

# **SPO 145- Green Purchasing**

## **Slide - Title**

Hello and welcome to the SPO Green Purchasing webinar. My name is Asia Yeary and I'm with the US EPA Region Nine in Honolulu, HI and I'm going to be speaking about green purchasing from the Federal perspective. Next Jon Chin from the State Energy Office will speak about the Lead by Example program here in Hawaii and after him Gail Suzuki-Jones from the State Energy Office will speak about green purchasing products and practices.

## **Slide – Why Purchasing?**

Why purchasing? State and local governments spend approximately \$1.5 trillion annually on goods and services. This is a huge amount of money and it's significant because goods and services account for approximately 42% of U.S. green house gas emissions. Fortunately there are significant and relatively easy changes to make that organizations and individuals can do to reduce greenhouse gas emissions by improving how they spend their money.

## **Slide – Quick introduction to EPP**

Emergency is just one of six procurement methods, along with Competitive Sealed Bids (IFBs), Competitive Sealed Proposals (RFPs), Sole Source, Professional Services, and Small Purchase. Emergency procurement method is used when there is threat to life, public health, welfare, or safety. The need must be immediate and serious. While there is no dollar threshold, it does require Chief Procurement Officer (CPO) approval.

## **Slide – Federal EPP Initiatives**

So from federal perspective we have environmentally preferable purchasing initiatives. These started in statute and policy since 1993 and they are currently driven by executive order 13514 which is "Federal leadership in environmental, energy, and economic performance." And it's focused on several areas including: energy efficiency, water efficiency, toxics reduction, biobased content, and recycled content.

## **Slide – Simple steps for Feds (and you!)**

Simple steps for everyone, the federal government as well as state governments and anybody else who is interested in environmentally preferable purchasing, are to purchase EPEAT products which are registered thru the EPEAT program - computers, printers, copiers, televisions. Energy STAR certified products - mainly office equipment. WaterSense products - water- saving plumbing fixtures, toilets, things like that. And lastly 100% recycled content paper. And I'm going to talk a lot more about recycled paper in a moment. And these are the different logos of the different programs from U.S. EPA.

## **Slide – Coming soon!!!**

Coming soon. So EPA is working on guidelines for Ecolables and standards for greener products. These are a set of criteria to help identify private sector standards and Ecolabels that federal purchasers

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should consider. The final guidelines are due later this year and by 2015 we hope to have a credible third party use the guidelines to evaluate a wide variety of labels and standards.

### **Slide – Coming Soon (cont.)**

We're also going to have a climate friendly purchasing toolkit and this is a product of the West Coast Climate and Materials Management Forum. And it's going to be focused on key goods and services with high contribution to a state, county and city's greenhouse gas emissions. So it's a strategic approach. And a toolkit will include primer on finding key greenhouse gas sources, reduction and mitigation strategies for priority areas, including fuels, IT, carpet, food, professional services and case studies and purchasing tools. And we're hoping have this in the spring of 2015.

### **Slide – 100% Recycled Copy Paper**

I'm going to talk more about 100% recycled copy paper and I'm going to go over federal requirements, a little bit on state requirements, other buyers, and then I'm going to discuss some of the environmental impacts and calculators that are available.

### **Slide – U.S. EPA Initiatives**

So the U.S. EPA has several initiatives focused on 100% postconsumer recycled paper and we've been working on promoting this through environmental management systems since 2007. So this is not a new project. We've been working on this for a long time, but we are making progress.

