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Public Procurement of Energy Efficient Products Practitioners Workshop

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ESMAP
Energy Sector Management Assistance Program

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ABBREVIATIONS AND ACRONYMS

ASE	Alliance to Save Energy
CFL	compact fluorescent lamp
CII	Confederation of Indian Industry
CLASP	Collaborative Labeling and Appliance Standards Program
DEDE	Department of Alternative Energy Development and Efficiency
EE	energy efficiency
EECI	Energy Efficient Cities Initiative
EEFF	European Energy Efficiency Fund
EEP	energy efficient purchasing
EC	European Commission
EGAT	Electricity Generating Authority of Thailand
EMS	Environmental Management System
ESMAP	Energy Sector Management Assistance Program
EU	European Union
ESCO	energy service company
FEMP	Federal Energy Management Program
FIDE	Fideicomiso para el Ahorro de Energía Eléctrica
GHG	greenhouse gases
GPP	green public procurement
GSA	General Services Administration
kWh	kilowatt-hour
LCC	lifecycle cost
MOU	memorandum of understanding
MV&E	monitoring, evaluation and enforcement
NGO	nongovernmental organization
OMB	U.S. Office of Management and Budget
PPP	public-private partnership
RE	renewable energy
RPN	Responsible Purchasing Network
SEAD	Super-efficient Equipment and Appliance Deployment
S&L	standards and labeling
TA	technical assistance
USDOE	United States Department of Energy

INTRODUCTION

The public sector represents a strategically important market for energy efficient goods and services. As an influential consumer, government actions to improve energy efficiency within its own premises can help demonstrate good practices to the private sector and citizens. Governments' ability to purchase goods in large quantities can have a catalytic impact on markets and the economy by helping to encourage suppliers to offer more efficient products while bringing down costs. There are, however, key challenges in realizing such opportunities such as lack of training and education about how and why to purchase EE products, limited financial resources, limited staff resources to develop EE specifications and promote the use of EE products once they are added to government contracts, restrictive policies and procedures, limited access to information, a need for more effective tools to facilitate EE procurement and track results, and a lack of incentives to overcome behavioral inertia.

In response to these challenges, the World Bank's Energy Sector Management Assistance Program (ESMAP), as part of its Energy Efficient Cities Initiative (EECI), initiated a global review to assess global lessons learned and best practices with energy efficient purchasing, or public procurement of energy efficient products. Over the past nine months, the team prepared a draft report on lessons learned about energy efficient purchasing from around the world. A key second task under this initiative was to hold a practitioners workshop with broad representation to discuss preliminary findings and recommendations from the report, as well as to share information about drivers and barriers, policy approaches and program models, tools and resources, innovative procurement ideas, and recommendations for furthering these efforts. The workshop took place at the Washington, D.C. offices of the World Bank on June 7-8, 2012. (The final agenda is included in Annex 1.)

The workshop brought together energy efficiency specialists from developed and developing countries, cities, partner organizations and World Bank staff to draw on experiences and lessons learned from initiatives related to public procurement of energy efficient products. Workshop participants included experts from the People's Republic of China, India, Thailand, the Arab Republic of Egypt, the European Commission (EC), Russia, the City of Vienna (Austria), Brazil, Mexico, the United States, and the District of Columbia (U.S.). Several partner organizations also participated, including the Super-efficient Equipment and Appliance Deployment (SEAD), ENERGY STAR, the Collaborative Labeling and Appliance Standards Program (CLASP), Alliance to Save Energy (ASE), the Confederation of Indian Industry (CII), and UL Environment. (A full list of participants is included in Annex 2).

These proceedings summarize the participant presentations, main issues discussed, and some recommended actions presented for the international community to consider in order to further accelerate public procurement of energy efficient products worldwide.

PRESENTATIONS

This section presents a summary of each presentation delivered during the first day of the Roundtable. Copies of the full presentations can be found in Annex 3.

China
Mr. Tienan Li, Director, Center for Industrial Energy Efficiency

China started a pilot program of government procurement reforms in 1996. *The Circular on Implementation of Government Procurement of Energy-saving Product* was issued jointly by the Ministry of Finance and the National Development and Reform Commission in 2004. This voluntary policy encouraged the procurement of certified energy efficient products. A mandatory policy was later passed in 2007, which required the procurement of energy saving products for nine product categories within all levels of government. The program is based on in-country testing and labeling, where qualified products are then placed on a national Energy Efficient Product List. While a more robust monitoring system is still under development, preliminary results show that the procurement of energy saving and environmentally friendly products account for 77.6% of all public purchasing within China's targeted categories.

Thailand
Ms. Sirinthorn Vongsoasup, Energy Efficiency Expert, Department of Alternative Energy Development and Efficiency

Thailand has a national target to reduce energy intensity by 25% by 2030 (compared to base year 2005). The government has mandatory and voluntary policies for energy efficient public purchasing, including the adoption of the ISO 50001 Energy management Standard, accompanied by the use of cooperation and networks. However, EE public purchasing is not mandatory yet. The Pollution Control Department in the Ministry of Natural Resources and Environment has been assigned by the Cabinet in 2007 to initiate a pilot green purchasing program with a goal of 50% of total purchasing in 2011. Energy efficiency standard (set by the Ministry of Energy) and environmental standard (set by the Thailand Environment Institute Foundation and the relevant department in the Ministry of Natural Resources and Environment) are the two main criteria for green products. The Government is now considering plans to expand the green purchasing policy to the entire government sector. The labeling program is an important tool to support green product list and green public purchasing. There are two kinds of Energy Efficiency Labeling under the Ministry of Energy: one for electrical products administered by national utility, EGAT, and one for non electrical products issued by Department of Alternative Energy Development and Efficiency, DEDE. Key challenges to expanding the Thai green purchasing program include a lack of environmental awareness, a lack of information and procurement tools within various government agencies, concerns over the potentially higher initial costs of green products, and difficulties with identifying green products.

