

Asia-Pacific Economic Cooperation

# APEC SYMPOSIUM ON THE IMPLEMENTATION OF GOVERNMENT ENERGY EFFICIENCY PROGRAMS

Kunming, China 2-3 August 2004

# Session 10: Conference Wrap-Up

# 2-3 August 2004, Kunming, China

# Communiqué

# **INTRODUCTION**

Forty-five (45) participants from 12 economies attended an APEC workshop in Kunming, China to discuss lessons learned and prospects for increased international cooperation in government energy management programs.

# **WORKSHOP OBJECTIVES**

- Explore Best Practices
  - Share experience and information on implementation of government energy management programs
  - Procurement, regulatory measures, promotion and incentives in the government building sector
- Share Lessons Learned
  - Discuss the effectiveness of government energy-efficiency programs
  - Describe the primary barriers and how they can be overcome
  - Share experience with third-party energy efficiency and finance services?
- Promote International cooperation
  - Discuss the level of information-sharing and cooperation that would be useful
  - Discuss current and proposed mechanisms for cooperation
  - Discuss effectiveness of regional and international cooperation

# **GENERAL FINDINGS**

**Range and diversity of activity.** The participants were impressed by the amount and range of activity in government energy management programs. Speakers from the 12 participating economies presented results from a diverse range and number of programs covering building design and energy management; EE procurement; and EE in the transportation sector.

**Significant opportunities for cooperation.** Even though many of the participants had significant implementation experience, all of the participants said they learned about new programs and approaches from the sharing of information at the Symposium. It was agreed that significant opportunities exist for sharing information and best practices, and in some cases program coordination. These opportunities exist both between levels of government and

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agencies within a country; as well as regionally and internationally.

**Demonstrated program benefits.** The presentations at the Symposium provided concrete evidence that government-sector programs have achieved significant energy reductions in many economies. In addition, participants stressed that the benefits were not merely energy cost savings, but also include additional benefits such as pollution reduction, greenhouse gas reductions, increased employment and worker productivity, and improved energy security.

# RECOMMENDATIONS

The consensus recommendations are organized into three categories:

- Policy Leadership and Framework
- Implementation: Mechanisms for Program Delivery
- Coordination and Information Sharing

#### **1.** Policy Leadership and Framework

**Policy must be linked to action.** While the participants agreed upon the need for a strong policy framework, they also stressed that all policy should be linked directly to implementation, and that the results of the implementation should continually be used to convince decision-makers and improve and develop the policy framework.

**Build support among top policymakers.** There is a need for advocates (government officials, NGOs, consultants) working in this field to develop a simplified and coherent message explaining the rationale for, and benefits of, government energy management programs. The best way to build long-term support among decision-makers is to implement practical programs, develop compelling case studies, and aggressively market the case studies and benefits to policymakers and decision-makers. To sustain program effectiveness (and support among policymakers), it is important to ensure ongoing monitoring and measurement and monitoring of program impacts.

**Governments must lead by example.** This point is critical to the success of all energyefficiency efforts throughout the economy. If the government leads by example (i.e. implementing EE procurement), it will improve the effectiveness of its programs throughout the private sector. But if the government fails to implement energy-efficiency practices itself, then this will undercut the government's efforts to promote energy management throughout the economy.

Highlight the multiple program benefits. Instead of focusing only on the energy cost savings,

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government energy management programs should be recognized for the multiple benefits that they yield. The benefits include not only reduced energy costs, but also reduced environmental impacts (e.g., reduced pollution and greenhouse gas emissions) and also social benefits (e.g., increased employment or worker productivity).

**Recognize that the programs improve energy security.** Government energy management programs can have a significant and measurable impact on energy use. An important benefit to these programs, which should be recognized by policymakers, is that they can improve the long-term energy security of the economy by reducing the need for investment in new energy sources and reducing dependence on imported energy.

**Framework for Implementation.** The following five-point framework can be used for officials to plan implementation of government energy management programs: (1) policies, targets and reporting; (2) existing and new public buildings; (3) energy-efficient procurement; (4) public transport, water, and other public utilities; and (5) training, information, and recognition.

Assign central responsibility for government-sector energy management. There is a need for a central focal agency to direct and track efforts. In addition, the central agency acts as a coach and supporter to the government agencies and facilities.

# 2. Implementation: Mechanisms for Program Delivery

**Build capacity for implementation.** It is critical to have staff and facility managers involved in conceptualization and design of the programs. This should be part of a process for building capacity of the agencies to implement and manage programs and projects. This point is particularly important for international agencies that are providing technical assistance to develop government energy management programs.

**Implementation guidelines and checklist.** A number of the participants felt that it would be useful to have guidelines for model program development. Implementers could use these guidelines as inspiration and also a checklist as they develop and implement their programs. Such model guidelines could also help them to benchmark their programs against other economies.

Assign Accountability and reward performance. Facility energy managers need to view energy savings as an opportunity and also a priority in their work. This can be supported and enhanced by recognizing superior performance through awards, presented by high-level government officials or politicians.