And a lot of this, I think, is thanks to our Regional Administrator Jared Blumenfeld who is a huge proponent of 100% recycled paper. And I actually have an interesting story. Before Jared Blumenfeld came to EPA, he worked as a director for the environment in San Francisco and he was able to purchase 100% postconsumer recycled paper, which looks exactly like regular paper. You can't tell the difference in the shade; it's bright white, it's different than it was decades ago. It's bright white, it feels the same, it looks the same. If you did a comparison test, a blind test on regular paper vs. 100% postconsumer, you wouldn't be able to tell the difference. And I believe Jared really proved this by purchasing all 100% postconsumer recycled paper for his offices and all of the copying machines and everybody was using it for I believe about 6 months before he started telling everyone that the office was switching over to recycled paper. Once he told everyone the office was switching there started being a lot of complaints, that the copy machine was jamming and that the paper isn't working, this recycled paper doesn't work, it's causing issues, the ink is not the same, yada yada. But it turns out that everyone had been using it for many months already, up to six months, and had not noticed the difference until he told them it was 100% recycled paper. So I think the story shows that there are myths associated with this paper and I hope this story helps share that they're myths. They're not true and it works perfectly well. And if you didn't know it was recycled paper, it would not cause any problems. It's fabulous. We've been using it in our office since 2007 and I've never had an issue, nobody's had an issue, and we have hundreds and hundreds of staff. So I hope that helps you understand that. Really it's just the same as regular paper except you are helping save the planet.

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### **Slide – Federal Agencies Must Buy MINIMUM 30% Postconsumer Recycled Copy Paper**

Okay, federal agencies must buy minimum of 30% postconsumer recycled copy paper. Federal law: the resource conservation recovery act which is RCRA section 6002 has a requirement that federal agencies shall procure designated items composed of the highest percentage of recovered materials practicable. And the highest percentage of postconsumer recovered materials practicable in the case of paper is 100% so we are shooting for that. There's also Executive Order 13514 which promotes pollution prevention and eliminates waste by reducing printing paper use. So of course it's best not to use paper in the first place but if you need to, then we do encourage the 100%. And again the minimum is 30% postconsumer fiber.

### **Slide – State Agency Requirements**

State Agency Requirements. I'm going to speak about this briefly, but later I'm going to let Jon Chin and Gail Suzuki-Jones talk about Hawaii standards a little bit more. For right now on federal law (RCRA 6002) applies to any state or local agency or government contractor that uses appropriated federal funds. So any state or local government that receives federal funding this does apply to them. And that State law in Hawaii HRS 103D-1005 discusses the preference to bidders for recycled content, it follows the federal requirements, and it urges purchasers to purchase paper and printed products only with recycled content. So as you can see both federal and state have specific rules and programs that specify the use for recycled paper.

### **Slide – RCRA 6002 Product Categories**

And again this is not just office paper, but the RCRA 6002 also encourages recycled construction products, vehicle and transportation products, park and recreation products, landscaping products, and every other product you can imagine. We're trying to include as much recycled content as possible.

### **Slide – Other Recycled Paper Products under Federal Guidelines**

And there's also not just copy paper; there's lots of different types of paper. So here is a list of a few of those: envelopes, file folders, forms, text and covers, coated carbonless, the list goes on. So really we're trying to encourage all recycled content paper and other products.

### **Slide – Why Paper?**

So, the big question is why paper?

### **Slide – Materials Generated in the U.S.**

Materials generated in the United States. This pie chart shows paper accounts for 28% of the materials generated in the United States. That is very significant and I believe it's our duty to do something about that.

### **Slide – Paper Overview**

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Over 70 million tons of paper generated. 65.6% which is nearly 46 million tons of paper is recycled. Paper collected for recycling includes 55% recycled into new paper products and then 39% is exported and this paper export is one of the largest U.S. exports by volume which is impressive. U.S. paper recycling reduces U.S. greenhouse gas emissions equivalent to taking 28 million cars off the road a year. So again, this is significant. It seems simple and straightforward but it has a large impact.

### **Slide – Green Jobs**

Also provides more green jobs. Over 11 times more jobs are created by recycling paper than landfilling or incinerating paper. So these are real numbers, real jobs. It's something to consider.

### **Slide – Printing & Writing Paper Recycling Trends**

Printing and writing paper recycling trends. Unfortunately we're going down but this trend can reverse and we can increase our recycling rate if we work together and really try to promote both recycling, reducing the use of paper and buying/purchasing recycled products.

### **Slide – Pacific Southwest Federal 100% Recycled Paper Customers**

A lot of different federal agencies purchasing 100% recycled paper. Here is a list of them.

