Information Technology Solutions for Boosting Procurement Monitoring

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Presenter	Graziella Siciliano, Oak Ridge Institute of Science Education Fellow, U.S. Department of Energy
	Christopher Payne, Group Leader, Sustainable Federal Operations Group
	Aure Adell, Project Manager, EcoInstitut
	Liisi Liivlaid, Senior Officer, Estonia Ministry of Environment
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Sean	Hello everyone! I'm Sean Esterly with the National Renewable Energy Laboratory, and welcome to today's webinar, which is hosted by the Clean Energy Solutions Center in partnership with the Super-Efficient Equipment and Appliance Deployment or SEAD Initiative. Today's webinar is focused on Information Technology Solutions for Boosting Procurement Monitoring.

One important note of mention before we begin our presentations is that the Clean Energy Solution Center does not endorse or recommend specific products or services. Information provided in this webinar is featured in the Solution Center's resource library as one of many best practices resources reviewed and selected by technical experts.

Before we begin, I'll quickly go over some of the webinar features. For audio, you have two options. You may either listen through your computer or over your telephone. If you choose to listen through your computer, please select the "mic and speakers" option in the audio pane. Doing so we will eliminate the possibility of feedback and echo. If you choose to dial in by phone please select the telephone option and a box on the right side |

will display the telephone number and audio PIN you should use to dial in. Panelists, we ask that you please mute your audio device while you are not presenting. If anyone is having technical difficulties with the webinar, you may contact the GoToWebinar's Help Desk at 888.259.3826 for assistance.

If you would like to ask a question, we ask that you use the "Questions" pane where you may type in your question. If you are having difficulty viewing the materials through the webinar portal, you will find PDF copies of the presentations at cleanenergysolutions.org/training and you may follow along as our speakers present. Also, an audio recording and the presentations will be posted to the Solutions Center training page within a few of weeks and will be added to the Solutions Center YouTube channel where you will find other informative webinars, as well as video interviews with thought leaders on clean energy policy topics.

Today's webinar agenda is centered around the presentations from our guest panelists Graziella Siciliano, Christopher Payne, Aure Adell, and Liisi Liivlaid. These panelists have been kind enough to join us to focus on the use of Information Technology solutions in procurement and to discuss their experience with IT Solutions from varying regions worldwide.

Before our speakers begin their presentations, I will provide a short informative overview of the Clean Energy Solutions Center Initiative. Then, following the presentations, we will have a Question and Answer session where the panelists will address questions submitted by the audience, closing remarks and a brief survey.

This slide provides a bit of background in terms of how the Solutions Center came to be formed. The Solutions Center is one of 13 initiatives of the Clean Energy Ministerial that was launched in April of 2011 and is primarily led by Australia, the United States, and other CEM partners. Some outcomes of this unique initiative include support of developing countries and emerging economies through enhancement of resources on policies relating to energy access, no-cost expert policy assistance, and peer to peer learning and training tools, such as the webinar you are attending today.

The Solutions Center has four primary goals. It serves as a clearinghouse of clean energy policy resources. Second is to share policy best practices, data, and analysis tools specific to clean energy policies and programs. Third is to deliver dynamic services that enables expert assistance, learning, and peer to peer sharing of experiences. And lastly, the Center fosters dialogue on emerging policy issues and innovation around the globe.

Our primary audience is energy policymakers and analysts from governments and technical organizations in all countries, but we also strive to engage with the private sector, NGOs, and civil society.

One of the marquee features that the Solutions Center provides is the no-cost expert policy assistance known as "Ask-an-Expert." The Ask an Expert program has established a broad team of over 30 experts from around the globe who are available to provide remote policy advice and analysis to all countries at no cost. For example, in the area of Regulatory and Utility Policies we are very pleased to have Riley Allen, Research Director for the Regulatory Assistance Project (RAP), serving as one of our experts. So if you have a need for policy assistance in Regulatory and Utility Policies, or any other clean energy sector, we encourage you to use this valuable service. Again, the assistance is provided to you free of charge. To find out if the Ask-an-Expert service can benefit your work please contact me directly at my email address sean.esterly@nrel.gov or you can call my number directly or you can also go onto the Clean Energy Solutions Center webpage and contact us through there. We also invite you to spread the word about this service to those in your networks and organizations.

Now, I'd like to provide a brief introduction for today's panelists.

Now I'd like to provide a brief introduction of today's panelists. First up today is Graziella Siciliano an Oak Ridge Institute of Science Education Fellow at the U.S. Department of Energy where she has served as a coordinator for the Global Superior Performance Partnership (GSEP) initiative of the Clean Energy Ministerial since August 2012.

Following Graziella, we will hear from Dr. Christopher Payne. Dr. Payne is the Group Leader for the Sustainable Federal Operations Group. He also leads an LBL project team in support of the Federal Energy Management Program's Energy Efficient Product Procurement program.

Our third speaker today is Aure Adell. Aure is a Project Manager at EcoInstitut. She has been a member since 2001. Aure has more than 15 years experience in the area of sustainable public procurement.

Our final speaker is Liisi Liivlaid. Liisi is a Senior Officer at the Estonia Ministry of Environment and has covered the topic of GPP since the beginning of 2013.

With those introductions, I would like to welcome Graziella to the webinar. Hi Graziella. Just make sure you are off mute. We are not able to hear you at this point. Graziella, just make sure you...looks like you are switching over audio. We'll see if we can get your audio working real quick otherwise we will go ahead to the next presenter. Let's see if that worked.