**Measurement and feedback is critical.** Participants stressed the importance of monitoring and measuring the results of projects. This begins by ensuring adequate budgetary resources are

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allocated for monitoring; that effective processes are set up to collect and manage the data; and that the data are regularly provided to program managers and higher-level decision-makers.

**Use success stories and case studies as marketing tools.** It is critical for committed individuals managing effective programs to compile and use the results of their implementation to convince decision-makers and improve and develop the policy framework.

**Tailor the message to management.** It was agreed that outreach efforts (e.g., initial marketing and energy audit reports) need to convince top management that energy management can produce real benefits and be a priority. The participants noted that EPA of the United States and EECA of New Zealand have developed effective methods for supporting framework for energy management decision-making.

**Clear criteria and bidding specifications.** Participants agreed that for EE procurement efforts to succeed, the government must have a transparent procurement process, and set clear technical criteria (i.e. qualifying EE levels or calculation methodologies) for product selection. Government agencies should clearly specify the Standard Operating Procedure that they use for developing performance specifications and carrying out procurement bidding.

**Shift from First Cost to Life Cycle Cost.** Procurement processes that only account for the first cost of purchasing energy-using equipment are a major barrier to the procurement of energy-efficient equipment or facilities. Participants agreed that is essential to factor in the long-term energy operating costs for products and equipment when making a procurement decision.

**Start with easy products.** It was recommended that government procurement programs should start with products that are easier to implement, and that the program design should be kept simple, to maximize the chance of initial successes.

**Promote innovative uses of the web and ICT.** The participants agreed on the benefits of using the Internet and information and communications technologies (ICT) to assist in benchmarking and tracking progress in improving government energy management. As an example, notable projects from Australia were mentioned including the Whole-Of-Government Energy Report (WOGER) and on-line Energy Data Gathering And Reporting (EDGAR) in Australia; the Government e-Procurement System (GePS) in Korea; and software and calculation tools available through the government energy management program operated in Mexico, and through the Cities for Climate Protection Campaign coordinated by the International Council for Local Environmental Initiatives (ICLEI). However, it was noted that the processes have to be in place and working properly before the ICT approach will help.

**Review available mechanisms for raising funds.** Participants discussed various mechanisms and models for financing energy efficiency in the public sector, for both capital investment and operating and maintenance (O&M) of energy-using equipment.

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<u>ESCOs and third-party finance.</u> A number of participants discussed the use of energy service companies (ESCOs) to guarantee energy savings and performance and to facilitate financing of energy-efficiency projects in government facilities. The primary mechanisms for third-party project finance are shared savings (in which the ESCO assumes the technical and credit risk) and guaranteed performance (in which the ESCO assumes the technical risk and a bank assumes the credit risk). Additional third-party mechanisms include leasing (equipment and office space); and manufacturer up-front financing of the incremental costs of EE products.

<u>Revolving Funds.</u> The use of revolving funds, in which the budget savings generated through energy-efficiency projects can be set aside for a revolving fund, which can be accessed by the local agency to reinvest in energy management projects.

# 3. Coordination and Information Sharing

**APEC as a forum for information sharing.** APEC is a good foundation for sharing information and experience among economies on formulation and implementation of government energy management efforts.

**International trade frameworks.** It is important to design government EE procurement efforts to be consistent with frameworks for free trade promotion; and also to explore whether these frameworks can be used to facilitate coordination or harmonization of EE procurement specifications.

**Technical standards are an important foundation.** The technical specifications for energy performance test procedures, product energy labeling requirements (and in some cases MEPS) are an essential technical foundation for setting targets in government energy management programs.

**Explore regional trade benefits from common EE specifications.** Participants agreed that it could be useful to explore the possibility of alignment energy performance test procedures, and in some cases the MEPS and endorsement levels for high-efficiency products. Such alignment can increase the impact on manufacturers by increasing demand for procurement of energy-efficient equipment.

**Long-term goal of an international standard.** It could be an eventual goal to work toward an international standard specifying guidelines and best practice for government energy management programs.

**NEXT STEPS** 

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Participants agreed on a set of next steps that should be pursued in order to build on the interest and momentum generated at this Symposium and continuing to share information and coordinate government energy management programs across APEC economies.

**1. Post information from the Symposium on APEC ESIS web site.** The first follow-up step will be the posting of workshop documents and information on the APEC Energy Standards Information System web site (<u>www.apec-esis.org</u>). Information could include the workshop summary report; workshop presentations; reference documents provided by participants; and links to web sites and tools used by individual economies in their government energy management programs. A link should also be placed to the extensive information on government energy management programs that can be found on the web site of the PePs (Promoting an Energy-efficient Public Sector) initiative (www.pepsonline.org).

**2.** Comparative study of government energy management across APEC economies. Such a study would entail compiling and comparing information on programs in APEC economies; gather and organize documentation (e.g., source documents and procurement specifications) on the APEC ESIS web site; and compiling or referencing software and calculations tools that have been developed for use in government energy management programs.

**3. Explore possibility for a biannual international conference on government energy management.** While the participants agreed that information sharing through e-mail and the Internet would be important to build on the momentum from this Symposium, it was also agreed that it would be important to have periodic (perhaps biannual) face-to-face meetings bringing together practitioners of government energy management programs.

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