### **Slide – 100% Recycled Copy Paper Leaders**

100% recycled copy paper leaders. So Washington and New York state are both leaders. Seattle, San Francisco, Mill Valley, Berkeley, Los Angeles, Marin County. These are all in Region 9 by the way. And then we have lots of colleges and universities. Right now we have one business that we know of which is the Wyndham Waikiki which is purchasing 100% recycled paper and actually doing this affordably by taking coupons to the Office Depot and getting a reduction in their price so we're really excited they're working on that. But it would be really great to add more on businesses in Hawaii, more colleges and universities that are located here. And the more organizations in Hawaii that purchase 100% recycled paper that increases the demand for it and the price will go down. So we need the cities, the counties, and the whole state as an agency to start purchasing 100% recycled paper and then the price will go down and we'll be making a significant environmental impact.

### **Slide – Recycled Office Paper**

Recycled Office Paper. There are many different ways that recycled office paper contributes to environmental protection. Here is a list of different emissions that it reduces including hazardous air pollutants, greenhouse gas emissions. It reduces particulate air emissions, solid waste, total energy consumption, and reduces suspended solids.

### **Slide – External Tool – Environmental Benefits: Paper Calculator 3.2**

Here's an example of an external tool. It's not an EPA tool, it's through the Environmental Paper Network, which is an NGO, but it's a fabulous tool for looking at an actual savings from using 100% recycled paper. So here you can see that using 30% recycled paper as a baseline vs. the target of 100%

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recycled postconsumer paper for example the wood used if you're only use 30% recycled you have 261,000 tons of wood used. And if we move over and start using 100% zero tons used. Net energy same thing it goes down. Greenhouse gas emissions are reduced, water consumption, solid waste. These are real numbers. This calculator is an excellent way to really show what your organization is accomplishing by shifting your targets and changing your purchasing behavior.

### **Slide – Environmental Indicator**

This is more examples: NOx, SO2, particulates, hazardous air pollutants, the listed goes on.

### **Slide – Environmental Paper Calculator 3.2 Results (Examples)**

Environmental paper calculator 3.2 results. It also produces these more anecdotal numbers that allow for laypeople, anybody including myself, to understand what does this mean. So the baseline paper used 261,000 tons of trees. So what does that equate to? The greenhouse gas emissions are reduced by 498,000,000 pounds of CO2 equivalent and this is equivalent to approximately 45,000 cars per year. This is significant.

### **Slide – Region 9 – Results FY12 and FY13**

EPA Region 9 results. So we've been tracking our savings from using 100% postconsumer recycled paper for 2012 and 2013 and our numbers are significant we have, this is for all of region 9, so not just EPA but you can see in 2012 we had 315 tons of wood saved and in 2013 we had 265 tons which equals to 1,700 trees saved. So we are doing pretty well and that's why we want you to join and the more organizations we have joining and committing to purchasing 100% recycled paper our savings are going to increase exponentially and we're going to really make a substantial difference.

### **Slide – Buying 100% Recycled Paper for State Agencies**

Okay, buying 100% recycled paper for state agencies. There is an opportunity that state agencies can start buying recycled content paper and DAGS and the SPO, the State Procurement Office, has extended contract 11-07 for another year and is working on updating the green specs and it'd be great if they were updating those to include 100% recycled paper. Right now I believe it's 30%. The agencies are able use the vendor list currently to obtain paper that is at least 30% recycled and hopefully in the future 100% postconsumer recycled paper will be available on your vendor list to make it easy for you to purchase that paper.

### **Slide – Questions?**

Okay. Jon Chin from the State Energy Office is going to speak about the lead by example program.

### **Slide – Lead by Example**

Hello, my name is Jon Chin. I'm with the Hawaii State Energy Office and today as part of this webinar, I'm going to be talking about a program here within the state of Hawaii called the lead by example

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program, which has been going on since 2006 and there is a component of environmental purchasing involved with this program.

### **Slide – Lead By Example (LBE)**

But I first want to give an overview of what lead by example is. So as I mentioned it was started in 2006 and when it was started there were some working groups that were set up. So you can see here there was a leadership group, which was usually the department heads; a building energy use group, which tended to be facility managers; environmentally preferable purchasing group, which was the chief procurement officers in each of the departments; and then finally there was a transportation group, which oversaw the efficiency of fleets.