Graziella	Apologies, are you able to hear me?
Sean	Yes, we are now.
Graziella	Sorry about that. I'm not sure why the line stopped working. So apologies, I am Graziella Siciliano with the US Department of Energy, and I also work on the Super-efficient Equipment and Appliance Deployment initiative of the Clean Energy Ministerial or SEAD, which is a voluntary international government collaboration whose primary objective is to advance global market transformation for energy efficient products. SEAD has 16 member governments and we work together to develop common technical foundations that will enable faster and easier options of cost effective product efficiency, policies, and programs. The SEAD initiatives broader market transformation efforts include collaborative work on awards and incentive programs and public procurement in an effort to further advance and enhance global markets for efficient products. Next slide please.

SEAD's procurement activities support a transformation by leveraging the purchasing power of public and private sector buyers to signal demand for highly efficient products in the market. These efforts are focused on developing effective policy instruments and advancing energy efficient procurement practices. Next slide.

SEAD procurement working group, we have a range of activities that provide research and tools needed by policymakers to develop and implement procurement programs. Today we've had a range of activities, for instance, we have been working on accelerating procurement of energy efficient street lights and promoting a product evaluation tool that we've developed, sharing best practices for energy efficient procurement programs, cataloging energy purchasing requirements and public procurement programs across the world and lastly, improving the monitoring and evaluation of green public procurement programs.

In 2013 we published the SEAD guide for monitoring and evaluating green public procurement programs, which is a resource for policymakers as they develop and implement programs and track progress against set targets and objectives. I look forward to presentations from our experts here today on the use of IT solutions in procurement and how that can help accelerate and help countries meet their procurement goals. I will turn it over to our next speaker, Christopher Payne. Thank you. |
| **Christopher** | Hi, can you hear me okay? |
| **Graziella** | Yep. |

Christopher   Thanks for having me today. My name is Christopher Payne. I'm a Group Leader with the Sustainable Federal Operations Group at Lawrence Berkley National Laboratory where we have supported U.S. energy efficient product procurement for about twenty years now. And today I wanted to reflect a little bit on the guide for monitoring and evaluation that we received recently and speak a little bit to the relationship between what I saw in that guide and some of the activities that we've had in the U.S. case and try to tie that where I can to some of the new IT solutions that are available. I would note that for about half my career in public sector procurement here in the U.S., the phrase IT solution was something of a misnomer. We used to mail paper binders full of information to procurement officials and thought it was a big breakthrough about fifteen years ago when we moved to this thing called the internet and started providing information that way. So in some sense I think we are behind the curve when it comes to some later entrants in using electronic systems to track procurement but I think we are climbing that curve together and I am looking forward to the other presentations tonight. With that in mind I would like to go through four slides relative to monitoring bringing public procurement programs.

The first thing I want to talk about was monitoring the institutionalization of procurement and that is getting the public sector organizations to adopt green public procurement as a standard of practice that is just the default condition for doing business in the public sector. I can't say enough about how important this institutionalization aspect is. One could give whole webinars on how to accomplish institutional change and how to track whether that change is occurring but a couple things that came out from me from the guide that one would want to pursue. One, this issue that we want to track institutionalization by understanding what policies have been put in place that direct buyers to buy green products or services.

One of the things that we found was that it is very important that the policies that are implemented speak to the level that is most applicable to the buyers who are actually buying the products. Let me give you a couple examples of that. In the early days of the US green public procurement program we used executive orders, which were orders from the president to the members of the administration that said thou shalt do this. Well, we thought the president said it so people must be doing it, must be aware of it, must be taking action. At the same time what we found was, in large part, many people were not aware of the executive order or even when they were they weren't sure if this was necessarily applicable to them, given the other policies that were already in place about a variety of procurement topics.

So the next step was to try to get agencies to issue their own agency-specific policies so that the Department of Justice or the Department of Energy or the Department of Commerce would have justice, energy, or commerce specific language for their employees so that they were saying we want you to have green procurement to be a part of your procurement

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process. And we found that those were a little bit more adopted. People recognized that if their agency head was saying something that was a little bit more specific to them, but there was still some concern about whether or not it was actually applicable.

What we found was that there were orders called the Federal Acquisition Regulations that govern public procurement in the United States. The Federal Acquisition Regulations were the procurement bible to which buyers turned to understand what rules drove their acquisition practices. When we made changes to the Federation Acquisition Regulations themselves, directing public sector green procurement, then we started seeing a lot of uptake of procurement activity because the FAR, the Federal Acquisition Regulations, told them to do it and that was what buyers were looking for information.

So, bullet point, when monitoring institutionalization it is important to first get a sense of the touch points that buyers use to determine their activities and to make sure that the policies are speaking at those touch points.

The second point of course is that policy awareness, itself, does not necessarily equal a green acquisition action. We've had situations where certainly people are not aware of the policies and regulations that are in place and so an important aspect of implementing a green procurement policy is the training necessary to make buyers aware of the policies that exist. Even when they are aware, that doesn't necessarily translate into action. One big example of this is in information technology and the systems that are used to make procurements.

If the systems themselves make it difficult to purchase green products, the awareness of policy can be 100% but if the tool used to make the buy doesn't allow it to occur, or makes it difficult to occur, you're going to get low compliance. So it is important when monitoring this institutionalization to monitor the institutionalization of these procurement programs in the information technology systems that are used so that the orders can translate to action.

Finally, it's not enough to make it possible for people to purchase green products. Ideally you want to move to policies that support green by default. The standard of practice becomes procurement of sustainable or energy efficient products and that that is the easiest type of procurement that can be accomplished.