Egypt
Dr. Ibrahim Yassin, Managing Director, UNDP Lighting and Appliances Project

Energy efficiency started to be visible on the energy policy map in Egypt in 2006. In 2007, a target was set to reduce energy consumption 20% by 2020. An Energy Efficiency Unit was set up in 2009 for coordination across sectors. Activities focus on public buildings, street lighting and replacement of incandescent light bulbs with compact fluorescent lamps (CFLs). The initiatives on public buildings were interrupted due to the current political instability in the country, but are expected to resume soon. The main challenges to EE procurement in the public sector include a lack of incentives, favoring of the lowest upfront cost, lack of public funding, and a lack of interest from service providers. Egypt has promoted EE in the public sector by training government engineers, and by developing EE building codes and standards for six product categories.

Russia
Mr. Alexey Tulikov, Head of Department, State Legislative Development Energy and Innovations, Russian Energy Agency

A federal law on energy saving and increasing EE adopted in 2009 established EE requirements for public procurement, banned procurement of incandescent light bulbs for state or municipal needs, and established a requirement for products to have EE class (label) information. Federal and municipal authorities and related organizations who are responsible for public procurement projects are obliged to announce tenders in compliance with EE requirements. The primary barrier to EE procurement in Russia is a lack of available products in the market that meet the EE criteria. Consequently, procedures to compare and assess bidders do not include EE and LCC criteria. EE purchasing requirements apply only to the federal agencies and they are not extended to the state and municipal agencies. Finally, there is no monitoring and control system of goods delivery for compliance with EE criteria.

City of Vienna
Ms. Eva-Maria Persy, Coordinator Sustainable Development, Urban Planning Councilor, Ökokauf Wien

Vienna is the capital city with 1.65 million inhabitants. It spends €5 billion on goods and services. Green public procurement (GPP) initiatives started with Vienna's Climate Protection Initiative in 1999. The City of Vienna's GPP program is managed by a Steering Committee that consists of all relevant departments, and working groups of experts have been created. Technical criteria for EE and other green products are developed within the working groups and checked with Ökokauf's legal committee to ensure they comply with local, national and international laws. The City has a budget for GPP research, pilot projects and education. It prepares and distributes informational materials on energy saving and sustainability to city employees and the public. Training is crucial for the implementation of City's GPP policies. The City tracks cost savings and environmental benefits; its results show a significant CO_2 decrease by 103,000 tonnes.

European Commission
Mr. Timothee Noel, Project Officer for Energy Services, Executive Agency for Competitiveness and Innovation

The European Union energy policy is to provide safe, affordable and sustainable energy to consumers. It has adopted policies to cut energy consumption and GHG emissions by 20% and to increase its use of renewable energy 20% by 2020. Its legislation on EE covers various sectors such as services, products, buildings, and vehicles. Product requirements are regulated by *Eco Design* and *Energy Labeling Directives*. Requirements on public procurement have been established by the *Energy Star*, *Clean and EE Vehicles*, *Energy Services*, and *Energy Performance of Buildings Directives and Regulations*. To set standards, the Commission consults with stakeholders to find a suitable balance between technical and economic criteria, and allows the industry to self-regulate. The EU has adopted both voluntary and mandatory policies as well as a voluntary Green Public Procurement initiative that set as a target for 50% of all public tendering processes to be green. Results to date show that 55% of the recent public contracts in the 27 EU countries include at least one GPP criteria and 26% include core GPP criteria. Lessons learned include the need for a mandatory policy, simple and cost-effective criteria, rewards and incentives, improved tools for tracking activities and impacts, improved knowledge exchange as well as more capacity building activities for public procurers

Brazil
Mr. Hamilton Moss, Director, Dept. of Energy Development, Ministry of Mines and Energy

Public sector electricity consumption in Brazil accounts for 1.5% of the country's total electricity consumption. Brazil has an overall EE policy linked with the energy sector planning process and policies for reducing CO_2 emissions. EE programs started in 1984 with an appliance labeling program. The mandatory EE Law passed in 2001 states that the Executive Power is responsible for establishing minimum levels for EE or maximum consumption levels for energy-consuming equipment and machinery. There are no specific targets for the public sector, but the *National Plan of Energy Efficiency* – which was adopted in 2011 and presents guidelines and introduces EE in national planning – proposes targets for public buildings, mainly based on air conditioning and lighting. EE efforts in the power sector have saved 6.16 billion kWh in 2010 through a national electricity conservation program. During the workshop, Brazil adopted a Presidential Decree promoting sustainable public procurement to celebrate World Environment Day, June 5, 2012 in concert with the Rio+20 Summit (United Nations Conference on Sustainable Development) scheduled for June 20-22 in Rio de Janeiro.

Mexico City
Mr. Jorge Lara Osorio, Environmental Management Specialist, Secretary of Environment

The Mexico City government launched the *Efficient Use of Energy Coordination*, *the Mexico City Climate Action Program* and *the Environmental Management System* with the purpose of coordinating and evaluating green and EE purchasing programs. The City has established energy and CO2 reduction targets for its public sector buildings, street lighting and subway system. There are two separate training mechanisms for technical staff and the general public. On June 14, 2011 the *General Guidelines for the Procurement of Goods with Less Environmental Impact* were published, which are mandatory for all Mexico City Government dependences. Public agencies must comply with the specified GPP guidelines and inform the Secretary of Environment which sustainable products they purchase. Mexico City has also adopted a *Green Plan* (Plan Verde) and is implementing an Environmental Management System (EMS), which promotes the purchase of environmentally friendly products; their EMS is focusing on "green" electricity and office supplies as well as products that yield water savings. Energy efficient products are labeled by FIDE. Currently, it is difficult to report on the amount spent on sustainable procurement. Mexico City is working on an information system designed to show the investment in GPP, product variety, quantity and benefits. The Federal Government approved three labels: one for EE products (the Government also recognizes the Energy Star label), one for sustainable forests and one for the recycled material content in paper.