As a note, ACEEE named the LBE program one of the top 5 state led energy efficiency programs in 2010, which was a great honor for us.

### **Slide – Annual State Agency Electricity Consumption from FY05-FY13**

So one of the things our office focuses on is energy and we do track state agency utility consumption and we have been doing this since the start of lead by example. So we used fiscal year 05 as our baseline year and we've been tracking consumption each year. So these are the results of the tracking. As you can see, energy use went up for the first few years under the program but in 2008, we started to see a decline. In 2009, we had a very large decline in energy use and a lot of that was a direct result of necessity since the price of oil went sky high and the price of electricity went sky high. So we really needed to conserve and since then we've maintained our consumption level at a level that is below the baseline year and currently we are 4.8% below the baseline.

### **Slide – Comparison of kWh consumption by Agency by Year**

So here is a look at consumption by agency and you can see we call them the big four, UH, DOE, DOT-Airports, and DAGS. They all have large facilities and therefore they have higher consumption. But it doesn't mean it's not important or the other agencies to cutback as well. But you can see from FY 05 to FY 13, 17 agencies were able to decrease their electricity consumption below the baseline year. So in general the State is doing its part to reduce electricity use.

### **Slide – State Electricity Costs FY05-FY13**

This is the total cost of that electricity over the same time period. And as you can see this is the problem. Since our baseline year of 2005, we're now paying double what we were paying in that year despite using less electricity. So now our costs are in the range of \$209,000,000 annually just to keep the state facilities running.

### **Slide – Consumption and Cost Percentage Change FY05-FY13 by Agency**

This chart shows both the percentage change in kilowatt hours (electricity use) and the percentage change in cost. So the blue is kilowatt hours and the green is the cost. And this really shows the issue

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that we're having with energy use. Since so many of the agencies have decreased their energy use over the years but every single agency has seen a rise in the cost. You can find your agency here.

### **Slide – Percent change (over FY05) of Electricity Price, Cost, and Consumption**

This chart shows how the price of oil really impacts what the State of Hawaii ends up paying for our energy. You can see the purple line is the price of oil per barrel and these are percentage changes from the baseline year 2005. You can see the oil has gone up. The next line which is the blue line is the average retail price per kilowatt hour of electricity and you can see that generally follows the trend line of the oil. And following right along with that is the green line which is the total cost to the State of Hawaii for our electricity so it falls very closely with the price of electricity. The red line shows our slight decrease in the kilowatt hour consumption by state agencies and you can see where the red line crosses below the axis that is where the green line crosses below the blue line. So it is shielding us from even higher costs.

### **Slide – Savings and Costs from Baseline (2005)**

This is a chart showing the savings that have been produced from energy efficiency within the state agencies even though we're not seeing real cost savings we could be paying a lot more for our energy if we were still using energy at the same level as our baseline year. So essentially the yellow in this chart is representative of the difference and the savings that we created through energy efficiency which is to the tune of about \$10,000,000.

### **Slide – Top Ten Things to Lead by Example**

So the next thing I want to do is go over the top ten things that state agencies are doing to lead by example. There's been a lot of activity over the years and it's very exciting. We want to make sure we recognize the agencies for doing great things.

### **Slide – LBE Statute – HRS 196-9**

So before we get into that I want to go over the lead by example statute and you can find it at HRS 196-9. On this slide, I've pulled out six and seven which are the two pieces that I think pertain most closely to the purchasing piece but there are others that have to do with energy efficiency, green buildings, fleet efficiency, as well as pollution prevention. So here are the two: one is to use a life cycle cost benefit analysis to purchase energy efficient equipment such as ENERGY STAR products and use utility rebates where available to reduce purchase and installation costs, and then number 7 procure environmentally preferable products including recycled and recycled-content, biobased, and other resource efficient products and materials. So keep that in mind as we go through this top 10 list because it does touch on each of these areas.

