APEC Energy Working Group: A Broad, Diversified Agenda with Plenty of Room for Business Input

Phyllis Yoshida, EWG Lead Shepherd Deputy Assistant Secretary for International Energy Cooperation U.S. Department of Energy

APEC Accounts for Half the World's Economic Output and Energy Use



APEC Structure Allows Key Policy Findings to Reach the Top

- Annual Leaders Summit
- Periodic Energy Ministers Meetings (EMM)
- Energy Working Group (EWG)
- EWG Expert Groups
 - Energy Efficiency and Conservation
 - New and Renewable Energy Technology
 - Clean Fossil Energy
 - Energy Data and Analysis
 - Biofuels Task Force
 - Energy Trade and Investment Task Force
- Asia Pacific Energy Research Centre

Expert Group on Clean Fossil Energy

- Australia (Dept of Resources, Energy and Tourism)
- Canada (Natural Resources Canada)
- China (National Development and Reform Commission)
- Indonesia (Ministry of Energy and Mineral Resources)
- Japan (Agency for Natural Resources and Energy)
- Korea (Korea Institute of Energy Research)
- Mexico (Secretariat for Energy)
- Philippines (Department of Energy)
- Russia (Ministry of Industry and Energy)
- Chinese Taipei (Ministry of Economic Affairs)
- Thailand (Energy Policy and Planning Office)
- United States (National Energy Technology Laboratory)
- Viet Nam (Ministry of Industry)

Clean Fossil Expert Group Themes

o Natural Gas Trade

- LNG Public Education and Information Initiative
- Potential for Growth of Gas as Clean Energy

o Cleaner Coal-Fired Power Plants

- Options to reduce plant CO2 emissions
- Best practices on cost-effective upgrades
- Regulatory strategy to promote cleaner plants
- Environmental monitoring of plant operations

o Carbon Capture and Storage

- Geological storage potential
- Workshops on assessing storage potential

Nine economies active in Expert Group on Energy Efficiency and Conservation

- Australian Greenhouse Office
- Natural Resources Canada
- China Standard Certification Center
- Japan Energy Conservation Center, METI
- Korea Energy Management Corporation
- Mexico National Commission for Energy Conservation
- New Zealand Energy Efficiency and Conservation Authority
- Chinese Taipei Bureau of Energy, ITRI
- United States: DOE with support from Alliance to Save Energy, Lawrence Berkeley National Laboratory

APEC Energy Ministers and Leaders on the Key Role of Energy Efficiency

- EE clearly noted as a component of APEC Energy Security Initiative, reaffirmed annually since 2001.
- Transport fuel efficiency noted by EMM-7 (Korea, 2005) as vital to reducing oil import dependency.
- Efficiency confirmed as important for stationary energy sector (electric power, buildings and industry) by EMM-8 (Darwin, Australia, 2007)

Projects on Energy Efficient Buildings

- Comparison of Building Energy Codes in APEC Economies
- Energy-Saving Doors and Windows:
 Survey of Policies and Programs
- Cool Roofs in APEC Economies:
 Best Practices and Potential Benefits
- Harmonization of Standards and Labeling for Compact Fluorescent Lightbulbs to Reduce Trade Barriers

Projects on Fuel-Efficient Transport

- Policies for Fuel-Efficient Transport
 - Survey completed July 2008
 - Follow up workshop March 2009
 - Revision of survey with new information
- Policy approaches to consider
 - Improved fuel economy for cars and trucks
 - Bus Rapid Transit (faster and more frequent buses to encourage shift to buses from private vehicles)
 - Transit-Oriented Development (urban planning to reduce traffic and encourage use of mass transit)
 - Intermodal Freight (shift from trucks to more fuelefficient modes like ships, barges and rail)

