

Workshop Overview and Linkage to APEC

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Hydrogen Workshop for APEC Economies
Focus on the Eastern Hemisphere
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What is APEC?

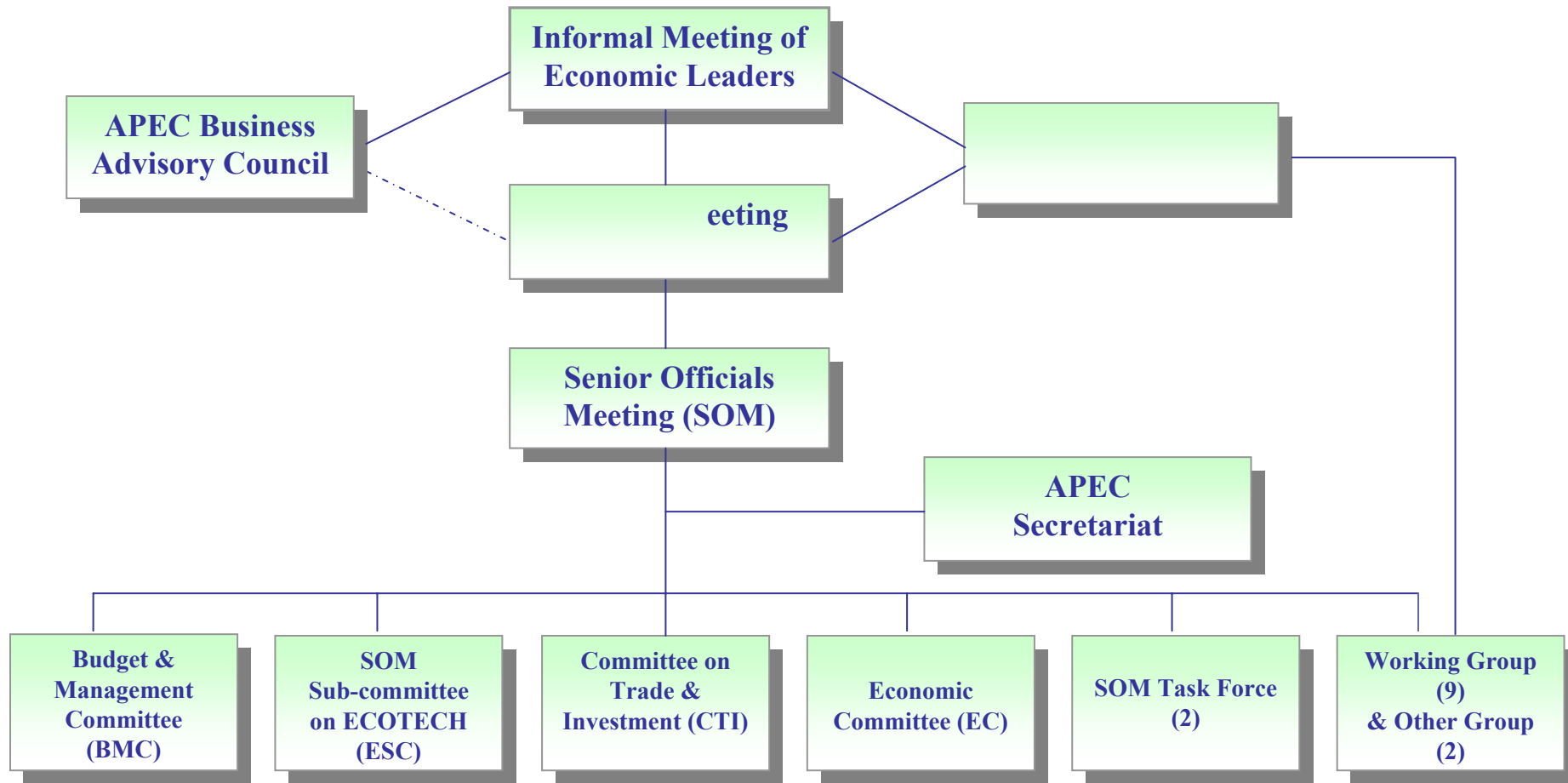
- Asia-Pacific Economic Cooperation (APEC) was created in 1989
- Objective: Promote trade liberalization, trade facilitation and technical assistance
- Implements its activities through 11 working groups including the Energy Working Group
- EWG is assisted by 5 Expert Groups including the Expert Group on New and Renewable Energy Technologies (EGNRET)