Too often, at least in the U.S. case, our policies have been adders to existing procurement regulations. So what we've said is, yes, we want you to do these 2000 pages of procurement regulatory policy and in addition to that we'd also like you to be paying attention to buying green products. What we set up are conflicts between things like, for example, purchasing lifecycle cost optimized products and purchasing products with the lowest first cost.

Here again IT systems are really implicated in this issue. If we can develop the policies and the associated IT tools that make purchasing sustainable or green or energy efficient products the default case in the system, that will make the compliance with those policies much higher. So again in monitoring institutionalization be looking not only for the directives that say yes green policies are allowed but go beyond that to look for policies that make green the default condition.

So the second level of acquisition monitoring I wanted to talk about is in monitoring acquisition activity in itself. I think this is an area where IT systems are becoming much more useful in helping to track the vast volume of procurement data to go and try to capture information about a fraction of that volume of procurement is related to the procurement of green products and services. Then within those products and services that are related, which a fraction of those actually are green.

Another thing that we found in some of our acquisition monitoring activity is that the monitoring can provide information that reveals underlying standards or templates that are, themselves, in need of change. So I mentioned the idea of making green the default condition in your IT systems.

Another example we've seen is situations where solicitations will reference certain specifications for a given product. So, for example, in the U.S. case, there is a set of documents called the Unified Facilities Guide Specifications. These are used by architects and engineers to build new buildings for the Department of Defense. What we see is that when the Department of Defense issues solicitation language trying to acquire goods and services they often reference these Unified Facility Guide Specs for the specific information about the size, the type, the qualities of the product. And part of that specification includes the environmental attributes of those products. When the environmental attributes are specified as green in that product specification, it makes it very easy to reference in the solicitation. Alternatively, when the solicitation references an underlying specification that does not include either green components or includes them in a way that is vague it makes it difficult to then flow through and end up with the acquisition of the green product.

Monitoring the activity that is underway in the solicitations, tenders for offer, that kind of thing, can reveal these underlying specifications and other forms of documentation that support procurement that themselves need to be changed in order to achieve green procurement objectives.

The second point, we do a lot of thinking about what is being bought and often it can be very useful to think about what is not being bought. So in the U.S. case for energy efficient procurement, there are exceptions that are written into the standard that say you are allowed to buy an "inefficient product" if certain conditions exist. If an efficient product is not available that meets the functional requirements of your agency, if an efficient

product is not lifecycle cost effective in the specific condition in which you want to operate it, then you can buy this other thing and that choice is intended to be documented, that exception.

Exceptions, if they are well documented and while collected, can be very useful in helping inform the accuracy of your underlying standards for green procurement. So for example if you have set up a standard that requires a particular level of recyclability and it turns out that that is very difficult to find on the open market your exceptions for buying should be showing up that lots of exceptions are being filed for that requirement. So, again, it is important to monitor acquisition activity that your IT system that monitors your acquisitions allow the capture of these exceptions to green procurement because that exception itself can be useful in guiding further policies.

Finally I just want to note that acquisition activity can itself identify targets for opportunity in training, in improvement. My first bullet is about acquisition documents is one example but you can also trace acquisition activity and realize that certain contracts, for example, may not be including information about procurement in their solicitation. So that is an opportunity to focus training attention on that particular area of personnel. You may identify that there are certain pathways of procurement that are related to certain types of acquisition. So for example, water-cooled chillers may always be bought under an architecture and engineer construction contract, whereas, computers may regularly be bought off of blanket purchase agreements. Under two different types of acquisition they usually involve different IT and procurement systems. They usually involve different procurement personnel. They often have different sets of regulation that are associated with them. So if one realizes I have a real opportunity to improve the acquisition of computers, one would want to focus on that specific procurement pathway. So, again monitoring your acquisition activity and capturing that information can you help you then target your programmatic resources to more effectively bring about the change to full compliance with your procurement objectives.

Third one - monitoring environmental benefits. This is a tricky one. Certainly there has been a lot of work in IT systems to create different cost calculators or other kinds of calculation tools that can help calculate environmental profits when a product is purchased, but I think a key component of this that can make things easier is making sure that some of these calculations of the environmental benefits are included in the setting of the objective in the policy. So for example when we set an efficiency requirement for a water heater we think about what the lifecycle cost of the water heater and typical government operation would be. We make the choice to set the efficiency level based on that thinking about lifecycle cost. Now, later, if we think about how many water heaters were purchased we've already built in information about what we believe to be the lifecycle cost benefits of buying a water heater so we can multiply that times the number of water heaters acquired and get an environmental

impact. So including those impacts in the objective setting process can really simplify process of trying to calculate the environmental benefits.

Another important aspect there is setting some standard assumptions about what your public sector operating conditions are like; what you believe to be the standard practice that these green products will be used. If you have those standard set of assumptions that can make it easier to generate your environmental benefits. It can also be something that can be reviewed over time to decide, well, are our operating hours 3000 hours a year or are they actually more like 5000 hours a year?

Second bullet - this may be unique to the United States. I'm not sure that I have seen this in many other countries, though I have seen it in one or two. There seems to be a just sort of a natural schism between thinking about energy efficiency and thinking about other kinds of environmental performance. I don't know quite why this arises but it does seem to so what we see is that the people that tend to procure energy-consuming systems are different buyers than the people who tend to procure things like recycled content or low toxicity chemicals or easy waste disposal kinds of products. Therefore when monitoring the programs, it is important that you are speaking to the right people. We've seen situations where monitoring and evaluation of a given program will go to one of these two sides; let's say the environmental acquisition side. And they will be asked about energy efficiency procurement and the environmental folks will have a very different viewpoint of procuring energy efficient products than the energy folks. Well, don't know why that is but I guess my bullet point here would be the energy and the environmental when you are monitoring benefits.

