products can also contribute to energy efficiency as you start to evaluate you climate change inventory efforts.

Slide 55: Related Efforts

Liz Paulus: Similarly, we have Water Sense which I think came online last October. It is similar to Energy Star where you've got specifications for how many gallons per minute and those kinds of things available at that website. We have implemented some of that language in some of our contracts already.

Slide 56: Related Efforts

Liz Paulus: We touched on this a little bit ago, about the power management, another related effort. When the computer comes in, when the contract has been awarded, there is an office that will be imaging that computer so it can be set up as a desktop and at that point in time, or when you go through and do some sort of organization wide upgrade, it's possible to change the settings that are available. There are some great case studies on the web if you just google, "low carbon IT campaign" where they have saved \$100,000 a year when they put it into a calculator. It seems very simple to make that switch and it provides great cost savings at hundreds of thousands of dollars. By the way, April is the Low Barn IT Campaign, so that it a good time to consider that.

Slide 57: Related Efforts

Liz Paulus: You might want to think again, and this if for folks in the climate change inventory mode, about your supply chain management and that's what this speaks to. Have you thought about folks to provide to you for them and their business to do an energy audit? That doesn't sound like a hard thing to do and often they can get assistance from the power providers in the area. We haven't gone through and put this in yet because we are going through our own energy audits at this time. Until we've felt that we can walk the walk we probably won't put this in our contracts, but it's there now as a thought about how to do supply chain management and how to reduce that climate change inventory.

Slide 58: Lessons Learned

Liz Paulus: Relative to the whole process that we have been in for a while now, we've learned that the vendors you can work with are so key because they can make sure you have the most current product information. Sometimes when I'm looking at an expiring contract, something has changed since it was initially awarded and when it's expiring and it may already have a green product in there. I wanted to take advantage of a success that has already worked in my department by finding out what was that specification and how do we repeat success, but it wasn't in the original contract. Or you might find that you have very large contracts that have a green alternative and you weren't aware of it, so you want to look at that existing product and pull it into the mainstream. They can also be great subject-matter experts in areas for lighting, motor efficiency, roof coatings, and the kinds of things that are in the Energy Star program.

Slide 59: Lessons Learned

Liz Paulus: You want to make sure you put in your EPP specifications every time. If you don't tell the vendor that you are keying in on a certain specification then the chances are you will not get it. They've been providing before, they are going to read the contract specifications as written. They are going to give you what you asked for because they are trying to repeat business. You have got to be very diligent about getting that language into your contract. Outreach is important with your vendors too because you want to have competition when you are going out for bid. The more vendors that you let know you are going in this direction, like the city of Phoenix is – we're centering on sustainable purchasing efforts to draw more vendors in.

Slide 60: Lessons Learned

Liz Paulus: Also, I just wanted to mention that it can also help your tracking and your recording and your successes; if you put a clause in your contract that says they'll provide report. You'll have a better tool than going back to your departments and asking, "What did you buy?" and "How did it work?" Once you've purchased go back to the vendor and ask them to help track. That is what we did with EP computers. That was very successful for us. Dell was very helpful in how many computers we purchased over time.

Slide 61: End Slide

Liz Paulus: And that about wraps it up for me.

Andrea Denny: Thanks so much, Liz. That was great. I think in the interest of time we will take one question now and then if we have time at the end we can come back to any other questions.

Lauren Pederson: What did it take to incorporate life cycle analysis into the bid process?

Liz Paulus: That particular example was for an HVAC system and it was a stand alone, so we didn't have a life cycle. What we do is use that outside of the procurement process with the department with whom we are trying to navigate towards green. We use that to let them know that by using the specification, you can obtain a product that is cost effective over its lifetime. We do it outside of the bid process. Once we have that we put it into the contract and that's what we use for the request for quotes. So we work with our department.

Andrea Denny: Thanks Liz. I'm going to turn it over now to Steven Greely. Steven is the Waste Reduction Program Manager for the city of San Diego. He has been with the city of San Diego since 1991 and he has been the Waste Reduction Program Manager since 2002. In that division, he manages the city's recycling program, code enforcement, and field operations sections. He was the president of the California Organic Recycling Council from 2001-2006. He has done some interesting work in providing solid waste consulting services to the Kingdom of Saudi Arabia and the Republic of Marshall Islands. He holds a Masters in Environmental Science from the University of London.