U.S.
Ms. Amanda Sahl, Lead, Energy Efficient Product Procurement Team, Federal Energy Management Program
Ms. Cynthia Vallina, Senior OMB Analyst, Office of Management and Budget

As one of the largest purchasers in the world, U.S. government can have a significant impact on the market. It has a $20 billion annual energy bill and spends about $500 billion annually on goods and services. EE procurement has been mandatory since 2005 based on the Federal Energy Management Program (FEMP) and ENERGY STAR specifications. Every federal government agency is required to report their green purchasing activities and impacts to the U.S. Office of Management and Budget (OMB) on a monthly basis; then OMB issues them a Sustainability and Energy Scorecard every six months. This transparency initiative has helped foster faster implementation. While the U.S. federal government is reducing its energy consumption, it has not reached its energy reduction target yet. The U.S. has also set a goal of providing $2 billion in federal EE investments in 24 months. Federal institutions are coordinating testing standards, and

standardizing EE levels. (LCC is integrated into some of the FEMP and ENERGY STAR standards). The federal government has a centralized buying program for vehicles. Despite the visible progress on EEP and GPP, existing policies are not enough. There is a need to make purchasing process easier and to clarify obligations to ensure compliance. Sharing knowledge and best practices are also crucial for improvement. Efforts are now focused on turning EE purchasing into the norm.

District of Columbia
Mr. Jonathan Rifkin, Special Assistant to the Director, Office of Contracting and Procurement

The District of Columbia (Washington, D.C.) has adopted two policies to promote the procurement of energy efficient and green products. These include an environmentally preferable purchasing policy, which contains vague "maximum extent practicable" language and a more targeted, mandatory Energy Star Efficiency Amendment Act. DC also assembled a team to implement its green procurement initiative. The team included members from a cross-section of procurement and other stakeholders representing all commodity groups as well as officials from schools, the University of D.C., and Departments of Public Works, Transportation, and Environment. They conducted a procurement prioritization process and environmental analysis on a select number of eligible contracts in order to maximize their impacts given their limited resources. Short term goals are to provide training early in the procurement cycle, improve capturing of green spending, and create an interagency committee with members from the procurement and budget offices, Department of Environment, Executive Branch, and a representative from the small business community. The experience showed the need for clarity on GPP criteria. Other important aspects include: (i) robust training and tracking systems; (ii) coordinated, centralized planning; and (iii) a strong standards and certification regime.

SEAD
Dr. Christopher Payne, Office Leader, Environmental Energy Technologies Division, Lawrence Berkeley National Laboratory, U.S.
http://www.superefficient.org/

The Super-efficient Equipment and Appliance Deployment (SEAD) is a voluntary international governmental collaboration whose primary objective is to advance global market transformation of EE products. As of June 2012, SEAD consists of 17 member governments and six partner institutions. SEAD was launched as an initiative by the Clean Energy Ministerial in 2011. Setting minimum efficiency is designed to eliminate inefficient products out of the market while labels, awards, EEP and incentives pull the market by promoting the most efficient models. The SEAD Procurement Working Group builds strategic partnerships to maximize leverage and is engaged with peer-to-peer collaboration on specific activities. The *SEAD Procurement Guidebook* collects experience of the working group, identifies common barriers, summarizes key points and identifies future opportunities. SEAD's other products to date include the SEAD Street Lighting Evaluation Tool, a procurement specification catalog, and a monitoring and evaluation guide.

ENERGY STAR
Ms. Una Song, Program Manager
http://www.energystar.gov/

ENERGY STAR is an endorsement label developed in the U.S. The ENERGY STAR Program, which has been in operation for two decades, advances energy efficiency through several key program elements such as the development of specifications, the coordination of working groups and the dissemination of a variety of implementation tools. To date, the purchase of ENERGY STAR products have contributed to the reduction of 150 million metric tons of GHG emissions annually. Product specifications are developed based on the following guiding principles: significant energy savings; cost-effectiveness; maintained or enhanced product performance; use of multiple technologies for efficiency; and the ability of testing to verify energy consumption and performance.

The working groups bring together different agencies with the same purpose to share best practices, talk about barriers to implementation, and potential solutions. In 2012, ENERGY STAR will continue its commitment with existing international agreements, enhance other ENERGY STAR relationships, and continue to pursue test procedure harmonization.

CLASP
Ms. Anna Lising, Senior Associate, Collaborative Labeling and Appliance Standards Program
http://www.clasponline.org/

CLASP is an international not-for-profit organization whose mission is to serve as the primary resource and voice for appliance, lighting and equipment energy efficiency worldwide. CLASP serves as the Operating Agent for SEAD. As the Operating Agent, CLASP uses its extensive experience in energy efficiency standards and labeling (S&L) for appliances and equipment to support SEAD activities. CLASP provides responds to the needs of policy makers and technical experts in targeted countries and regions by providing technical assistance, training, and capacity building on all aspects of energy efficiency S&L, and capitalizes on opportunities to collaborate and disseminate research and best practice information. The 2010 Global Survey conducted by CLASP evaluates monitoring, verification, and enforcement (MV&E) structures and regimes of S&L programs across 14 countries. The MV&E Guidebook is a project to identify national, regional, local practices and show how a verification program can be prepared.

