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IPEEC SUBMISSION to ADP

Updates on recent Energy Efficiency Improvement Activities of IPEEC

The International Partnership for Energy Efficiency Cooperation (IPEEC) is a unique intergovernmental partnership that focuses exclusively on energy efficiency improvements. IPEEC members include economies that are both energy producers and end-users. Together they represent over 75% of global GDP, energy use and green-house gas emissions. In 2013, IPEEC was proud to welcome South Africa as its 16th member.

Using a distributed leadership model, IPEEC's member-led Task Groups implement its substantive work programme. Participation in Task Groups is voluntary. In addition, the IPEEC Secretariat provides valuable coordination, communication, and analytical support.

In 2013, IPEEC member economies invested significant resources to improve energy efficiency. These actions have helped decrease global energy intensity (see Figure 1). However, several global energy efficiency potentials remain untapped in each sector. Trends such as the emergence of new middle classes and urbanisation in developing economies, as well as the proliferation of home electronics and overall network connected devices, require additional efforts to address the global increase in energy consumption. According to IEA's *World Energy Outlook 2013* scenarios, energy efficiency could account for almost half of the total abatement of Greenhouse gases emissions by 2020 (1.5 Gt of CO₂). Finally, according to the IEA's *Market Report*, the market size for energy efficiency ranged from USD 147 to 300 billion in 2011, the most recent year for which data is available, and continues to grow.

Figure 1. Sectoral Energy Efficiency Potentials





Source: IEA, World Energy Outlook, 2012.

Accomplishments in 2013

In 2013, members worked on a broad range of energy efficiency issues, resulting in significant outcomes, as follows:

Policies, Regulations and Finance Mechanisms

- Data on Energy Consumption in Latin America: Under the Task Group on Improving Policies through Energy Efficiency Indicators (IPEEI), led by the French Energy Agency (ADEME), the United Nations Economic Commission for Latin America and the Caribbean (ECLAC), and several Latin American countries, IPEEC supported several capacity building initiatives. Efforts focused on monitoring energy efficiency policies through indicators and developing a database on Energy Efficiency Indicators (BIEE) that provides detailed information on energy use for several Latin American countries.
- Multilateral and International Energy Efficiency Programmes: The IPEEC Secretariat compiled a list of multilateral and international energy efficiency programmes implemented in Brazil, China, India, Mexico, Russia and South Africa known as Making Energy Efficiency Real (MEER). The MEER database includes detailed information and lessons learnt from each project. The list and database are available on IPEEC's website.
- A Report on Finance Mechanisms in France, India, Japan, Russia and the USA: Under the Task Group on Assessment of Energy Efficiency Finance Mechanisms (AEEFM), led by India, IPEEC documented and assessed several existing energy efficiency finance mechanisms used in the participating countries.

Institutional Capacity Building and Training



Capacity Building and Training in Asia: Under the Task Group on Worldwide Energy Efficiency Action through Capacity Building and Training (WEACT) led by Italy, IPEEC facilitates the development, improvement and implementation of energy efficiency policies in developing and emerging economies by coordinating regional workshops with key policymakers. The May 2013 workshop in Seoul, Korea, brought together South-East Asian decision makers from government, industry, academia and civil society.

Key Sectoral Initiatives

- Industry is one of IPEEC's top priorities, as this sector accounts for one third of global energy consumption and almost 40 percent of global greenhouse gas emissions. IPEEC Task Group activities in 2013, led by Japan and the United States, included:
 - Exchanging information and best practices on the use of energy management and energy efficiency and conservation to meet demand during Electricity Crises - the Government of Japan has shared its findings from the Fukushima disaster.
 - Facilitation of a pilot energy management system implementation at a Canadian
 3M plant that resulted in an energy performance improvement that saved USD 315,000;
 - Peer-review of a coal thermal power plant near Jakarta, resulting in low to no-cost recommendations that could lead to a 64,000 ton-per-year reduction of fuel consumption; and
 - Development of an International Framework for Industrial Energy Efficiency which provides a template for improved coordination and implementation of multiple international efforts to advance industrial energy efficiency policies, programs, and practices.
- Energy consumption in the buildings sector is expected to grow at an average annual rate of 0.5 percent between 2013 and 2035. In 2013, IPEEC Task Groups led by Australia and the United States dedicated significant resources to this sector by:
 - Developing a study of building efficiency rating systems that aims to assess the impacts of global building efficiency rating programmes and identify best practices in program design to impact investment decisions; and
 - Promoting the installation of cool roofs in India, Mexico and South Africa by working with local energy agencies. Simultaneously, IPEEC launched a Cool Roof Toolkit web portal that serves as a repository of case studies, evaluation tools and



other resources. These activities were conducted jointly with the Clean Energy Ministerial (CEM).

- Additionally, in 2013 IPEEC worked on **appliances and equipment efficiency** under a USA-led Task Group in cooperation with CEM. This work included:
 - The SEAD Global Efficiency Medal competition, which identifies the most efficient product in a specific category in four regions as well as a global winner. In 2013, the Global Efficiency Medal competition focused on computer monitors. Samsung and LG products were the recipients of the September 2013 awards. The winners in the motors competition will be announced in 2014.
 - Collaboration on 8 specific product category areas to accelerate the pace of existing efficiency standards and labelling programs, as well as to achieve the most costeffective savings while making the most efficient use of government resources;
 - Efficient procurement with a free SEAD Street Lighting Tool that helps local governments make more informed choices regarding street lighting to help achieve energy savings of up to 50%;
 - Analytical tools to inform programme design, as well as a common analytical platform for assessing progress and opportunities in appliance/equipment efficiency; and
 - Technical analysis showing the potential to cost-effectively double the energy efficiency of ceiling fans. India's Super Efficient Equipment Programme was based in part on this analysis. Regarding room air conditioners, it was shown that even the best currently available technology offers large efficiency improvement opportunities, with a 35 to 50 percent reduction in energy consumption from market-average products. As a result, the U.S.-India Collaboration on Smart and Efficient Cooling was launched.
- Finally, under Task Group activities led by the U.K., IPEEC worked with **energy providers** that represented most of the global spending on energy efficiency in 2013. As such, IPEEC, in collaboration with IEA, was able to:
 - Publish a series of reports on energy efficiency programs implemented by energy providers as well as regulatory approaches for energy provider-delivery of such programmes. These reports include 41 detailed case studies of innovative energy efficiency programmes implemented by energy providers; and



 Publish an analysis of district-level energy sector emissions in the Barents region.
 This May publication was based on reports from Norsk Energy and the Norwegian Ministry of Environment.

Taken together, these activities represent substantive cooperation in policy and program design and implementation. IPEEC is fulfilling its mission to "accelerate the adoption of energy-efficient policies and practices through international cooperation and information sharing on policy analysis, programs, tools, and proven practices."

Extract from IPEEC 2013 Annual Report, available on: http://www.ipeec.org/index.php?r=publications/index