Finally, this point that I think a lot of us are aware of but I'll just repeat this point again that reduced consumption, that is not purchasing something, is itself an important environmental attribute and you want to make sure that when you are calculating environmental contents you can think about the procurements avoided just as much as the procurements that were actually pursued.

So my final point about monitoring market impact, this is an interesting and problematic multivaried question about how can public sector procurement have an impact on the market as a whole for these products and services. And trying to calculate whether your program has had that impact can be quite challenging. One aspect that I think is very important that we don't do a lot of that I've seen in our procurement programs is providing information about the distribution of environmental performance within a given product category. So we often tend to fall to kind of binary answers of, well buy the labeled product - the Energy Star or the Blue Angel or the Sustainable Forestry Initiative or any of the other labeling mechanisms. And so it becomes a label good, not label bad or we talk about performing above a certain threshold. You should have more than 50% post-consumer content in your recycled paper. What we don't

provide is information to the buyers about the range of choices that are available and the degree to which, for example, post-consumer recycled content can vary from 0% all the way up to 100%. It is valuable to have that range available, not only so that procurement officials can understand that it is a continuous variable, not a binomial one. That one can chose among a range of choices and make an optimized choice for their specific context but also coming back to this market impact, if you're monitoring that distribution over time ideally you can see changes in that distribution as your program goes on. So that can be an indicator of market impact.

The second point that I wanted to make was that when we think about market impact at a policy level often we think in a sort of federal or a central government level and we think about the marketing impact that is caused by that activity. And we don't realize the enormous leverage that takes place through the uptake of those policies by other institutions. Here in the United States when the federal government put in place the requirement to buy Energy Star and FEMP designated products within a few years we had seen a majority of the U.S. states adopting their own procurement policies that referenced the federal policy of Energy Star and FEMP designated. And in the United States, state and local procurement is about a factor of five larger than federal sector procurement. So when thinking about market impact it's important to think about those sorts of spillover effects that your program has made possible but other people can take up your program and use it to direct their own procurement.

Finally, this issue of product labeling and the proper labeling of the environmental attributes in the product is critical. This speaks again to IT systems. There is a real issue in collecting the volume of data that is available about products generally in procurement systems and trying to establish environmental attributes associated with some fraction of those products. What we've seen in the United States is that frankly there is a real incentive for vendors to claim that their products are environmental, do meet the requirements, because that allows them to be on the schedules on the procurement systems that are then used by federal buyers to buy products. So no vendor wants to say anything that would filter them out of being used by those systems and so often they will just say that, yes, their product meets those requirements. This has resulted in a number of unusual circumstances in the U.S. federal procurement system of things like Energy Star pencils or FEMP Designated aircraft nose wheel housings or Energy Star copy paper. We've seen various countries flags be labeled as environmentally friendly, that kind of thing. So properly label the attributes in the IT systems so that buyers can have confidence in knowing that what they're selecting does meet the standards that are being requested is a real key component and a thing that has to be continuously monitored.

That's all I have in my thinking about the guide to monitoring and evaluation. I'm happy to answer your questions later I believe and if you have any questions feel free to include them in the go to meeting chat function. With that I will turn it over to our next presenter.

Aure   Hi, thank you Chris for handing the presentation to me. I guess everybody hears me? I'm Aure Adell. I work at Ecoinstitut. We are based in Barcelona. I will present a selection of examples from around the world on how IT solutions have been used to better monitor sustainable public procurement with different points of view - either green environmental aspects or also social aspects, but the tools are the same and can be used for similar monitoring criteria. So all the cases that I will present either come from the SEAD guide that Christopher mentioned that we did, by command of SEAD, or within the framework of a working group on monitoring Sustainable Public Procurement (SPP) implementation that is one of the programs under the 10 Year Framework Program that came after Rio +20. This is the first 10 Year Framework Program on Sustainable Public Procurement and within that rule there were several elements that government decided that they were interested to develop farther and investigate more. One of them was on monitoring SPP implementation. And another one that we'll cover is calculating the benefits—also Christopher mentioned it—calculating the benefits of sustainable public procurement and communication.

Within our working group on monitoring SPP implementation, we have three main objectives. The first one was to map existing practices on monitoring SPP implementation. The other one was to develop case studies that could inspire other public administrations. And the third one that we are now on the process is on developing recommendations and the recommendations go in two ways. One - to set or improve governments' sustainable public procurement monitoring systems. The other one, to kind of give some kind of general guidelines on how a system to monitor international level SPP implementation could be built, which kind of elements that general reporting system, if you want, could be composed of.

Now we are finalizing the first draft of the recommendations and we have started with the piloting phase. So if anyone is interested in that you can contact me also later. You will see my email. And as I mentioned, the first thing we did was to map the different practices around the world. Because we focus on monitoring implementation, and not environmental impacts or market impacts, we focused really on the first two elements that Christopher mentioned: The one on institutionalization or embedment of SPP within the organizations. The other one is on acquisition or procurement activities.

Within that we divided in four different categories because not everybody is monitoring procurement activities the same way. Some people monitor if they introduce sustainable criteria in tenders. Some others they purchase green or sustainable products. Some others, if they hire or purchase products from companies that are preferable for one reason or another that might depend on the countries. The final group that we identified was how we can contribute to direct work development from our contracts, especially works and services. On that we have an illustration on how one

system refers to the other. We have a collection of more than 30 case studies that represent different elements in each of those scenarios. The key is really when we think of monitoring, well with monitoring anything, but especially when we think of monitoring procurement activities the key is data tracking. We find really this information on how many vendors, how many green products, how many companies or how much amount of money we've spent on preferable companies, etc. The key element is how to get this information that will allow us to calculate the indicators in the end and for that IT solutions are one of the best ways, or the more efficient way, of gather all this data. So we will present a couple of examples, either based on how vendors database have been adapted to track this information, also how financial accounting or other kind of resource management and soft wares can also be used to track this information on green products or sustainable products or sustainable tenders and also different uses of electronic procurement platforms—either just the announcement or the whole procurement or either an online show, either one.