Alliance to Save Energy
Mr. Jeffrey Harris, Senior Vice President
http://ase.org/

EEP is spreading globally, but programs need continual improvement. Routine transactions can save energy and money, and reduce GHG emissions. Public actions can drive market transformation. For an effective EEP strategy, actors should: turn EEP practices into policies; make it possible by changing rules and regulations; make it easy by providing efficiency criteria and product lists; make it rewarding by recognizing best case examples; make it work by monitoring and testing; and set examples for others. Starting with multiple efficiency levels instead of setting a single level initially can help convince multiple players to participate and eventually converge the market to a higher efficiency level.

Confederation of Indian Industry
Ms. Shagufta Kamran, Executive Officer, Center of Excellence for Sustainable Development
http://www.cii.in/

GPP Guidelines in India were developed by the Prime Minister's Council on Climate Change. It was decided to outsource this task to an external institution, CII, which made the first consultations with the Government in 2008. The GPP Project focused on analyzing GPP procurement opportunities in India, examining other countries' experiences, and developing GPP guidelines. Even though some GPP criteria existed in India, the country lacked a coherent policy. CII studied Japan and some other country examples that could best fit the Indian case. Based on the Japanese policy and discussions with the Ministry of Environment and Forests, the GPP Product List was finalized for nine product categories. Challenges with GPP included the higher upfront costs, a lack of environmental awareness, a lack of managerial support, a lack of tools, a lack of training and a lack of a unified and coordinated approach. To address these challenges, a multi-stakeholder process was adopted. Additional measures on budgeting, voluntary initiatives, a communications strategy and development of an institutional framework are necessary to better facilitate GPP. CII's *Recommendations on GPP Legislation* offers suggestions on the establishment of an institutional framework and provides solutions for the Ministry on how it could introduce GPP in India.

UL Environment
Mr. Mark Rossolo, Director, Public Affairs
http://www.ul.com/environment

UL Environment works to advance global sustainability, environmental health, and safety by supporting the growth and development of environmentally preferable products, services, and organizations. Responsible purchasing should factor environmental attributes, social attributes and price into the decision-making process. Responsible purchasing can decrease costs and increase productivity. Green products can be initially expensive, but they can prevent incurring future expenses such as health-related costs. Keeping green purchasing affordable is possible via the use of price preference, LCC, best value purchasing and cooperative purchasing.

ESMAP
Mr. Jas Singh, Senior Energy Specialist
http://www.esmap.org

To help national/regional/municipal governments develop EEP policies and programs, ESMAP prepared a global review of EEP experiences to date. The report focuses on five issues: 1) public sector EE barriers and programs; 2) EEP policies and trends; 3) main approaches and tools for identifying EE products; 4) EEP program components; and 5) alternative procurement strategies. While a number of barriers—financial to informational to incentive issues—face public EE, a range of interventions have been developed and used around the world to overcome them. EEP can be a powerful mechanism to substantially improve EE within the government sector, while pushing the market for EE products and services. Key approaches, from EE labels to catalogues of products or technical specifications to LCC calculators, can help governments with such programs, however, the institutional set-ups, testing and certification regimes, training programs, partnerships, and monitoring and reporting are also critical to ensure success. Preliminary conclusions and recommendations were offered for discussion among the participants. The final report will be published and sent to all participants in the Fall.

ROUNDTABLE DISCUSSIONS

During the roundtable discussion session on Day 2, the Chair posed a number of questions to participants for discussion. The synopsis below provides a brief summary of some of the key responses and themes discussed during this session.

Question: What are some of the major ***drivers and barriers*** with your EE purchasing programs?

Responses:

The representative from *Egypt* indicated that changing the mentality of public officials is a barrier. Budgetary constraints, such as public agencies not being able to retain their energy savings, are a big challenge. Governments should not reduce budgets, but provide incentives for EE. Political instability in Egypt has also slowed down progress on the national EE program.

CII (India) noted they would like to learn whether EPP/GPP could have any sort of implications on trade. They lack the experience, so they would like to find out if the international community had any examples where EPP has caused trade implications.

Thailand noted that a lack of awareness among the general population is difficult to overcome. ESCOs can help but they are still underdeveloped in Thailand.

FEMP (U.S.) indicated that the complexities of public procurement systems make influencing them a barrier.

CLASP noted that initiatives to establish EEP are often driven by energy departments and the ministries of energy, but these institutions are not responsible for procurement. They underlined the difficulties and importance of starting a dialogue across relevant government agencies.

China identified two barriers: (i) staff training, which is crucial. Unless procurement staff know the technical specifications behind EE labels, they will not understand the benefits; and (ii) a lack of guidance for staff on how to choose the right products.

The *EC* mentioned that setting up sustainable procurement policies is important for green growth. Job creation is also an important driver. *RPN* noted that green jobs that could not be exported were important for politicians. The *World Bank* noted that visible EE improvements, such as public lighting and buildings can also represent urban renewal, helping create more livable cities.

Mexico City noted two barriers: (i) a lack of communication between procurement and policy staff, and (ii) behavior of procurement staff. Although the rules are determined by the policy, staff know how to get around these rules when they need to. Changing behaviors and making EEP the "normal" practice is important.

USDOE mentioned a lack of responsibility and accountability as major barriers that lead to "finger pointing". Procurement staff or technical staff either do not accept responsibility or are not given responsibility to comply with EEP. This makes it difficult to create mandatory policies.

