

**PROGRESS REPORT  
OF THE  
ENERGY WORKING GROUP (EWG)  
EXPERT GROUP ON CLEAN FOSSIL ENERGY (EGCFE)**

The Chair of the EGCFE, Mr. Scott Smouse, has provided a summary of administrative and project activities undertaken by the EGCFE.

**ADMINISTRATIVE**

**EGCFE Leadership**

Effective with the EGCFE meetings in Kuala Lumpur, Malaysia during the first week of March 2002, Mr. Scott Smouse (USA) replaced Dr. Sun Chun as EGCFE Chair and Mrs. Susan Laczko (USA) replaced Mr. Ken Hong as EGCFE Secretariat.

**EGCFE Support Contractor**

The East-West Center's contract with the U.S. Department of Energy to support the EGCFE Chair and Secretariat was terminated on 31 March 2001. A new contractor, Sobran, Inc., has been selected to provide the administrative support previously provided by the East West Center (EWC). A one-year contract has been put in place with Sobran with annual renewals. The EGCFE mailing list previously maintained by EWC has been transferred to Sobran and is being updated.

**EGCFE Common Fund**

The EGCFE Common Fund balance was \$106,213.12 as of 6 March 2002. Sobran currently administers the Fund.

**EGCFE Internet Web Site**

The EGCFE Internet web site has been transferred from the EWC to USDOE. The new domain, established as <http://apec-egcfe.fossil.energy.gov/>, has been linked to the websites of the APEC Energy Working Group and the APEC Secretariat. Economies and other interested individuals can access all files, reports, summary records, and proceedings of the EGCFE group. The USA provides funding to support maintenance of the EGCFE web site. The web site's home page has been extensively updated and expanded. The balance of the site will soon be updated.

**EGCFE Terms of Reference**

The EGCFE Terms of Reference (TOR) were reviewed at the Group's Business Meeting in Kuala Lumpur, Malaysia on 6 March 2002. A number of minor corrections were made and the Group concurred on adding a statement on the importance of energy security. The changes have been made and the Chair will submit the revised TOR to the EWG Secretariat as requested prior to the EWG23 meeting (14-15 May 2002/Bangkok, Thailand).

**COMPLETED EGCFE PROJECTS**

**A Study of CO<sub>2</sub> Reduction Options in the APEC Region (EWG 04/2000)**

The final report on "A Study of CO<sub>2</sub> Reduction Options From Electricity Generation in the APEC Region" was completed by Levelton Engineering Ltd. (Canada), (S&T)<sup>2</sup> Consultants,

Inc. (Malaysia), and Malaysian Environmental Services SDN. BHD (Malaysia), and distributed to EGCFE members. The project oversight committee consisted was led by Korea and supported by Japan, China, and the United States. The post-project Evaluation Report was prepared by the EGCFE Chair and submitted to the EWG Secretariat upon completed of the study.

The project's final report achieved most but not all of the objectives specified in the Phase I RFP. Specifically, it was unable to provide information on the current status of the approaches taken by member APEC economies to reduce CO<sub>2</sub> emissions from fossil fuel power generation in the APEC region. The reason for this was the failure of the project questionnaire to elicit sufficient response from APEC economies to the section that dealt with emission reduction approaches. Given the extremely varying and preliminary nature of CO<sub>2</sub> reduction measures in even the developed APEC economies, the details requested in the questionnaire were probably over-ambitious. However, faced with this difficulty, the consultant took some productive initiatives to provide a body of information and data that could be used by APEC economies in their decision-making regarding the best approach(es) to CO<sub>2</sub> reduction in the electricity generation sector. This laid a better basis for assembling the information sought in a future phase of the project.

## **CURRENT EGCFE PROJECTS**

### **Energy Security Initiative (EWG 08/2001)**

A Workshop on "Elements of Energy Security Policy in the Context of Petroleum" was successfully organized in Bangkok, Thailand, during 14-15 September 2001, as part of the APEC Energy Security Initiative (ESI) Approximately 75 representatives from 12 economies participated plus an IEA representative from France. The ESI workshop was a partial fulfillment of the project originally proposed by the EGCFE but now subsumed by the APEC Energy Working Group.

At the conclusion of the Bangkok Workshop, a Summary Recommendation was prepared, which submitted to the EWG during the EWG22 Meeting in Papua New Guinea. The EWG subsequently revised the Summary Recommendation and submitted it to the APEC Leaders. A joint statement on energy security was subsequently made at the Thirteenth APEC Ministerial Meeting in Shanghai, People's Republic of China during 17-18 October 2001, which "...directed the EWG to intensify its work on strengthening the security and reliability of affordable energy to all in APEC, through such means as exchange of information and experience on oil stockpiling, on facilitating energy efficiency and conservation, and on facilitating improved stability in the provision of energy supply to meet demand. They called for further energy technology development, exchange, application and deployment, and for the facilitation of a diverse and efficient supply mix to avoid the risks posed to the economy by volatility in the international oil market."