### **Slide – #10: Adoption of EVs**

So the first is the adoption of EVs. Obviously this is a very large purchase. But that the agencies have been doing it and back in 2010, I believe, DAGS purchased 6 electric vehicles for the state motor pool

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which I believe all executive agencies can borrow from the state motor pool. So they have highly efficient vehicles and alternative fuel vehicles in the DAGS motorpool. DBEDT and NELHA also have electric vehicles. Also they have installed charging stations and two public charging stations were installed. One of them was at the state capital and that was I believe three years ago.

### **Slide – #9: Waste Reduction & Recycling**

The next is waste reduction and recycling. Many of the agencies are managing their waste in different ways but the most common is recycling and also finding ways to simply cut down on the amount of waste produced. So you can see here some great examples. UH Manoa has a campus-wide recycling program. And they recycle cans, plastic, paper products, green waste, and they minimize their waste stream by about 37%. The foreign trade zone has started a cardboard recycling program and they've reduced their volume by 40% and then UH Hilo also has a recycling program. And they've estimated 132,000 cubic feet diverted from landfills. So this is a really important piece especially for Hawaii where space is limited.

### **Slide – #8: Grants**

Next is grants. This is something our office is very closely involved with. We got a grant to bring on some green interns. The grant was through the U.S. EPA and we had ten interns go through the program and work on our green business program as well as our green government challenge.

### **Slide – #7: Environmentally Preferable Purchasing**

Environmentally preferable purchasing. Here are some great examples of what the agencies are doing. I haven't captured them all here but these are some good samples. DLNR are using recycled asphalt material at the Diamond Head State Monument. HHFDC is getting ENERGY STAR rated equipment to put into their multi-family housing complexes as well as recycled content product DAGS Central Services Division. They use green cleaners in their buildings. And UH Manoa, they've been recycling using bio-based materials in their dining service. And currently our office, we put out an environmental purchasing guide and the original one was put out in 2011 in partnership with UH and this year we are updating that environmental purchasing guide which can be found online at the State Energy Office's web site. If you'd like the link I can send it to you. Please email me.

### **Slide – #6: Capitalizing on Energy Efficiency Incentives**

Number 6: capitalizing on energy efficiency incentives. By now hopefully you're aware of Hawaii Energy which is the third party public benefits fee administrator and what they do is they have funds available for energy efficiency retrofits and to provide an incentive for people to do these projects. And so far since 1996 when the program was still with Hawaiian Electric, State agencies have received over \$7.27 million in rebates for our project and this is really generated a lot of savings as you can see here. Cumulative dollar savings of over \$130 million and electricity savings of 799 million kilowatt-hours and then over the life of the equipment, the savings will be approximately 108,000 households' annual

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electricity use. Hawaii Energy also offers incentives for residential homeowners so you can also take advantage of that by yourself or individually.

### **Slide – #5: EPA National Building Competition**

Next is the EPA National Building Competition. This is a nationwide building competition as you might guess and in 2012 the State of Hawaii entered the state capitol building. In 2014, we entered six State buildings in the capital district and along with this effort we've done a fair amount of education outreach to building occupants on things that they can do in the building to cut back on their energy use, such as turn off the lights, hibernate shut down your computer and turn off and unplug and remove personal devices.

### **Slide – #4: LEED and Green Buildings**

The next is LEED and green buildings. One of the LV statutes requires all new construction for state buildings to be LEED Silver or better. LEED is a green building rating system that is probably the most ubiquitous in the industry and nationally there are many many groups that are doing LEED projects as well as internationally. So eight years ago there was actually only one LEED accredited professional working for the State; that was Gail who is going to be speaking next. But now actually there's 30 LEED AP's in a whole number of agencies and there have been 20 State facilities that have been certified as LEED and there are additional 54 projects that are working towards that certification. In 2012, the state office tower was the first to become LEED certified for existing buildings, so not a new building but ones that are already existing and it really focuses on changing operations within the building to have a smaller environmental impact and footprint. A very exciting example is DHHL; they have a whole subdivision, a 403-unit subdivision that is LEED for neighborhood development and they also have the Kaupuni Net-zero Community as well as Kumuhau.