An attending consultant indicated that energy prices are a driver. When prices increase faster than inflation, people are more inclined to follow EEP to generate cost savings. A representative from the *World Bank* responded that low energy prices are a barrier.

Russia indicated collusion as a barrier in public procurement. In Russia, price is the main criteria used to ensure competition. The government can include EE criteria in its tender documents, but cannot use these criteria to compare bidders. The government also wants simple procedures and processes, so they are unlikely to use approaches such as developing detailed catalogues with technical specifications.

Question: What approaches have you used for product testing and certification?

Responses:

The *City of Vienna* is using a catalogue of technical specifications which has worked well for their green purchasing program. For example, a working group was formed regarding paper products. The technical group met with the main 4-5 European paper companies and created a sample folder

papers that met the criteria, which procurement agents/city staff could examine when purchasing. The importance of political support was also crucial, without which the city could not have banned the use of products with PVC and tropical woods.

FEMP mentioned that they develop technical specifications when ENERGY STAR is not available and have received suggestions to have a label. However, since creating a new label is resource-intensive, FEMP is unlikely to do so.

The representative from *ASE* responded that the value of multiple EE labels should be carefully assessed and felt that EE product lists may be more efficient than labels. He emphasized the importance of collaborating with industry.

Thailand noted that EE policies are quite strong and they have been promoted for a long time. Energy efficiency standard is certified by the Ministry of Energy, so many green products can be certified by Thailand Environment Institute Foundation, an NGO. She indicated they have not faced any problems with credibility of the labels or manufacturer complaints to date.

Russia does not have any EE labels, but uses EE classes instead. The government requires only A class products where available. The government also relies on technical descriptions in regulations instead of specifications, and has used bans on some products (e.g., incandescent bulbs).

Mexico City indicated that they do not accept paper with less than 60% recycled material content or printers that cannot do double-side printing. This is one of the examples of testing in the policy.

Egypt mentioned that they create a short list of prequalified vendors and then pick random samples from each for independent testing. Only those that pass the test will have their bids accepted. Once a vendor is selected, each delivered batch is subject to testing. If the products fail, the contract can be terminated.

The City of Vienna noted that if a procured product does not meet the quality promised, there are several ways to sanction such as blacklisting the company for a certain time.

On testing and certification harmonization

China mentioned that they are working to harmonize testing procedures and technical standards with other countries. They initiated a GEF-supported regional project for harmonization and testing starting with seven product groups. The government has also signed an MOU with the U.S. Government. But, China does not yet accept labels from other countries.

The *ENERGY STAR* representative noted that they support international testing harmonization, but indicated that every country's government market is different. They focus on the needs of the U.S. government market.

GSA (U.S.) has developed an interagency method for harmonization and a set of guidelines to choose labels. As long as the labels meet the environmental guidelines, their origin does not matter.

CLASP mentioned that SEAD is also working on testing and standards harmonization.

Thailand noted that some labels are based on manufacturer testing, but the government routinely selects products at random for independent testing and pays for these products to be tested. They feel it is up to the market to determine whether or not to accept labels from other countries.

A *World Bank* representative mentioned that an unusual label in Korea, for banned products, has actually worked very well and represents an interesting alternative to an outright product ban.

The *EC* stated that only the European Eco Label and Energy Label are relevant for public procurement and that they are an excellent source for finding criteria. However, governments must specify the minimum technical requirements in the bidding document and cannot require a label, as such a provision would be viewed as discriminatory. Suppliers are required to certify that they meet the technical requirements, which can be done with the EU labels or certification from an accredited laboratory.

Russia noted that they are trying to harmonize technical specifications with the EU, but updating has proven to be difficult. Russia is working to harmonize standards and create a labeling system with Kazakhstan and Belarus, which would be based on the EU directives.

Egypt noted that they have an EE label with a shape similar to the EU Energy label, however they have different minimum efficiency levels due to the different climate conditions.

The EC mentioned that EU's GPP criteria include details on how procurement staff can prepare tenders for 19 product categories. Guidelines provide the minimum criteria, which correspond to the energy efficiency criteria of the best EU energy labels. This is a voluntary guideline.

ENERGY STAR noted that they have an energy saving calculator which can be included in LCC calculation. They are trying to reach people to communicate their calculator and keep track of monthly downloads.

FEMP stated that they are working to make LCC calculators user-friendly. They provide guidance and make the tools available for people interested in using them. The calculators do not reach the technical market as much yet; however, they are used by manufacturers.

The City of Vienna mentioned that they post their technical standards on their public website and include it in press releases. They recommend cities starting with GPP to rely on EU's GPP criteria.

**** LUNCH BREAK ****

The *World Bank* asked why U.S. procurement agents do not use technical specifications that are available under FEMP.

ENERGY STAR responded that agents may be unaware that ENERGY STAR covers that specific product category.

GSA responded that the government needed to be better at updating the available information and making it accessible and easy to understand.

FEMP added that compliance may be higher than their tracking figures indicate, since producers are well aware that the Federal government is obligated to purchase ENERGY STAR products. So, even if the contract doesn't specify ENERGY STAR, bidders usually offer them.

USDOE noted that SEAD, led by CLASP, has a cataloging effort for procurement specifications on different product categories from various countries. The catalog allows access to data and comparison. It is a work in progress and they want to expand it to more countries. The participants suggested including the summary of testing procedures in the catalogue. Several countries agreed to share their specifications with SEAD.

The *City of Vienna* underlined the importance of having adequate resources. When a new technical issue arose, it was important that the City could hire an expert to study and advise on the issue.

On lifecycle costing and best value analyses

The *World Bank* asked how many participant countries use lifecycle cost (LCC) analyses to develop their EE or green specifications.