Two additional meetings will convened this year under the APEC Energy Security Initiative: (1) an Oil Supply Disruption Simulation Workshop to be sponsored by the Asia Pacific Energy Research Center (APEREC) on 18-19 April 2002, in Tokyo, Japan, and (2) an APEC ESI Workshop, to be sponsored by the Energy Commission of the Ministry of Economic Affairs of Chinese Taipei during 23-24 April 2002. The United States oversees this project.

### **Clean Transportation Fuels Supply Security (EWG 02/2001T)**

A TILF Request for Proposals (RFP) was issued and a US\$132,250 contract was finalized with Hart/IRI Information Services (USA) supported by the Asian Clean Fuels Association (Singapore) to conduct the study. Several progress meetings have held and a questionnaire has been distributed to APEC member economies. The results of the questionnaire are being analyzed. The study is on schedule for completion this year. The United States and Australia oversee this project.

### **CO<sub>2</sub> Reduction Options for APEC Economies (Phase II) (EWG 02/200)**

The US\$50,000 RFP for "A Study of CO<sub>2</sub> Reduction Options in the APEC Region (Phase II)" drafted by Korea and finalized by the United States, and subsequently submitted to the APEC Secretariat for release. Three proposals were received by the closing date of 15 March 2002. The proposals are being reviewed by the project oversight team, led by Korea and including Japan and China, who will make their recommendation to the EGCFE Chair by 1 April 2002. The plan is to have the contract with the selected consultant in place by 15 April 2002 and complete the study by the end of November 2002.

### **Coal Mine Gas Project Phase III (Y2000 Self-funded Project)**

This US\$38.1-million self-funded project has been divided into three phases. Phase I, consisting of site selection and field survey, was completed in 1996. Phase II, consisting of a pre-feasibility study and preliminary engineering design, continued into 1998. As part of Phase II, experts from Japan, PR China, and USA conducted a site survey of Tiefu Coal Mining Administration (CMA) and Tieling City in Liaoning Province, PRC. The survey's objective was to get the necessary data and information for the preliminary study and the basic design of a demonstration project of coal mine gas (CMG) drainage and utilization. An APEC Coal Mine Gas Workshop was held in conjunction with the 3<sup>rd</sup> CMG Project Committee meeting in Tokyo, May 19-20, 1998, to solicit advice from CMG experts. Detailed design, construction, and operation began in 1999 under Phase III using funds contributed by Japan. The project will capture the methane from mine and transport it to the nearby town of Tieling for use as town gas. The gas drainage facilities were introduced in Daxing mine and the demonstration operation of gas drainage was continued in 2000. The construction of gas supply facilities were started in 1999 and continued in 2001. The demonstration operation of whole facilities was started from December 2001. The technology transfer training has been conducted in Japan since 1998. Japan oversees this project.

### **Malaysia Joint 8<sup>th</sup> Coal Flow and 9<sup>th</sup> Clean Fossil Energy Technical Seminar (Self-funded) and 4<sup>th</sup> APEC Coal TILF Workshop (EWG 06/2000T)**

Malaysia hosted the Joint 8<sup>th</sup> APEC Coal Flow Seminar and the 9<sup>th</sup> APEC Technical Seminar in conjunction with the 4<sup>th</sup> APEC Coal TILF Workshop during 4-8 March 2002, in Kuala Lumpur. The project steering committee consisted of Australia, Japan, USA, China, and Korea. Approximately 175 representatives from seven economies participated in the Joint Seminar and about 100 representatives from the same economies participated in the TILF Workshop. In addition, two site visits to coal-fired power plants were held between the Joint Seminar and the TILF Workshop. All three events were viewed as being very successful and Malaysia expressed sincere thanks for being afforded the opportunity to learn much by hosting the events. The USA oversees this project.

## **PROPOSED EGCFE PROJECT PROPOSALS**

The following five new project proposals were prepared and submitted to the EWG Secretariat for consideration by Members at EWG23:

1. Joint 9<sup>th</sup> Coal Flow and 10<sup>th</sup> Clean Fossil Energy Technical Seminar in the People's Republic of China (US\$150,000 self-funded proposal) - China has agreed to host the next Joint 9<sup>th</sup> Coal Flow and 10<sup>th</sup> Technical Seminar in October 2002, near Chengdu. An initial proposal has been received from China and was discussed during the EGCFE Business in Kuala Lumpur, Malaysia on 6 March 2002. A Steering Committee, consisting of PRC, Japan, Korea, and the United States, plan to meet in May 2002 in Beijing to discuss details of the Joint Seminar.
2. Assessment of Geological Storage Potential of Carbon Dioxide in the APEC Region (Operational Account Proposal seeking US\$50,000 of US\$50,000 total)
3. Options to Reduce CO<sub>2</sub> Emissions from the Electric Power Generation Sector in APEC Economies (Phase III) – TILF Workshop for Developing Economies (TILF Proposal seeking US\$125,000 of US\$150,000 total)
4. Costs and Effectiveness of Upgrading and Refurbishment of Older Coal-Fired Power Plants in Developing APEC Economies (TILF Proposal seeking US\$50,000 of US\$50,000 total)
5. Feasibility of Supercritical Technology for New Coal-Fired Power Plants in APEC Developing Economies (Operational Proposal seeking US\$50,000 of US\$50,000 total)