Slide 62: City of San Diego Environmentally Preferable Purchasing Program

Steve Grealy: Thanks, Andrea. I appreciate the introduction. And thanks for inviting San Diego onto this conference today. My slide show is going to be fairly short. It's funny how it tracks Phoenix because we started basically at the same time with the same types of policies and we're getting to the same place today at about the same time. My presentation is going to be a little bit about the development and what steps we had to go through in order to get this policy passed, some examples of our success, and I'll finish up with a road map of where we're going from here.

Slide 63: Background

Steve Grealy: The background again is the same, starting in the late '80s/early '90s. We had the Recycled Product Procurement Policy come in. We had a price preference program which included a 10 percent increase in cost for things like paper products. What we found when developing this latest iteration in our EP3 policy is that we had to drop that price preference and we ended up with something that ended up being more potent, which is what Liz touched on at the end of her presentation. You work with each of the purchasing departments and if they think they are going to save money in five years they will just spec it in their contract what the requirements are. In that way they get around the life cycle analysis because they just have to do it themselves and make every bidder meet those specs.

Slide 64: ESD EP3 Pilot Project

Steve Grealy: When we started off there was still nervousness in the city. “Is this going to cost us an arm and a leg?” “Is this possible to do?” So we thought, “Okay we’ll do it with our departments first within the Environmental Services Department with a pilot.” One of the things that Liz touched on as well is that already there is a lot of green practices that are going on because they are becoming – you know if you go to a trade show about road construction then you find that they are talking about rubberized asphalt and slurry seals and those types of things that have recycled rubber in them because they are just superior in terms of performance. So to go out and look at what else is going on, you are going to be surprised by how much is already happening. You can see our data there. In FY05 we purchased in our department about \$4 million of EP3 products. We do run a landfill and collection fleet off of low sulfur diesel and two fuel trucks, etc. We are a big part of the price savings and green product expenditures.

Slide 65: Administrative Regulation

Steve Grealy: For our city, we are now a strong mayor form of government. We were originally looking for a council policy which would have been a proposal having a strong management city government. But, having a strong mayor form of government, what we came up with was an administrative regulation, which is a mandate from the mayor to the departments that he now controls, making them look through a filter of environmentally preferable criteria. We have had for several years a very close relationship with our purchasing and contracting department. For a few years we actually funded a position in that department out of our budget so that we could really jump start this effort and get them to dedicate the time to researching it, getting it into their systems, getting it into the contract language and put into their systems, and start tracking it from the outside as well. One of the things about EP3, when you go around to each of the departments, you need to know what is this and what does it mean. It is confusing. It’s one of those things that becomes blindingly obvious to you when you get into it, so there’s a big learning curve you have to get over. We first tell them why we’re going this way and some of the issues have been well-covered prior to my presentation here today.

Slide 66: EP3 Criteria

Steve Grealy: Here are some of the criteria we’ve put into the administrative regulations. These are the sorts of things we want you to look at in purchasing in each department in terms of what sort of things apply to EP3. You get questions like, “what if it’s got two of those?” or “which one do you rate as being more important?” It really comes down to common sense. What is the environmental footprint that you are looking at?

Slide 67: Examples of EP3 Products

Steve Grealy: Here are some examples of similar products. There shouldn’t be too many surprises in here.

Slide 68: Examples of EP3 Products

Steve Grealy: Street and traffic control materials, the signage, the cones... All those types of things have a very solid market out there that’s also in many cases the low bid as well.

Slide 69: Examples of EP3 Products

Steve Grealy: There are some more examples here. Mulch and compost is one that is often overlooked. If you have a good local source of a nice quality recycled green waste compost. We actually went to our city Development Service Department. We had them change the book of specifications that are out there for any engineering project. We put recycled mulch in there as one of the products. It's called the Green Book over here and it's a Southern California Regional directory. I know that different areas of the country have different types of books that engineers use when specking projects. They specify different products. We also have class 2 base which is made from recycled concrete and asphalt and we got that into the book as well. Be prepared to take a couple of years to make those sort of changes, but persistence is what pays off in the end.