ENERGY STAR noted that they use several criteria to determine their technical specifications, including cost-effectiveness but also energy savings potential, multiple qualified suppliers, ability for proper product testing, etc. Focusing on products that represent the top 25% of the market is important to show the government is a market leader.

The City of Vienna responded that they do not do an in-depth LCC to determine their green purchasing specifications. Rather, they develop criteria within expert working groups where they feel there are environmental benefits and still sufficient suppliers to ensure competitive proposals.

The *EC* stated that the EU Directive on Clean and Energy Efficient vehicles includes an LCC methodology for procurement agents.

Thailand noted that quantifying EE life cycle cost is clearly understood and implemented, but quantifying environmental impacts such as a product's CO_2 footprint is still under development. They do not have enough data or the necessary methodology to undertake such analyses in each process.

ASE stated that they felt there are two points for setting up technical specifications: (i) look for best practices that are commercially viable; and (ii) look for the point beyond which competition will suffer.

The *World Bank* noted that a key demand of developing countries is to ensure value for money, especially since their needs are so great and resources so limited. Asking governments to spend additional budget on benefits which are more difficult to qualify is very difficult. The lack of developed and widely accepted methodologies and tools for LCC analyses, to qualify benefits of

both EE and green products, was deemed particularly disappointing and noted as a key constraint to further discussions in this area.

On financing and financial incentives

CII noted that guidelines for financing and incentives in India are still under consideration. The government is considering relaxation of the L-1 principle (lowest cost only). No incentives are in place but it is proposed that the government allocate increased budgets to allow for green purchasing to take place.

FEMP noted that the U.S. stimulus funds have supported EE over the past few years. FEMP is now looking into two areas: (i) expanding requirements for EE products to service contracts, and (ii) developing greater collaborations with utilities and their incentive programs. *ENERGY STAR* mentioned they work closely with utilities on rebate programs.

The *EC* noted that many Member States had financing programs for public authorities, but mostly for building retrofit programs rather than product purchasing. The EU offers for instance investment support via the European Energy Efficiency Fund (EEEF) and offers TA, if needed. In France, there is a White Certificate scheme which obliges energy suppliers, such as utilities, to undertake EE programs. This scheme can provide extra financial leverage to municipalities when implementing EE measures.

Russia noted that they have draft schemes for white (EE obligations) and green (RE obligations) certificates for utilities. They drew experience from France, Italy and Sweden. They are talking with the EU about implementing this system in Belarus, Kazakhstan and Russia. They also provide subsidies from the federal budget to the regions – about 5 billion rubles.

Thailand responded that they have financing mostly for EE activities. They allocate more than 200 million Baht each year through the Energy Conservation Fund. They can also provide direct subsidies for energy conservation projects, both for public and private facilities.

Egypt noted that there are no direct subsidies, but electricity companies have distributed CFLs for 50% of the retail price. The Ministry of Local Development has invested US$50 million to introduce energy efficient street lighting.

Brazil explained that the government requires 0.5% of utility revenues to be used for energy efficiency. 60% of these funds are used for low-income EE programs such as distributing CFLs and efficient refrigerators. Low-interest loans are available to the municipal governments to improve universal access to electricity.

Mexico City responded that the Federal government, in association with manufacturers, purchases CFLs to replace incandescent bulbs. Public buildings have to pay a municipal tax in Mexico City, but they can receive an exemption if their facility qualifies as a “sustainable” public building.

ASE noted that it is important to distinguish between financing for a one-time project and a mechanism that is available over time for many, smaller purchases. There are also leasing strategies and vendor financing that can help overcome the initial cost barrier.

Question: What are various countries and programs doing to improve monitoring and reporting?

Responses:

USDOE pointed out that they are in the process of contracting the development of a monitoring guide.

The *EC* noted that ICLEI has a Procura plus manual, which recommends using a score card to assess EEP/GPP compliance.

Mexico City has a monitoring system for all products related to electric goods. The problem was monitoring office products, which constitute 50% of all public purchasing. There are no labels for green office products or sustainable products in Mexico. The lack of labels makes it difficult to identify EE products. Agencies report back to the center the quantities they purchased.

Brazil stated that they cross check information and do periodic evaluations for monitoring for various EE programs, but it is not as regular as it could be. Better comparisons of international data would help.

Egypt mentioned that relying on manufacturer reporting is not always reliable, as they often manipulate sales data in order to avoid tax payments.

China stated that public agencies need to report to the central government when they want to issue a tender, and this information is used to allocate budgets. The government collects data through these reports. However, these are only their plans and not actual purchases and this was not an efficient way to monitor compliance.

Thailand noted that they monitor through departments' reports. They gather information from the purchase reports on use of green technical specifications. But there is no monitoring of results.

Question: What recommendations do you have for the international community to support your efforts?

Responses:

USDOE suggested developing an improved understanding for LCC analyses can help governments understand the importance of the total cost of ownership. Development of a more complete methodology for LCC could help both improve technical standards and acceptance that lowest LCC is preferable to only looking at the purchase price.

Brazil noted that it is important to start on a small scale with a few projects. He also suggested the World Bank to provide examples with simple LCC analyses.

ASE suggested adding statistical information about what is at stake to the report, i.e., EE potential and cost savings. He mentioned engaging manufacturers and energy suppliers could be useful. Better cross-references amongst websites could help users more easily find the information and resources they need.

City of Vienna suggested that sustainable public procurement could be a new tool used by the World Bank to promote social issues.

ANNEXES

ANNEX 1: Workshop Agenda

Public Procurement of Energy Efficient Products
Practitioners Workshop
June 7-8 2012, Washington, DC
Room MC C1-200
1818 H Street N.W.