So the first case is from India. The Indian government has a policy to promote the procurement of small and medium enterprises (SEMs). They have to report every year how much money they spend on small and medium companies, either directly as vendors or subcontracted for services or works. What they did is, because they have their finance system where you know how much you pay total all your contractors and they have also a database of your vendors in most public sectors does exist, they modified that database of vendors. They included some fields in that database so they could identify were small and medium companies. Within those they had different categories in the policies. They also know which ones came from which sectors. This allows them to easily provide the appropriate indicators because they just need to go to the database and say give me all the vendors, how much money have I spend on them, and if they are small or not. That way they can provide the indicators very easily. We are told that they already use the vendor database. The only shortcoming of this system is because they can only track vendors directly. They don't have the information of the subcontracts. If a vendor that is not a small company is subcontracting some parts to a small company, they don't get this kind of information. Sometimes for services and subcontractors this information was missing but it is a very easy way to, something that everybody has, modify it to track some sustainability aspect. In this it's small or medium companies, but it could be companies with an environmental management system or sheltered companies and here we can have either aboriginal companies, women-only companies, or veteran companies. It really depends on each country and regulation but it is a very good way to have some indicators and that's thanks to an IT solution of a database of vendors.

Here the lesson was to because in the policy they said that they want to know. They had a 20% objective of all procurement from small

companies, either direct vendors or subcontractors. But the policy objective was very nice but then you had the problem tracking this information because you can only track one part and not the other one with the tools already in existence. So it is important when we define policies to also think already of the monitoring system—what do we have, what we don't have, and how difficult it would be to change and gather all the information you want or do you have to be that ambitious and define you policy objective based on the information you can get.

In most of the other systems, financial systems or accounting systems, the first example that I want to give is from Ottawa City. They monitor two aspects. They monitor the overall embedment or institutionalization of sustainable public procurement and also they monitor the procurement processes that have considered and/or sustainability criteria. It's not about products. It's more about tenders or cost/product position that they monitor. What they did is they had in place a subsystem, which is a system to measure financial and operational information, materials, invoices, etc. The general term is enterprise resource planning software. Within that system that they already had, what they did was modify it so that they could monitor and track which of their procurement processes had considered the sustainability criteria and which had really included those sustainability criteria. And they separated in four elements that you can see here: the economic sustainability, the environmental sustainability, the social or cultural. The definition of that, because here it does not show their subsystems where they introduce their sustainability monitoring requirements, and the definition is provided in a guideline that all procurement officers, or people that are working with this subsystem, have access to. So again another way of using an IT solution, a very powerful one, that is used for management reasons to modify it so you can also track which procurement processes enter this criteria. For example here the city of Barcelona, they also have a subsystem and they are also working on how they can modify it to monitor sustainability and sustainable procurement.

A different approach, using a different IT solution, comes from the U.S. Government Department of Energy. As Chris already mentioned, the U.S. Government has a green procurement program and they have to report every year. The Department of Energy they have their own buildings but they also have a lot of other ones that are managed by different companies. This one, the Pacific Northwestern National Laboratory, what they do is they have a software to integrate, to track, this information and then each purchaser—every people that the responsibility or the possibility to buy items—they have to input their purchases, every month, in this software. It is software that is linked to other management software so it is like the SAP that I was mentioning. This is a separate one but they are linked together so they don't have to duplicate certain parameters. What they do here is match so they have to say, ok, which purchase group they were buying. In this case it's office products. Then comes a menu that says, ok,

from this which kind of subgroup and it is usually one, paper—uncoated for copy, like regular office paper. Then you get the attributes, the environmental attributes that you are supposed to monitor. Is it recycled or not? Normally you would say yes. If, for whatever reason, you say no then you also have to specify why you didn't buy it because they have exceptions. It's an IT solution that compliments others already in place to track information here in actual purchases, so not in tenders but actual products.

If we move from the more financial management kind of systems to other IT solutions, which are procurement platforms, tendering platforms, online shops, etc. I put up three examples. The first one is from the Swiss government. They have an overall commitment to implement sustainable public procurement. What they did is, and also a regulation that requires them to report on that, is they decided to monitor tenders and contracts that are published in SIMAP, which is an electronic platform where high volume contracts and tenders are announced. So it's not for all the tenders and contracts. It is only for those with a high volume that have to be published through this platform, compulsory for the government. Here is an image.

Then what they did, because they have a long history of promoting sustainable public procurement what they did is in this platform that always serves to announce a call for tenders and then to announce the awarding, who gets the contract. What they did is they are modifying the system so that each purchaser when they have to publish the award of the contract, that it has to be done within thirty days. They have to fill in a questionnaire with small questions that prompt in the SIMAP, where they ask if they ask if they introduce certain sustainability criteria, either environmental or social, and a couple of other questions. Very simple questions that they have to compulsory fill before being able to publish the award—the contract. This way ensures that everybody has to answer to those questions, because if not it is sometimes on a voluntary basis. Some people forget to input their information. Here it's compulsory so they make sure that everybody that publishes here has to fill those questionnaires and those questions to really get the information. Again they use this solution, this SIMAP that they already had. They modified it to be able to track the sustainability information on contracts and tenders.

