

EXPERT GROUP ON MINERALS AND ENERGY EXPLORATION AND DEVELOPMENT

REPORT BY GEMEED SECRETARIAT

Ottawa, May 10, 1998

1. Background

The Expert Group on Minerals and Energy Exploration and Development, GEMEED, was established at the Eleventh Meeting of the Energy Cooperation Working Group in October 1995.

The Expert Group should carry out the following activities:

- articulate, coordinate and promote subjects related to minerals and energy within different APEC Committees and Working Groups;
- facilitate elements and factors required for the discovery, assessment and development of mineral sources of energy;
- establish new initiatives associated to minerals and energy exploration and development;
- Promote the application of environmentally sound and efficient technology, and the introduction of measures to mitigate environmental and socially negative effects.

2. Main activities carried out by GEMEED in 1997 and 1998

Since the Second Meeting in Korea, in March 1997, GEMEED has undertaken various activities in pursuance of its objectives and program.

A. Database project:

The database project is making progress according to schedule. During the Database steering committee meeting on May 8th, 1998, Mr. Paul Williamson outlined the history of the database project to date. Mr. Williamson indicated they were preparing selection criteria for a contractor for the second phase as well as a draft for third phase funding.

AMSAT, the consultant responsible for creating the database provided a more detailed review of project activities and achievements. AMSAT indicated that some economies still have to provide data and contact people. AMSAT outlined some next steps for the database and recommended creating lists of contacts and to approve completion of phase one.

Mr. Williamson asked each economy for their views on the database and issues, such as language of data, maintenance of the database and inclusion of commercial sites, that the steering committee should address.

B. Secretariat News

- Chair of GEMEED attended the 14th and 15th EWG meetings. During these meetings it was discussed issues related to the Expert Group and to Third Tier Groups within APEC.
- As part of the strengthening effort at the Secretariat, Mr. Raul F. Campusano, attorney at law, specialist on environmental and international law joined the Secretariat as technical adviser.
- The Rector of the University of Santiago, a State University, leader on metals and minerals studies, has proposed to explore with the Secretariat joint activities regarding education, research and development, related to mining within the APEC region. This University is planning to create an Asia-Pacific Studies Institute.
- The Secretariat will soon publish the proceedings of ECOW'97.
- ECLAC, in conjunction with the Secretariat, will publish the presentations from the Seminar on Taxation in Mining given in Santiago in September 1997.
- The Secretariat contracted a study related to energy efficiency in the mining sector.

C. Approved Project Proposals

Project proposals approved at this stage are the following:

- a. Korea: to construct a database on oil and gas fields. US \$ 30,000, self-funding, to be started and finished during calendar year 1998.
- b. Comprehensive database, second phase. Australia/Chile. Self financing. US \$64,000. APEC funding US \$ 99,000.

Progress on these projects will be presented at the EWG 16th meeting.

D. ECOW'98

At the end of ECOW'97 Chile offered to host a second workshop in Santiago. Institutions leading the organization of the workshop at this stage are the Ministry of Mining, the Chilean Copper Commission and the Secretariat. Preparative work is under progress and decisions have been made:

The Second Environmental Cooperation Workshop (ECOW'98) will be held in Santiago on September 28th, 29th, and 30th. The workshop will focus on the "Clean Production for a Sustainable Mining" issue. It encompasses four sections where the various economies belonging to the APEC will be presenting documents for discussion based on the interests of these various economies.

- **Better Practices in Mining**

Environmental Performance Instruments in Mining: This module is oriented to the disclosure of the successful application of various environmental performance instruments during every phase of a mining project. Some of the environmental performance instruments are: environmental impact surveys, environmental performance systems, environmental audits, voluntary agreements, analysis of a commodity life-time, green stamps, environmental indexes, risk analysis, closure plans, etc.

- **Technologies for Mining**

This module is oriented to the disclosure of clean technologies in the mining industry (hard technologies). These technologies will be classified in those ones focused on pollution prevention at the source, reusage of products, recycling and residues minimization.