15 Economies in Expert Group on New and Renewable Energy Technologies

- Australian Department of Resources, Energy and Trade
- Canada Agriculture and Agri-Food Canada; Natural Resource Canada
- China Department of New and Renewable Energy, National Energy Administration; Energy Research Institute
- Hong Kong, China Electrical and Mechanical Services Dept.
- Indonesia Directorate of New Renewable Energy and Energy Conservation, Ministry of Energy and Mineral Resources
- Japan New Energy and Industrial Technology Development Organization (NEDO); Institute of Energy Economics Japan (IEEJ)
- Korea Energy Management Corporation
- Malaysia Ministry of Energy, Telecommunications and Communications;
 Malaysia Energy Center
- Mexico Secretariat for Energy (SENER)
- New Zealand Resource Development Limited
- Chinese Taipei Bureau of Energy, Ministry of Economic Affairs; Industrial Technology Research Institute (ITRI)
- Philippines Department of Energy
- Thailand Department of Alternative Energy Development and Efficiency (DEDE);
 Thailand Institute of Scientific and Technological Research (TISTR)
- United States Department of Energy; Argonne National Laboratory
- Vietnam Ministry of Industry and Trade

Renewable energy project themes

- Utility-based RE financing mechanisms
- Best practices for RE in urban areas
- o RE and EE in commercial buildings
- o Successful business models for RE
- o Guidelines for biodiesel standards
- o Biorefineries, energy and trade
- o Grid interconnection of RE

Four-fifths of All APEC Economies Participate in the Biofuels Task Force

- Australian Department of Resources, Energy and Trade; Bioenergy Australia; Commonwealth Science and Industrial Research Organisation (CSIRO);
 - Agriculture and Agri-Food Canada
- Chile Ministry of Agriculture
- China Energy Bureau and Energy Research Institute
- Hong Kong Electrical and Mechanical Services Dept.
- o Indonesia Ministry for Economic Affairs, Ministry of Energy and Mineral Resources
- Japan Observers: New Energy and Industrial Technology Development Organization (NEDO); Institute of Energy Economics Japan (IEEJ)
- Korea Ministry of Commerce, Industry and Energy (MOCIE); Korea Institute of Energy Research; Korea Energy Economics Institute
- o Malaysia Ministry of Plantation Industries & Commodities; Malaysian Palm Oil Board
- Mexico Secretariat for Energy (SENER)
- New Zealand Resource Development Limited
- o Philippines Department of Energy
- o Peruvian Association of Sugar and Biofuel Producers; Maple Corporation
- o Russian National Biofuels Association
- Chinese Taipei Industrial Technology Research Institute (ITRI)
- Thailand Dept. of Alternative Energy Development and Efficiency (DEDE);
 Thailand Institute of Scientific and Technological Research (TISTR)
- o United States Dept. of Energy; Dept. of Agriculture, Argonne National Laboratory

Biofuel TF Research Themes

- Biofuel Resource Assessments and Assessment Capabilities in APEC
- o Biofuels on Marginal Lands
- o Biomass Resource Elasticity
- Biofuel Employment Opportunities
- Potential for Biofuels from Algae
- o Sustainable Biofuels Development
- o Biofuels T&D Infrastructure

Energy Trade and Investment TF

- Established pursuant to Roundtable in Cairns, Australia, September 2008
- Cope with key barriers such as
 - Lack of clear carbon price in market
 - Lack of transparent investment regimes
- Initial project ideas include
 - Survey tariff and non-tariff barriers to trade in energy goods and services
 - Estimate costs of key trade barriers

The future is in our hands....

- Business input is welcome!
 - Proposals for APEC-funded projects
 - Proposals (funding?) for self-funded projects
 - Expert contributions to projects underway
- Energy businesses include
 - Oil and gas companies
 - Powerplant equipment manufacturers
 - Wind and solar component suppliers
 - Makers of energy-efficient appliances, equipment, roofs, doors and windows
 - Manufacturers of energy-efficient cars
 - Builders of powerplants and biorefineries
 - Many others

Thanks for listening!