In Chile they also are committed to promoting sustainable public procurement and they have two tools. One is the electronic tendering platform, which is called Mercado Publico. The other one is an online shop called ChileCompra Express. Those are two platforms, electronic platforms that everybody in the country can use. It is compulsory for the central government and here what they did to track information on which tenders they had introduced sustainability criteria was that they, in this platform had, standard forms that everybody has to fill with the administrative parts of the tender - who is tendering, which is the amount of money that the contract goes out for, which is the period for the

contract, and the award criteria? So certain elements, that is standard form, then for the administrative part and then they can attach the technical and specification. So what they did here is in the part of the awarding criteria they specified two SPP awarding criteria. One is the cost, the price and then they had another one on environmental attributes and another one on energy efficiency and they have other quality criteria. In these forms people can say, ok, I'm introducing any criteria on energy efficiency—yes or no, or any environmental attribute that I'm giving points to award the contract. If they introduce some text on those fields in the forms, these are automatically collected in the database, which is behind the portal and they can very easily again track data because people only have to fill in if they are implementing any of this criteria. If not it is empty. Then they can really easily, every month, see how many contracts included some energy efficiency or environmental award criteria. The drawbacks of this are that, of course, they only monitor if the award criteria had some environmental attributes. They miss anything that wasn't compulsory and wasn't specified in the tender and wasn't specified in the specifications but, on the other hand, if it's a country that is starting implementing sustainable public procurement then it's probably more normal that they put it as award criteria and not as a complement criteria or not compulsory criteria. Then it makes sense that they only monitor this from the time being. And in comparison with the case in Switzerland, in Switzerland they track the information at the end of the process. So when everything has been published and they decided who is winning the tender they track the information at the end. Here they track it while they are preparing the tender. So they moved the tracking ability forward, which might also help to bring more tenders and more of that will be presented by Liisi in the case Estonia.

The last case is in South Korea. In South Korea they promote green product, not so much sustainable in general but more green. They also have to monitor it and report it every year. Like in Chile they have an electronic tendering platform, which is really the whole procurement process. The tenders are generated there. The payments are done through this system. They also have the online shop platform. I will explain the case of the online shop. What they do here is, slides, what they do with shops is the products are already selected. So they have the catalogue there with all the products, all the specifications, and then they have a column where they also explain which environmental attributes that product has - so either because it has a Korean eco-label or because it's a recycled product or also because it is an energy efficient product based on a label from the country. So when you look for a product you can see which ones comply and they also have a specific section, which is a special shop for eco-products, they call it, which only those with an environmental attribute in the catalogue are shown.

So they again use the online shop, which has all this information from the different products. They have categories on the environmental attributes

and then it is very easy to say how much money was spend on this and this and this green product, which are eco-labeled products, which are recycled products, which are energy efficient products. They can get this information very quickly. That is why I mentioned this information at the beginning. Using information technology platforms and soft wares can help to really track the information which can serve to calculate the indicators and progress afterward. If not it means to go tender by tender, invoice by invoice to see if the product was green or wasn't green and that takes up a lot of time and that is what makes monitoring very very very burdensome to procurers and what makes the process much more difficult. With IT solutions the process can be speeded.

In short, IT solutions are used in many procurement and non-procurement activities. Everyday life around here we have this web conference and this is an IT solution. It can be used for reporting. For example, for embedment or institutionalization of green or sustainable public procurement many times what governments have done is to build an online survey or questionnaire that people have to answer. Information technology can also be used for that, for reporting, but they should really be used for data tracking because it is only way to efficiently collect this information. Before we start thinking of an indicator of a policy, of an objective, we really need to consider what we already have before defining the monitoring system. We have a procurement system, vendor database, a subsystem. We should know that before so we can really find a solution that the monitoring is not requiring too much effort for everybody and then at that complement or maybe implement an IT solution that you don't have but you want implement so that monitoring can be easily done.

Also very important but I won't go into detail, in the SEAD guide there is more information on that, it's really important and probably also Liisi is probably going to mention what happened to them in the first try of the monitoring, to define what is sustainable or what is green, what is energy efficient, etc., etc. If not people, for example in the Basque country, a lot of people say oh yeah, green that tender. Then when they send it to us we look at it and we only see the requirement of compliance with the waste collection law. We say, well, it's a law. You don't go farther than what you're supposed to do anyway so this is not really green procurement. It's just complying with the law. So it's very important to clarify what green or sustainable is so that you get better results. Here I think that's all. If you have any questions I am looking forward to them. Here are my contact details and also if you want more information on the working group or the case studies that have been developed, the mapping, and also the recommendations that we will take up for piloting now, just please contact me. And I hand over to Liisi.

Liisi	Thank you. I hope everyone can hear me.
Sean	Yes we can.

Liisi	And see? So yes. My name is Liisi and I work in the Estonia Ministry of Environment. I work with GPP mainly but today I am going to talk about our procurement register and the way we do e-procurement here. So just briefly, I just want to introduce how we see our register and what are the possibilities. The e-procurement environment as it is today was launched in 2011. It has already been online for quite a time. The register is administered and developed by the Ministry of Finance. The procurement register is a platform for allowing to announce tenders, create, publish, and access-tendering documents, submit proposals, evaluate bids, and award contracts. So from beginning to the end, everything can be done in the platform. The Public Procurement Act states mandatory electronic calls for tenders in the register starting from 10,000 euros for services and supplies or 30,000 euros for works. Since 2013 electronic submission of at least 50%, considering economic value, of all planned tenders by public authorities are mandatory. So, pretty much half of all procurements are actually tendered through the register. Since 2014 all the tender documents as well as all the communications between partners is electronically fully available for everybody without the need to log in.