- **International regulations and environmental agreements**

This module is oriented to point out current tendencies of both regulations and environmental agreements and their consequences in the mining area. Those regulations oriented to the restriction of both metals and minerals use in multiple applications will be emphasized. Some examples are quality standards for drinking water (WHO), Basle Agreement, etc.

- **Towards an Efficient and Sustainable Mining**

This module is oriented to an efficient and sustainable use of various resources employed by mining both at company and country level. Examples from the small and medium mining will be particularly emphasized.

3. Ideas for the Future of APEC GEMEED

After more than two years of the creation of the Expert Group, it seems advisable to think about the future of the organization from a comprehensive point of view. The Secretariat will undertake this task and welcomes the active participation of the member economies. Australia and Chile have handled preliminary documents already.

Some economies have expressed their interest in different meetings. Some of those recommendations are included below. They do not pretend to be exhaustive or to officially represent the view of that economy, but they could be taken to open a discussion and under such assumption, they summarize some of the lines of survey and projects that could be undertaken in each one of the various economies joining the APEC as in the group. It is evident that at member economies level, there is heterogeneity regarding the

priority of programs, resources assigned to them, technological development regarding survey and development, manufacturing, specification, and use of energetically efficient technologies.

a) Lines of survey or projects to be individually developed in each member economies.

- Identification of the barriers that hinder the complete market development in relation to investment resources assignment for incorporating both energetic and economically efficient technologies.
- Development of a data base of the final use of energy in the mining area, by sources and processes.
- Development of data base considering old data and the maintenance costs of mining equipment operated by energy, to be developed by the major mining companies.
- Identification of potential improvement of the efficiency of energy use in mining, where final uses and specific technologies must be distinguished.
- Development of mechanisms, incentives and regulations allowing to overcome obstacles that hinder an appropriate market development in relation to the assignment of investment resources to the energetic efficiency.
- Economic and quantitative assessment of the impact of energetic efficiency as an instrument for the environment protection.
- Implementation of projects and programs design of efficient use of energy on a large scale.

b) Projects or surveys of various APEC economies or of the group.

- Projects of technological development (scientific-technical and/or financial area) in the energetic efficiency field.
- Cooperation projects among the member countries, involving the contribution of financial and/or technological resources, from the most developed countries regarding energetically efficient technologies, the design of specialized institutions and the conception and application of mechanisms aimed to concrete a potential improvement of the efficient use of energy.

c) Identification of a survey project that could be developed in a mineral producing economy in the short term, as a demonstration project for other APEC economies.

- The proposed project “Data base on the use of energy in mining for improving the efficiency of energy use in mining companies” is oriented to the development of a performance tool aimed to improve the efficiency of energy use in the area and to consequently contribute to improve productivity and competitiveness of the mining industry, and to the reduction of pollutant emissions derived from the energy use in such sector.

Australia:

- How to maintain share of global exploration spending?
- National standing as supplier of goods, services and technologies to other mining countries.
- Exporting best practice in all aspects of operations (including environment, relations with local people, health and safety).
- How can we measure sustainability of development activities against criteria, and what the criteria should be.

Canada:

- How to maintain share of global exploration spending
- National standing as supplier of goods, services and technologies to other mining countries.
- How can we measure sustainability of development activities against criteria, and what the criteria should be.

Chile:

- How to maximize the benefit to the national economy of mining development.
- Impediments to value-adding.

Indonesia:

- Providing employment in traditional mining sector.
- How to balance national (central government) needs for economic rent and export contribution with local community benefits.
- How local people can sub-contract to supply requirements of the modern mining sector.

Japan:

- Security of future supply of minerals and energy.
- Rehabilitating old polluting minesites in Japan.
- Environmental acceptability of mining in “new” mining countries.

Korea:

- Security of future supply of minerals and energy.

Philippines:

- Acceptability of mining to the national and local populations.
- Attitudes toward foreign investment.
- Code of conduct for dealing with indigenous people.
- Environmental management in mining.

Chinese Taipei:

- Security of future supply of minerals and energy.

Thailand:

- How to maintain exploration, given environmental concerns.
- Impediments to value adding.

USA:

- Maintain market-driven focus in work of GEMEED and national policies of APEC members (no intervention or subsidization in minerals and energy markets).

Ottawa, May 11th, 1998