### **Slide – #3: ENERGY STAR**

The next is ENERGY STAR benchmarking and certification. You might be familiar with ENERGY STAR for products which we'll talk about in this webinar but also ENERGY STAR certifies buildings for being efficient and so that is an effort the State Energy Office is currently pursuing and has been pursuing and to date we've benchmarked 277 state facilities in ENERGY STAR. Of those 277, there are 21 states facilities that have been certified as ENERGY STAR.

### **Slide – #2: Renewable Energy Development and PPAs**

The next is renewable energy. Everyone's familiar with solar and photovoltaic systems I'm sure as they've been popping up all over town and Hawaii is the highest per capita installed in the country and the state agencies have also been partaking in this activity as you can see some of the examples here. Large projects.

### **Slide – #1: Energy Performance Contracting**

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And finally energy performance contracting. So this is something that our office has really been promoting among the state agencies because it's a good way to get large energy efficiency projects for whole agencies. It's not the way they do it everywhere but here in Hawaii I think the scale of our agencies is perfect for a large whole agency energy savings performance contracts so for three years running we've been recognized nationally as the number one state for performance contracting. We've invested over \$320 million and you can see the cost savings over 20 years will be \$897 million.

### **Slide – State ESPC Projects**

These are some examples of the ESPC projects that have taken place recently. Just this last year, the DOT signed a \$150 million contract to all their airports which is a huge huge project and it's going to generate a lot of savings.

### **Slide – DOH EPP Survey (2011)**

So the last thing I'll leave you with is the Department of Health has done an EPP survey which tried to make tangible the impact of state agencies' purchasing environmentally preferable products. And so you can see the results here and they're a little bit dated since it's 2010 but that was the last time they collected purchasing data from the agencies. Hopefully they'll be doing that again. But you can see that the products purchased in 2010 led to greenhouse gas savings equivalent to removing approximately 93 passenger vehicles from roadways for one year and energy saving equivalent to conserving about 17,000 gallons of gasoline in a year. So really the thing you can do in the purchasing arena can have a big effect.

### **Slide – Thank You!**

And that's it. If you have any questions, feel free to e-mail me at the address provided. Thank you. Next will be Gail Suzuki-Jones also from my office and she'll be talking about other initiatives in the state.

### **Slide – Green Purchasing, Products and Practices**

Hello, I'm Gail Suzuki-Jones from the State Energy Office and I'll be speaking about green purchasing in Hawaii, products and practices. So I'll be talking to you today about green purchasing products and practices in Hawaii, where to find some of these green products at the State Procurement Office and beyond and what others are doing to go green.

### **Slide –**

As you know, in Hawaii we are very blessed with an abundance of natural resources. We have the sun and the wind, we have waves, and we have a very mild climate.

### **Slide – Buying Green – Objectives**

And living on islands, we have to consider our vulnerability as well as our opportunities to reduce energy and water consumption to promote recycling and reuse, to prevent pollution and minimize waste and reduce emissions, and to promote healthy environmental practices. Here in Hawaii it's also very

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important that we respect and restore as well as preserve Hawaii's cultural and natural resources. And this is all about buying green.

### **Slide – Goal...Going Green**

The goal as Asia mentioned was sustainability, going green can mean meeting the needs of the present without compromising the ability of future generations to meet their needs. It's about the triple bottom line: people, planet and profit.

### **Slide – Going Green – What does this mean?**

So, what does this mean to us in terms of our purchasing practices? It means we really need to figure out ways that we can reduce our energy and water consumption, reduce the waste that we generate, utilize green cleaning and look at the tools and resources that we have available to us.

### **Slide – EPP In The State**

EPP in the State of Hawaii. Jon mentioned Hawaii Revised Statutes Chapter 196, Section 9, Item 7 is for State of Hawaii agencies to procure environmentally preferable products including recycled and recycled content, bio-based, and other resource-efficient products and materials.

### **Slide – Hawaii Energy – Elec. Usage...**

In Hawaii, did you know that 46.3 million barrels of oil were imported for Hawaii's total energy use over the past year? What does that mean? That's 36 barrels of petroleum for every man, woman and child living in Hawaii the average residential usage in Hawaii is about 615 kWh/month which ends up being approximately \$175 to \$200 a month just spent on electricity and that is significant.

