APEC Cleaner Production Strategy

VISION

The magnitude of new investment in industrial capacity in the Asia-Pacific region, combined the greater use of more flexible and cost-effective environment management techniques, creates an opportunity to achieve cleaner production and thus more sustainable industrial development in the Asia-Pacific region. APEC has a unique role to play in promoting cleaner production, by helping to identify best practices and establishing a strategic agenda for technical cooperation in partnership with the private sector.

To address the burgeoning impact of human activities on the natural environment, greater emphasis is required in the application of cleaner production techniques and clean technologies. The global vision of sustainable development can only be attained through implementation of comprehensive strategies and application of innovative processes and technologies.

I. BACKGROUND

Sustainable Development Ministers, meeting in Manila, Phillipines, July 11-12, 1996, called for an APEC Cleaner Production Strategy and invited the Industrial Science and Technology Working
Group (ISTWG) to lead this effort. The Ministerial Action Program that followed was endorsed by Senior Officials at SOM III and reemphasized at SOM IV.

The ISTWG, meeting in Canberra September 24-26, 1996, accepted the challenge posed by Sustainable Development Ministers to develop and APEC Cleaner Production Strategy, with the United States, Chinese Taipei, Australia and the Philippines taking the lead in co-sponsoring this effort. ISTWG also agreed to establish a Cleaner Production Task Force (Task Force) for the purpose of developing the Strategy. Science and Technology Ministers subsequently expressed their support for this work in the Ministerial Communique issued at the S&T Ministerial held November 13-14, 1996 in Seoul, Korea. This work also was recognized by Leaders in the Manila Leaders' Declaration. The 12th ISTWG, meeting in Vancouver, 5-6 March, 1997, approved the Terms of Reference for the Task Force.

II. DEFINITION OF "CLEANER PRODUCTION"

Recognizing that clean technologies are an internal element of cleaner production, the Task Force agreed to call this strategy the "Cleaner Production Strategy." To understand the goals of the APEC Cleaner Production Strategy, it is important to define the term "cleaner production."

For the purposes of this Strategy, the following definition, which was established by the United Nations Environment Program, will apply:

- Cleaner production means the continuous application of an integrated preventive environmental strategy to processes, products
and services to increase efficiency and reduce risks to humans and the environment.

- For production processes: cleaner production includes conserving raw materials and energy, eliminating toxic raw materials, and reducing the quantity and toxicity of all emissions and wastes before they leave a process.

- For products: the strategy focuses on reducing impacts along the entire life cycle of the product, from raw materials extraction to ultimate disposal of the products.

- For services: cleaner production reduces the environmental impact of the services provided over the entire life cycle, from system design and use to the entire consumption of resources required to provide the services.

- Cleaner production requires applying know-how, improving technology, and changing attitudes.

- Many preventive terms - such as eco-efficiency, pollution prevention, waste minimization, resource reduction - are in use today. At UNEP, the term "cleaner production" was chosen to encompass a comprehensive approach to production. Thus cleaner production covers both processes, products and services and impacts of all, including their design, utilization and usage of raw materials and energy. It covers all wastes - hazardous/toxic or not - whether emitted into the air, water or onto the land. The term acknowledges that cleaner
production requires not only improving efficiency and material substitution using tools such as technology and know-how, but new managerial skills and policies as well. It also acknowledges the importance of design and use of products as well as services.

### III. GOALS AND OBJECTIVES

The following two goals will serve as the basis for the APEC Cleaner Production Strategy:

**Goal 1:** Strive to achieve dramatic progress in reducing environmental impacts in various industry sectors through promotion of appropriate cleaner production technologies, policies and practices.

The first objective under Goal 1 is to spur widespread application within industry sectors of technologies, policies and practices that are both environmentally and economically efficient. The second objective is to forge partnerships between government and industry sectors that will stimulate sustained application of environmentally and economically sound solutions. In pursuit of these objectives, it is anticipated that participating economies will identify sectors of primary relevance to them and will work with other interested economies to develop and advance a cooperation agenda through such methodologies as those listed below.