Slide 70: Citywide FY07 EP3 Purchases

Steve Grealy: We are just getting ready to go out first annual report for year '07. I actually had a draft just handed to me yesterday to look at, so we have over \$17 million that we have been able to identify that the city purchased in FY07. You can see that the electronic items to add up to lot as well as the paper and office products. One of the things that can be paralyzing when you're starting something like this when you're a big city or almost any municipality out there is that the amount of products the organization buys. What we discovered – we were doing surveys, sending out online surveys to all of the responsible people in all of the departments – we were getting back confusing data and erroneous data. We probably spent a month or two trying to get this and then we just realized that what we've got to do is the approach that Phoenix does, which is just find out where the money is being spent (identify what the top dollar expenditures are) then go through each one of those items and see which ones are green and then approach either purchasing or the department depending on who's doing the procurement and work with them to get the specifications into the purchases.

Slide 71: Examples of EP3 Cost Savings

Steve Grealy: here is another example of our streets division. This is an example I got into earlier. They actually got into it on their own accord. We went over there and we were pleasantly surprised how much they were buying in slurry silt which has recycled crumb rubber in it.

Slide 72: Examples of EP3 Cost Savings

Steve Grealy: Some more examples of the dollar items that are in our annual report this year.

Slide 73: EP3 Implementation

Steve Grealy: What Liz is doing in Phoenix is some product testing. I have a much smaller staff working on it – and I realize there are a lot of people out there doing testing like the EPA of course. But there are a lot of other municipalities doing a lot of other work on spec language. So, we've created a website, so if you go to sandiego.gov and then click on departments and click on environmental services, you'll see the EP3 picture there to click on. We have a whole bunch of

resources there. There's a link that has a dozen or more savings calculators, and I saw a couple of new ones in the Energy Star Presentation this morning we can add in. We have about 10 different certifications we've got listed there with links to their websites. They do certification and like the ASTM chlorine-free products, consumer reports, ECO-label center, the Energy Star is there of course, Greenfields, etc. We also listed the best city and state websites that we found. It's mostly focused on California and the West Coast. We've linked straight to their websites so people can see what they're doing and how they're doing it. We also put a product and services guide in here with several products listed. The city of Palo Alto has a great website as well as Alameda, Seattle, King County; there's several on the West Coast. One of the other mistakes we made when we started trying to do it in a very organized methodical way – we'll first do our department and then we'll go to purchasing which includes central stores, then we'll go to park and rec, then we'll go to our water department – that that turned out not to be a very productive way to do it. The best way to do it to reiterate what I said earlier is just to find, like office paper and it's a big expenditure item and then it goes to all departments. You go product by product not department by department and go by the dollar amount don't worry about anything. For our department, for our city, for this first go around, we pretty much discarded anything that was under \$10,000 because it wasn't high enough to waste the amount of scarce stark resources we had in terms of getting bang for the buck.

Slide 74: EP3 Implementation Plan

Steve Grealy: Finally to wrap up, this is our implementation overall plan/sketch if you will. We have an annual report as part of a requirement under this administration, so it forces the issue every year. Basically, we work on this 6 months of the year, which is what it is panning out to be, because it takes that long to gather the data. We are learning obviously, and hopefully a few years from now it will be a much shortened, truncated process. We're working with the vendors and that has proved really valuable. The first time you call them they have no clue what you're talking about. When the light goes on they say, "We can't track it that way." We say, "You might want to modify your computer system so you can track it that way." I just spoke to one vendor the other day and he just spent two days modifying his computer system so he could give me the report I needed. Next year he is going to have it a lot easier to do. Again training sessions: we started doing department-wide and division-wide training sessions. We get a lot of people who wonder, "How does it affect me?" If you're going against the contracts of the bids that are going out then you're getting people's attention. You're getting the bids out on the street and people are trying to get the products they want. In our administrative regulation: it wasn't allowed to list that on our website directly, though we do have the resources on there and the things that are required to do for the people that are doing the purchasing in the city. They have an EP3 evaluation check list they should be filling out. And if they don't buy EP3 they have a justification form that they need to be completing. We just got those out, so we don't have a track record of getting people to use it. But that's something we planning to do just to put more accountability into the system. Because we have limited staff, our program is not to develop a website or develop educational package. We've got to constantly update it and rather link it to organizations like the EPA who have a considerable staff working on this and have product specifications. That wraps up my presentation today. Thank you.

Andrea Denny: Thanks Steven. I think we have time for one or two questions.

Lauren Pederson: How do you determine environmental preferable purchasing for vehicles and what standard did you use?