### **Slide – Hawaii ranks #1 – Electricity Cost\$**

Did you also know that Hawaii ranks number one in terms of electricity cost in the nation? This here is a chart that spells out what the electricity costs are per kilowatt hour on each of the islands. It's about 3 times sometimes 4 times the U.S. average of 11¢ per kilowatt hour. That's significant.

### **Slide – Third-party Certification Programs**

So what can we do here as purchasers both at home and at work? We can look at some of these industry wide third party certification programs such as ENERGY STAR, WaterSense, and Green Seal.

### **Slide – Top 10 w/ Green Certification Programs for Green product labeling**

Jon talked about the top 10 lead by example efforts. This is a list of the top 10 things that you can do both in your office and at home to minimize the energy you consume, the water that is also consumed, the amount of solid waste that is produced, as well as how to prevent pollution.

### **Slide – Energy Conservation**

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Here's another top 10 of energy conservation efforts that could be implemented in the buildings that you work in.

### **Slide – According to ENERGY STAR**

And according to ENERGY STAR, the combined annual energy cost nationwide for commercial and industrial facilities is about \$202.3 billion. So every usage of energy is an opportunity for savings. So this includes lighting, possibly heating, cooling, hot water and general office equipment. So this logo here, you can look for on products that you buy at home and at work. A couple of the resources for you to find these are located on the DAGS State Procurement Office price and vendor list at the web site that I've listed below as well as the EPG or environmental product guide 2011 under the energy star and lighting categories.

### **Slide – Water Conservation**

For water conservation, these are the top 10 things that can be done in your buildings to conserve water and look for the WaterSense logo in the top right corner for those types of products that meet EPA criteria.

### **Slide – Hawaii State Office Tower**

In the state office tower, as Jon mentioned, we have gotten LEED certification for existing buildings and one of the important categories that we addressed was water efficiency. We were able to achieve about a 37% water use reduction through the use of ultra low flush toilets and in low heat activated faucet fixtures. This saves an estimated 36,270 gallons per year and all this equipment was installed by DAGS Central Services Division.

### **Slide – County of Maui**

The County of Maui Water Resource and Planning division is also a great example of how you can save water and energy. They ended up saving 56% due to the installation of high efficiency fixtures as well as they were able to implement xeriscaping and efficient water irrigation surrounding their building.

### **Slide – By evaluating your water usage**

So by evaluating your water use and implementing water conservation you may realize not only reduced water savings but energy savings as well. And sewer costs, since they are directly tied to your water bill are also reduced. The EPA WaterSense program as seen on that logo on the bottom right corner is a great resource for some of these products as well as the environmental product guide 2011.

### **Slide – Waste Reduction**

In terms of waste reduction there's a lot that can be done with recycling. Both Asia and Jon mentioned some great efforts that are implemented at the Federal and State level and we can always do more in terms of recycling and composting.

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### **Slide – Hawaii State Office Tower**

In the State Office Tower, as part of the LEED existing buildings certification, we went through a waste audit of one day's worth of our trash and recycling and we utilized some of our green interns to help us in that project. We were able to really find out a lot about what was generated in our building and it wasn't necessarily the most entertaining process but it definitely taught us a lot about our building occupants and what we can look at in terms of recycling and composting in the future.

### **Slide – Recycling and Recycled Products**

Recycling and recycled products. The sign on the right hand corner shows how signage in the office can definitely assist with some of these efforts making clear where to recycle and what can be recycled is very important and some of these products you can purchase on some of the contracts that SPO has and you can just create some of your own and see resources such as the city and county's opala.org website.

### **Slide – Hawaii Convention Center EPP Examples**

The Hawaii Convention Center is also a great example of purchasing green. They have been able to purchase 100% recycled fiber napkins, compostable beverage cups made from renewable sources, sustainable forestry initiative certified office paper, and their cleaning product inventory is evaluated regularly for green cleaning products.

### **Slide – University of Hawaii**

University of Hawaii as Jon mentioned, is also doing a lot in terms of green purchasing. They are purchasing recycled content toilet paper and hand towels that meet EPA guidelines and picnic tables made from recycled plastic. Maui College's culinary arts program uses biodegradable food cartons, forks, knives and spoons in its foodservice operation.