Agenda

Day 1 – Thursday, June 7, 2012

9:00 AM	Welcome (Mr. Rohit Khanna, Program Manager, ESMAP)
9:15 AM	Introduction (Jas Singh, Project Task Team Leader)
9:45 AM	Attendee Presentations - Asia
	Mr. Tienan Li, Director, Center for Industrial Energy Efficiency, CHINA *Ms. Sirinthorn Vongsoasup, Energy Efficiency Expert, Dept. of Alternative Energy Development and Efficiency, THAILAND*
10:15 AM	Coffee Break
10:30 AM	Attendee Presentations (continued) – Middle East and Africa
	Dr. Ibrahim Yassin, Managing Director, UNDP Lighting and Appliances Project, EGYPT *Mr. Norman Radzivhoni, Energy Officer, Department of Energy, SOUTH AFRICA*
11:00 PM	Attendee presentations (continued) – Europe
	Mr. Alexey Tulikov, Head of Department, State Legislative Development Energy and Innovations, Russian Energy Agency, RUSSIA *Ms. Eva-Maria Persy, Coordinator Sustainable Development, Ökokauf Wien, City of Vienna, AUSTRIA* *Mr. Timothee Noel, Project Officer for Energy Services, Executive Agency for Competitiveness and Innovation, EUROPEAN COMMISSION*
11:45 PM	Questions and Answers
12:15 PM	Lunch
1:30 PM	Attendee presentations (continued) – The Americas
	Mr. Hamilton Moss, Director, Dept. of Energy Development, Ministry of Mines and Energy, BRAZIL *Mr. Jorge Lara Osorio, Environmental Management Specialist, Secretary of Environment, Mexico City, MEXICO* Experience from US Federal Energy Management Program: *Ms. Amanda Sahl, Lead, Energy Efficient Product Procurement Team, Federal Energy Management Program* *Ms. Cynthia Vallina, Senior OMB Analyst, Office of Management and Budget* *Mr. Jonathan Rifkin, Special Assistant to the Director, Office of Contracting and Procurement, DISTRICT OF COLUMBIA*
2:45 PM	Questions and Answers

3:00 PM Coffee Break

3:15 PM Partners Presentations

Dr. Christopher Payne, Office Leader, Environmental Energy Technologies Division, Lawrence Berkeley National Laboratory, Super-efficient Equipment and Appliance Deployment (SEAD) Initiative
Ms. Una Song, Program Manager, ENERGY STAR
Ms. Anna Lising, Senior Associate, Collaborative Labeling and Appliance Standards Program (CLASP)
Mr. Jeffrey Harris, Senior Vice President, Programs, Alliance to Save Energy

4:15 PM Private Sector

Ms. Shagufta Kamran, Executive Officer, Center of Excellence for Sustainable Development, Confederation of Indian Industry, India
Mr. Mark Rossolo, Director, Public Affairs, UL Environment

4:45 PM Questions and Answers

5:00 PM Wrap-up

Day 2 – Friday, June 8, 2012

9:00 AM Presentation on Global Review (Jas Singh, World Bank)

9:45 AM Questions and Answers

10:00 AM Introduction to Roundtable

10:15 AM Drivers and Barriers

- *Why did your government initiate, or is considering, such a program? What are the goals?*
- *What were/are some of the biggest barriers to launching such a program?*
- *What types of actors were the biggest proponents? Which stakeholders resisted the initiatives? How was such opposition overcome?*

10:45 AM Coffee Break

11:00 AM Core Policy/Program Elements

- *What are the core elements of your government's energy efficiency purchasing policies and/or programs? Are they mandatory or voluntary?*
- *If mandatory, how does enforcement work? If voluntary, are there incentive mechanisms in place?*
- *What training programs are in place to assist participation/compliance?*
- *Which tools have been used to help agencies?*
- *What has worked well? What hasn't?*
- *What institutional arrangements are in place to support it? What are the benefits and challenges of such arrangements?*
- *What approaches has the government taken to address incentive and behavior barriers?*

11:45 AM Product Testing and Certification

- *How are your products tested and certified? Is it effective?*
- *How are products under the policy/program identified? Do you have an existing label?*
- *How are the specifications determined? How often are they updated?*
- *Does your program recognize labels from other countries or jurisdictions?*

12:15 PM Lunch

1:30 PM Monitoring and Results

- *Does your program have a monitoring system in place to track purchases, compliance, energy savings, etc.?*
- *How can monitoring systems be improved?*
- *Do you report energy savings? CO_2 reductions? Other indicators?*
- *Has a broader impact assessment been conducted to determine the impacts of the program on the market? If so, what has the extent of market transformation been?*

2:00 PM Partnerships

- *Have you developed a partnership with the manufacturing industry on such programs? If so, how and what has the experience been?*
- *Have you partnered with other jurisdictions to combine procurements in order to reduce costs?*
- *Has the government partnered with other organizations, such as technical institutes, nongovernmental organizations, etc. to help further promote and implement the program?*

3:00 PM Coffee Break

3:15 PM Small group breakout session - participants will be broken up in small groups to discuss alternative procurement strategies and how the international community can help governments with such programs.