Steven Greely: For vehicles, we were looking at hybrid vehicles. That was our main focus to try to get as many hybrid vehicles. Also, there was downsizing. We had a look across all the departments and a lot of the departments especially in field operations where they were using 4-wheel drives when they only needed 2-wheel drives or using a $\frac{3}{4}$ ton pickup when they only needed a $\frac{1}{2}$ ton pickup. So we downsized a lot of the equipment to more closely match the job specs of the person using them.

Lauren Pederson: Out of curiosity, what percent of \$17 million products purchased by San Diego in 2007 were EP3 products vs. conventional products?

Steve Grealy: Well that's a good question. Our annual budget is about \$1.4 billion so that's for everything. It's a number we haven't really been able to throw our hands around yet and get a really good grasp on. As I mentioned before, I would be surprised if you got even half of our green products in in this first go around because like Liz said, some of our existing department contracts have green products in them and they didn't know it was green or we didn't think it was green or did not ask the question if it was green. So, I couldn't give you an exact number. Purchasing procures about \$250 million per year in sales and purchases but not all of those are amenable to a green procurement.

Lauren Pederson: That was the last question we had in the queue. But to circle back to the Energy Star presentation, how does that work with LEED certification?

Kate Lewis: We do participate in several of the U.S. Green building Council's workgroups to determine their documents moving forward and the amount of Energy Star qualified products and amount of energy efficiency products that are a part of their certified products like LEED for C & I and LEED for existing buildings. We are working together to impart that clarity for users that the Energy Star products or the use of Energy Star products and tools can be a critical step in achieving LEED building certification.

Andrea Denny: Thanks Kate.

Kate Lewis: Since we are circling back, I didn't want to give any of the attendees the sense that I was hedging the questions with the Climate Savers Computer Initiative. I did stall a little bit because I am only marginally familiar with the group. But rest assured that the gentleman who asked that question has already been in touch with the main Energy Star contact person in working with Climate Savers. It's an industry group that's arisen in the past couple weeks. This is what I know about it: they have a focus for businesses and enterprises and consumers. They are basically mounting this campaign on energy savings computing. Initially they were focused on working with computer manufacturers to dramatically increase the energy efficiency of the computer's power supply as a part of their campaign. They have contacted us and are working with us. We signed a voluntary MOU so that they are going to move forward with their campaign, but those who join the campaign will be provided with Energy Star resources on

computer power management, purchasing a new Energy Star computer, as well as information on efficiency of computer power supplies. That's what I know about it.

Andrea Denny: If you do have any additional questions. Kate can get you in touch or I can get you in touch with the EPA lead on that effort. Did we have any more questions in the queue?

Lauren Pederson: There is one last question. Are NIGP contact hours available for this webinar?

Kate Lewis: I'm sorry I don't understand that question.

Lauren Pederson: Okay, I can see if someone can supply clarification.

Kate Lewis: Oh wait, I see. I think that might have something to do with obtaining credit hours or something.

Andrea Denny: If that is the case, we are not affiliated with any of the groups that might be offering training credit for participating in this webcast.

Kate Lewis: But you know what? That's a really intriguing question and it might serve as another opportunity for us in Energy Star Purchasing and Procurement to get back in touch with NIGP. If the person who had the inquiry, similarly the gentleman who has the inquiry about Climate Savers, you could email me. I would be interested in talking about that. Maybe not necessarily for this webcast as Andrea said, but our Purchasing team holds monthly web conferences and maybe there is some kind of formal or informal arrangement we could make through working with NIGP.

Andrea Denny: Alright, well, I just want to thank all of our speakers once again. I think you all did a really phenomenal job on it. It's especially exciting to hear about the great work that's going on in Phoenix and San Diego. I wouldn't be surprised; Liz and Steven, if you hear from a number of people who sat in on this call to find out more about what you are doing and get your assistance. I'm looking forward to hearing about what other great things Phoenix and San Diego have to come in the months going forward and to hear what other local governments are doing on this issue as well. I did want to remind everyone to please visit our website and look at the chapter we have out on Energy Efficiency Products Procurement that will recap a lot of information that we went over today. And we certainly do welcome your comment and input on that as well as any other inputs on any other EPA programs to help local governments. Our goal is to create products and training that is most useful to you, so it is valuable to for us to hear what would be the most helpful. And with that, I think we can wrap up today's call. Thank you all again for participating.

Kate Lewis: Thank you so much for the invitation.

Steve Greal: Yes, likewise. Thank you very much, Andrea.