The GPP part is actually being monitored since the beginning of the platform. The GPP was monitored in the tender announcement form where it was asked…I have a screen shot here. The screen shots are all in Estonian, so sorry. There is a question here asking was any kind of environmental requirements used in the procurement? If the procurer says yes, then it has to give an explanation of what kind of environmental requirements were used. This is in the vendor announcement form. We saw a little bit of flaws in this system. What were the problems were that no clear definition was actually given on what is green. You can make green pretty much everything or it was left to the procurer. Therefore, the statistics were not very good. This is actually the way it works currently so the statistics are still not very accurate. Also, the tender announcement is actually the final step in the procurement process. So, at the very last question you were asked whether you used or didn't use environmental requirements. In this part of the procurement process it is already quite late to change the procurer's mind.

This led us to start a new development in this platform. From 2012 a new development in the platform to induce better GPP uptakes and monitoring was launched. It was actually finalized in the beginning of this year but due to the new GPP and directives of procurements it will probably go online in 2016. It was a little bit postponed.

In this development we had two main goals. One of them was better uptake of GPP. I have brought out a couple examples of what we did to achieve it. First in this new development you can add GPP criteria to your tender documents straight from the platform. It is also possible to choose from the example criteria, in this case European GPP criteria, or you can develop your own green criteria. We've also thought about a better definition of what is green. I have another screen shot here. It is technical

specification for where you can create your tender document. There are two possibilities here. One of them is where you can add example criteria by just clicking here. The second one is you write your own criteria here and you can mark it as green criteria and you can add it also to the list.

How we have defined what is green is that if you click here you get an information bar stating that if you choose example criteria, what the example criteria is, then it will probably say that it's the European GPP criteria that has been developed on the European level and by choosing the example criteria you are probably targeting the biggest environmental impacts of this product. Here you can look at the information of what actually is green or sustainable. When you selected the criteria, you've worded your own criteria; you can add criteria from here. If you choose some sample criteria then you get drop-down example criteria. Here firstly you need to state the product group of what you are procuring and the specific product or service. In this case it's paper. You can choose all these things that are the criteria in here - the wording of the criteria and the wording of the document that you have to prove. You can choose all the criteria listed in here or you can choose them one by one by just marking the criteria and adding things you can just press here. There is also a guidance document linked to the guidance documents. When you've chosen your criteria from the examples or you've worded your own, they have different markings. If you've chosen sample criteria then you get a green dot. Sorry, if you've worded your own criteria then you get a green circle. It's just to indicate that…I'm sorry. I hope this doesn't…yes. When you've listed all your criteria then as a final step you can save it as a tender document. I don't have a view of a tender document unfortunately but we can go on.

The second biggest goal for this development was to have a better monitoring of GPP or more accurate monitoring. As it is now we have this tender announcement form where you as a procurer you have to answer the question yourself. In this new system the answer will be generated automatically by if you've chosen the criteria or if you've marked your own criteria as green, the answer in the announcement form will already be answered. There is also a separate marking for GPP with EU criteria and own-developed criteria. Also, everyone can search and see green procurements.

There is again a view of this tender announcement where the answer to the same question has already been answered. It also states that all the criteria are listed in the tender documents.

Firstly in the register, you start looking at some kind of procurements when you get the general information. Here you can see that in the general information you already get the information whether the procurement was green or not. There is a GPP logo.

In the search view currently you can't really search for, as a private user, green procurements but in the future you can. What we've done, there's a close up here, by GPP you can select all the green public procurements and there are also two different markings here. These markings say that the procurer has used either the example criteria or has developed its own criteria and marked it as green. Anyway, the procurement is considered green. In case the procurer has used a certain amount or certain percent of the EU example criteria of one product group then it will get a logo of EU GPP. This way we can separate the procurements with self-made criteria, which we can't really be sure of and we can also say that these procurements with this logo are technically considered green either Estonia or even in the European level.

This is all for me now. I am going to keep going to the next person.

Sean

Thank you very much to Liisi and the rest of the presenters. So at this point we will move along to the question and answer session. So if anyone from the audience, just a reminder, if you have any questions for our panelists today you may submit those through the question pane. Let me go to open our window. Those will be submitted to me where I can then present them to the panelists.

The way we format our question/answer is very much like a discussion. I will start with the first question I receive and panelists if you'd like address that question please go ahead and make sure you are unmuted and just jump right in. The first question I did receive is, as a lot of procurement happens through vendors, for example the maintenance firm buys the cleaning products, how can IT systems help track this?

Aure

Hi, I'm Aure, I will just give an idea. Not so long ago the, what's the name...it's a U.S. organization that promotes green public procurement. In North Dakota what they did was they sent an Excel to the vendors where they have to input the information on the green products. You can think of IT solutions anything. Like an Excel sheet is an IT solution. It's software for a computer. This could also be an online form that they have to complete. That's kind of two ways. The first one would be, in the tender document, state as a requirement for the contract that - every month, every 6 months, at the end of the year, whatever is the frequency that makes more sense—they have to provide specific data. You provide a standard template, a standard form, either an Excel or an online form that they have to fill in, so that at least it is a requirement. Also you provide a solution for tracking this kind of information. That would be one possible solution, which would be very low-tech solution but it is one that can be used.

Sean

Great, thank you Aure. I take that no one else has anything else to add to that? Very good. I will move on to the next question. It asks if there are international standards that can help with green public procurement tracking.