<u>Alternative Procurement Strategies</u>

- *Has the government considered any alternative procurement strategies? If so, which ones?*
- *Can energy efficient products be purchased without specifying the technology?*
- *What other options do you see to allow greater innovation amongst suppliers?*
- *What are your plans, if any, for "green" procurement? What do you see as the key differences and challenges?*

<u>International Community</u>

- *How can lessons learned from other countries, particularly developed countries and cities, be shared most effectively with one another?*
- *How can the international community, donors, etc. help governments with such programs?*

4:15 PM Small group reporting

4:45 PM Wrap-Up

ANNEX 2: List of Participants

	#	Title	Name	Title	Organization	Email
CLIENT INVITEES	1	Ms.	Shagufta Kamran	Executive Officer	CII-ITC Centre of Excellence for Sustainable Development, India	shagufta.kamran@cii.in
	2	Mr.	Jorge Lara Osorio	Environmental Management Specialist	Environmental Management System, Secretaría del Medio Ambiente, Mexico City	jlara@dgpa.df.gob.mx
	3	Mr.	Tienan Li	Director/Professor	Center for Industrial Energy Efficiency (CIEE), China	litn@cieec.org.cn
	4	Mr.	Hamilton Moss	Director of the Energy Development Department	Ministry of Mines and Energy, Brazil	Hamilton.moss@mme.gov.br
	5	Mr.	Alan Poole	Energy Efficiency Advisor	Brazil	alan.douglas.poole@gmail.com
	6	Mr.	Alexei Tulikov	Head of Department	State Legislative Development Energy and Innovations, Russian Energy Agency, Russia	Tulikov@rosenergo.gov.ru
	7	Ms.	Sirinthorn Vongsoasup	Energy Efficiency Expert	Department of Alternative Energy Development and Efficiency, Thailand	sirinthorn_v@dede.go.th
	8	Mr.	Ibrahim Yassin Mahmoud	Managing Director	UNDP, Egypt	ibrahim.yassin.mahmoud@gmail.com
DEVELOPED COUNTRY INVITEES	9	Ms.	Nancy Gillis	Director	Federal Supply Chain Emissions, General Services Administration (U.S.)	Nancy.Gillis@gsa.gov
	10	Ms.	Mikhail Haramati	Intern	Office of Management and Budget (U.S.)	mharamati@gmail.com
	11	Mr.	Timothée Noël	Project Officer	Executive Agency for Competitiveness and Innovation European Comission	Timothee.NOEL@ec.europa.eu
	12	Ms.	Eva-Maria Persy	Coordinator Sustainable Development	Okokauf Wien City of Vienna (Austria)	eva-maria.persy@wien.gv.at
	13	Ms.	Sarah Blount	Intern	Energy Efficient Product Procurement Team, FEMP (U.S.)	Sarah.Blount@EE.Doe.Gov

	14	Ms.	Kavita Ravi	Policy Fellow	AAAS Science and Technology, Department of Energy (U.S.)	kavita.ravi@hq.doe.gov
	15	Mr.	Jonathan Rifkin	Special Assistant to the Director	Office of Contracting and Procurement, District of Columbia	jonathan.rifkin@dc.gov
	16	Ms.	Amanda Sahl	Lead, Energy Efficient Product Procurement Team	Energy Efficient Product Procurement Team, FEMP (U.S.)	Amanda.sahl@ee.doe.gov
	17	Ms.	Una Song	Program Manager	Energy Star (U.S.)	song.una@epa.gov
	18	Ms.	Cynthia Vallina	Senior OMB Analyst	Office of Management and Budget U.S.	Cynthia_A._Vallina@omb.eop.gov

PARTNERS	19	Ms.	Graziella Siciliano	Program Manager	Alliance to Save Energy	gsiciliano@ase.org
	20	Mr.	Jeffrey Harris	Senior Vice President - Programs	Alliance to Save Energy	JHarris@ase.org
	21	Ms	Anna Lising	Senior Associate	SEAD Team, CLASP	alising@clasponline.org
	22	Dr.	Christopher T. Payne	Office Leader	Environmental Energy Technologies Division, LBNL	ctpayne@lbl.gov
	23	Mr.	Mark Rossolo	Director of Public Affairs	UL Environment	MRossolo@greenguard.org

WORLD BANK PARTICIPANTS	24	Mr.	Jas Singh	Senior Energy Efficiency Specialist	Europe and Central Asia Energy Unit World Bank	jsingh3@worldbank.org
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	26	Mr.	Ivan Jaques	Senior Energy Specialist	ESMAP World Bank	ijaques@worldbank.org
	27	Ms	Alicia Culver	Consultant	Responsible Purchasing Network	alicia@responsiblepurchasing.org
	28	Mr.	Rohit Khana	Program Manager	ESMAP World Bank	Rkhanna2@worldbank.org
	29	Mr.	Feng Liu	Senior Energy Specialist	ESMAP World Bank	fliu@worldbank.org
	30	Ms.	Anke Meyer	Consultant		ankemeyer@me.com

ANNEX 3: Hot Links to Presentations

City, Country	Link
China	Government Procurement Policy for Energy Efficient Products
Thailand	Public Procurement of Energy Efficient Products – Status in Thailand
Egypt	EE Public Procurement in Egypt
Russia	Public Procurement of Energy Efficient Products in Russia
Austria	Okokauf Wien: Over 10 Years of Success in GPP
European Commission	Public Procurement of Energy Efficient Products – European Overview
Brazil	Public Procurement of Energy Efficient Products in Brazil
Mexico City	Mexico City Government Environmental Management System
United States	U.S. Government Procurement of Energy Efficient Products
District of Columbia	The District of Columbia GPP
SEAD	SEAD Procurement Working Group
ENERGY STAR	Energy Efficient Purchasing
CLASP	Accelerating Energy Efficiency and Market Transformation through Appliance Standards and Labeling
Alliance to Save Energy	EE Public Procurement: Challenges and Lessons Learned
Confederation of Indian Industry	Green Public Procurement Guidelines in India
UL Environment	Public Procurement for Energy Efficient Products UL Environment
ESMAP	Public Procurement of Energy Efficient Products