(<http://www.apec.org>)

APEC Member Economies span the Pacific

- Australia
- Brunei Darussalam
- Canada
- Chile
- Peoples Republic of China
- Hong Kong China
- Indonesia
- Japan
- Republic of Korea
- Malaysia
- Mexico
- New Zealand
- Papua New Guinea
- Peru
- Republic of the Philippines
- Russia
- Singapore
- Chinese Taipei
- Thailand
- United States
- Vietnam

Asia Pacific Economic Cooperation



APEC Expert Group on New and Renewable Energy Technologies (EGNRET)

Mission: To facilitate the increase in the use of new & renewable energy technologies in the APEC region

In carrying out this mission, EGNRET

- **Conducts research projects**
- **Organizes workshops**
- **Leads major initiatives**
 - **APEC 21st Century Renewable Energy Development Initiative**

Hydrogen was a Major Theme in 2003-2004

- **APEC Leaders endorsed the “APEC Plan to Enhance Energy Security” (October 21, 2003)**
- **APEC 21st Century Renewable Energy Development Initiative (Collaborative VI): Development of a Sourcebook of Hydrogen Codes and Standards for APEC Member Economies (proposed in 2003/implemented in 2004)**
- **EWG holds the Energy Security Initiative: Hydrogen Interim Framework Document Workshop March 29-31, 2004 in Hawaii.**
 - Interim Framework on Hydrogen and Fuel Cells (2 pages, Annex 9 Hydrogen Framework Summary)
 - Interim Framework on Hydrogen and Fuel Cells (27 pages, Annex 9 Hydrogen Framework)
 - Results of the 6th APEC Energy Ministers (EMM6) meeting held in Manila, Philippines June 10, 2004 are at:
 - *<http://www.apecenergy.org.au>*

Interim Framework on Hydrogen and Fuel Cells

Five recommendations were sent to the APEC Energy Ministers

- 1. Creating a web-based “tool –box” for policy makers in APEC economies to aid in the education and dissemination of current information on the challenges, opportunities, benefits and life-cycle costs of hydrogen and fuel cell technologies. This capacity building mechanism could also be made available to the public.**
- 2. Holding an APEC Policy Forum, involving the private sector, on the successes and failures of various policy and regulatory mechanisms to advance hydrogen energy development.**

Interim Framework on Hydrogen and Fuel Cells Recommendations (2)

- 3. Organizing a comprehensive codes and standards inventory relevant to hydrogen and fuel cell technologies as a starting point for longer term work on harmonization.**
- 4. Holding a workshop to analyze hydrogen and fuel cell codes and standards gaps.**
- 5. Establishing an information exchange on policies and RD&D status with the International Energy Agency and the International Partnership for the Hydrogen Economy in order to draw upon expertise and to help identify potential market opportunities.**

APEC New and Renewable Energy Technology Summary

Activities have focused on areas identified as priorities by APEC leaders and ministers

- **Financing Energy Investment in the APEC Region**
- **Interim Framework Document on Hydrogen and Fuel Cells**
- **Proposed five new projects for 2006**

New EGNRET Projects for 2006

- **APEC 21st Century Renewable Energy Development Initiative (Collaborative V III) Local Banks Training Program for Financing Energy Efficiency and Renewable Energy Projects (Mexico lead, \$100,000)**
- **APEC 21st Century Renewable Energy Development Initiative (Collaborative V I) Evaluation of the Role of Village Power Applications in Response to the Tsunami Recovery Effort (USA lead, \$75,000)**
- **APEC 21st Century Renewable Energy Development Initiative (Collaborative V III) Information Sharing on Financing Public Sector Energy Efficiency and Renewable Energy Projects (USA lead, \$75,000)**
- **APEC 21st Century Renewable Energy Development Initiative (Collaborative V I) Renewable Energy Products Database: Paving the Way for Deployment of Renewable Energy (Thailand lead, \$75,000)**
- **APEC 21st Century Renewable Energy Development Initiative (Collaborative VI): Handbook for Developing City/State Hydrogen and Fuel Cell Programs in APEC Member Economies (USA lead, \$100,000)**