### **Slide – Waste Reduction**

Waste reduction. Waste reduction is an area that I think we really can continue to work on. Approximately 4.6 pounds of waste is produced per person per day. And that impacts the cost of building operations and maintenance. So, if we can reduce the amount of waste that is generated via recycling and composting so much more of that funding can be targeted and used in other areas.

### **Slide – Hawaii State Office Tower – Waste Audit Results**

This chart here shows what the state office tower is able to do in terms of diverting its waste. It currently diverts 58% through recycled white paper, cardboard, aluminum and plastics. But, about 42% of the waste that is not diverted, mixed paper and compostable food fibers could be material that could easily be diverted and so we're looking into those particular options.

### **Slide – Green Cleaning**

## **SPO 145- Green Purchasing**

Green cleaning is another very important area in buildings. As you can see on the slide is the Green Seal logo, the Greenguard logo, and the U.S. EPA's Design for the Environment logo, all of which are located on green cleaning products that are third-party certified.

### **Slide – 3 Reasons for Implementing Green Cleaning**

So, there are three reasons for implementing green cleaning, it helps the people in your building stay healthy, it helps increase the life span of facilities, and it also helps to preserve the environment.

### **Slide – Hawaii State Office Tower**

In our State Office Tower project we were able to minimize the amount of green cleaning products that were not third party certified as well as maximize the amount of air filtration through the use of efficient air filters. We made sure that the lighting and thermal comfort standards were also proper for the work stations and DAGS Central Services division is continuing to explore different green cleaning third party certified products used in not only State Office Tower but other of its buildings statewide.

### **Slide – Logos**

This slide illustrates how many different green type logos can be found on products. What one must be very careful and cautious about is to make sure that the third party verification system is legitimate. So do your research.

### **Slide – Resources**

There are a number of different resources that are available to state, federal, and county agencies as well as private sector. The Hawaii State Procurement Office has price and vendor lists for office products, recycled office paper, maintenance, repair and operations, as well as products and services provided by qualifying communities rehab programs.

NASPO, or the National Association of State Procurement Officials, has a green web site at the website address located below.

And our State Energy Office has the Environmental Product Guide 2011 version located on our web site. That product guide will be updated in 2015.

### **Slide – SPO Vendor List – Office Products**

On the SPO vendor list, office products are listed here as well as the mandate that state agencies are supposed to be purchasing recycled paper. So you can go to this website address for any listing on office products, paper, as well as other items.

### **Slide – Recycled Office Paper**

Recycled office paper as Asia mentioned is available in a minimum of 30% post consumer recycled. The State Procurement Office is supportive of expanding these efforts to go beyond that, and hopefully we will be able to achieve 100% post consumer recycled paper in the near future.

## **SPO 145- Green Purchasing**

### **Slide – WSCA-NASPO Maintenance, Repair & Operation Contract**

The WSCA, or Western States Contracting Alliance, NASPO maintenance, repair and operation contract is located here on the SPO's web site and it gives information on products that are available for green cleaning and repair and maintenance of buildings.

### **Slide – Products and Services by Qualified Community Rehab. Programs**

Products and services by qualified community rehab programs such as the nonprofits listed below are some other options for your consideration.

### **Slide – Services Provided by QCRP**

They provide the following services: document destruction shredder and recycling, as well as food service, and assembly office services. Use of these local nonprofit organizations can be very beneficial not only to the state agencies but to the nonprofits and the community organizations in Hawaii.

### **Slide – NASPO**

And lastly, NASPO has the [naspo.org/green](http://naspo.org/green) web site which provides a number of different valuable resources on green policies, implementations strategies, measuring and marketing success, a number of different resources and program development, as well as a glossary and frequently asked questions.

### **Slide – Mahalo**

Thank you for your time and we appreciate this opportunity to present information on green purchasing. We hope that you all will go out and purchase lots of green products, only if you need them of course. We really thank the State Procurement Office and Asia Yeary and Jon Chin for participating in this webinar.