Aure	I might answer first again. No, there aren't or we haven't seen. In the International Working Group we have representatives from Asian countries, European countries, American countries, and there is no standard. There is no information that everybody reports on. That's why, within the Working Group, we are trying to kind of set up general guidelines but we have to also be aware that depending on your national policy, that's what sometimes more at the higher level they don't get it. Depending on your national priorities you may want to monitor, for example in Asia, they are very much monitoring green products—not so much the tender but the actual procurement of products. In Europe, for policy reasons, we are more focused on monitoring tenders because we consider that this is the channel that informs the market that we want green products. So we monitor that. When you want to have a monitoring system at the international level some will report on products. Some will report on tenders. Depending on your priorities there will be more product groups you report on or less. If you go for companies it's not the same definition of preferable companies in one place than another. In the U.S. they have aborigines or in Canada or in Spain, of course, we don't have native Spanish, so to say. The definitions themselves change from country to country from priority to priority. That's why there is no international standard. That is why we want to build minimum guidelines so that at least you can compare a bid. That's what there is up to now, just the Working Group that tries to define some general element. The main goal of the Working Group is not to come up with a system so it will be some general ideas but it should be developed even farther.
Chris	I agree that there are not general standards of procurement policy per se. I do think that there are some things that are being developed and I think that things like this Working Group can help them go further that establish some kind of lower level data frameworks. For example, being able to classify different types of products in different product categories we can agree that a water heater is a water heater. We may call it different things but it is performing the same function, which is providing hot water to a building. I think there are data frameworks that are starting to be developed around that kind of idea, kind of akin to the barcode and Universal Product Code stuff. I know that the UN has been developing a standard product classification code, the UNSDSC, which can be helpful to at least distinguish between paper and a wrench, for example. That becomes important in IT systems because right now, because we do not have international standards, often a lot of the attributes that we're interested in tracking are entered in sort of open text format or an open-ended question kind of thing, like Liisi presented. And that becomes problematic because what I call recycled content somebody else might call post-consumer content. If I want to understand within my organization what has been purchased this year, I end up doing ridiculous keyword searches to try to pull out from the texts of these systems information that can help me figure out what actually was bought. So that coding of product categories and product attributes can be important and I think we

are moving toward a framework in which at least at those levels we are starting to see some standardization. Another example of that would be what has become a bit more international, the Energy Star qualified products list, and the idea that there are lists of products that have met U.S. Energy Star criteria and that those product lists list make and model so that they can be consistent across countries.

Sean	Thank you Chris and Aure for the responses. Moving to the next question now. I would ask for an IT tool that is already in place, what would it take to enhance it to include energy efficiency procurement criteria and who needs to be consulted with the organization?
Sean	Again this question is open to everyone.
Aure	I think that…
Chris	We're all jumping in here because it's such an easy question.
Aure	Oh, yeah. Go ahead Christopher.
Chris	I'm not sure I had a great answer so if you had one, go ahead.
Aure	No I don't. It really depends on the tool that you have because if it's, for example, in the Department of Energy example that I showed where they have the product categories and then they have exactly the product and the criteria to monitor. It doesn't take that much. Who you have to ask for it or get involved, it is a project of several people so if you have in-house personnel that can help build or modify the existing tools then it's perfect. If you need to hire the company that developed it in the first place then they have to be involved to see the level of detail that you want that can be included in the system, then the ones that defining at the policy level, the procurers that use, or the personnel that use the platform. For them it makes sense. In Cardinia, it's a small authority in Australia; they changed the financial system so that they could track the green products. What they realized is that a lot of the users didn't really understand what they had to fill in or they didn't have the definitions right so they had to do a lot of training afterward so that everyone was reporting along the same things and providing guidelines and help elements within the tool and so on. That's a lot of people to get involved in the process but it really depends on which tools you already have in place.

Chris	I think just to amplify that. One thing that I would say is it's very important to recognize that people and technology are intimately interconnected and you can't really make changes to one without making changes to the other to support your goal. I think the IT example we often tend to think about developing the perfect information technology tool in isolation. There is an example there of rolling it out to the user and them not really understanding how it worked and needing the training to be able to use the tool effectively, is a great example. Similarly the other way is true too. As I mentioned in my presentation, you can do a lot of outreach to people and tall to them about changing their behavior and if they are IT systems aren't supporting that change that you're trying to achieve that's going to be ineffective too. I think the key element that I would emphasize is that when we are thinking about IT, it is not solely the technology. Also, one always has to think about the users and their experience. It is the tie of those two that lead to the policy outcome.
Sean	Thank you both again for addressing that question. That is the last question I received up to this point. Let's go ahead. We can move on to the survey now for the audience. We just have three quick questions that can be answered directly through the GoToWebinar for the audience to help us improve our future webinars. We just ask that you kindly respond. The question is that - The Webinar content provided me with useful information and insight. Great, and the next question is—The Webinar's presenters were effective. The final question is that—overall, the Webinar met my expectations.
	Thank you for answering our survey. On behalf of the Clean Energy Solutions Center, I'd like to extend a hearty thank you to all of our expert panelists, and to our attendees for participating in today's Webinar. We've had a great audience, and we very much appreciate your time in joining us. I invite our attendees to check the Solutions Center web site if you'd like to view our slides and listen to our recording of today's presentations, as well as previously held webinars. Additionally, you will find information on upcoming webinars and other training events posted by the Solutions Center. Additionally, we are now posting Webinar recordings from the Clean Energy Center on the YouTube channel and just remember to allow for about one week for the audio recording of today's broadcast to be posted. We also invite you to inform your colleagues and those in your networks about Solutions Center resources and services, including no-cost policy support. Have a great rest of your day and we hope to see you again at future Clean Energy Solutions Center events. This concludes our webinar.