**Goal 2:** Strive to achieve broader adoption of cross-cutting policies and methods for cleaner production through instructional, professional and private sector partnerships.

The first objective under Goal 2 is to spur
widespread adoption of innovative policies and methods that provide the necessary framework and tools to enable the application of environmentally and economically efficient practices across all industry sectors. The second objective is to initiate partnerships among and between government, industry, and public and private institutions that will develop the capacity to ensure sustainable economic growth. These objectives may be achieved through such methodologies as those listed below.

**IV. METHODOLOGY**

There is a wide variety of ways in which member economies may achieve the goals and objectives of the Strategy. The following list is a framework within which specific initiatives may be developed.

*Goal 1: Sector-Based approaches*

- Encourage member economies to develop tools such as training modules, manuals, and guidelines to enable industry to implement cleaner production.

- Develop capacity and mechanisms for sharing information on cleaner production within industry sectors and among member economies, for example: workshops; electronic means; study tours; and fellowships.

- Facilitate cleaner production demonstration projects with wide application in member economies.

- Encourage the involvement of established
science, technology, and research networks in the assessment and development of cleaner production technologies.

- Promote management systems that facilitate the implementation of cleaner production, such as the ISO 14000 series.

- Establish mechanisms to diffuse appropriate best practices throughout industry sectors and member economies, for example: public-private partnerships; involvement of industry and professional associations, including small and medium-sized enterprises.

- Promote the development and application of environmental performance indicators.

Goal 2: Cross-Cutting Approaches

- Encourage member economies to develop a policy framework that would facilitate the implementation of cleaner production within industry, for example; policies to encourage investment in cleaner production, and activities to promote adoption of management systems such as the ISO 14000 series.

- Develop capacity and mechanisms for sharing technical and policy information on cleaner production across sectors and among member economies, for example: workshops; electronic means, study tours; and fellowships.

- Facilitate cleaner production demonstration projects with wide application across industry sectors and member economies.

- Encourage the involvement of established
science and technology networks in the assessment and development of cleaner production technologies with wide application across industry sectors and member economies.

- Promote institution cooperation that strengthens the capacity of the public sector at all levels to promote cleaner production and to provide the tools needed to help achieve cleaner production in industry.

- Establish mechanisms to diffuse appropriate best practices across industry sectors and member economies, for example: public-private partnerships; involvement in industry and professional associations, including small and medium-sized enterprises.

V. COORDINATION AND PARTICIPATION

Implementation of the Cleaner Production Strategy will require participation by various APEC bodies in addition to the ISTWG. As noted by Sustainable Development Ministers in the July 1996 Action Program, it will be important to work with the Human Resources Development Working Group (HRDWG), The Energy Working Group (EWG) and other working groups as appropriate in implementing the Strategy.

Implementation of the APEC Cleaner Production Strategy should take into account the important work already underway in other international organizations and institutions, such as the UNEP Cleaner Production Center and the World Bank Clean Technology Initiative for Asia (see Annex2), and APEC Cleaner Production activities.
should complement such initiatives. Private sector expertise is an essential component in the implementation of the strategy and the design of the action agenda. The Strategy will be implemented in part through liaison with experts in cleaner production and existing cleaner production agencies in member economies to build upon their networks and experience.

ANNEX I

Terms of Reference for an APEC Cleaner Production Implementation Task Force

Background

The APECE Ministerial Meeting on Sustainable Development held in Manila on 11-12 July, 1996, called for the initiation of an APEC Cleaner Production Strategy. The Ministers, through the APEC Senior Officials Meeting (SOM), invited the APEC Industrial Science and Technology Working Group to develop and implement this strategy, working with the Human Resources Development Working Group (HRDWG), the Energy Working Group (EWG), and other working groups as appropriate. The Industrial Science and Technology Working Group (ISTWG) subsequently established a Task Force to prepare the Strategy, now called the APEC Cleaner Production Strategy, and to develop the Terms of Reference for an APEC Cleaner Production Implementation Task Force.

Article I: Establishment of an APEC Cleaner
Production Implementation Task Force

Under the authority of the ISTWG, the APEC Cleaner Production Implementation Task Force is hereby established. The Implementation Task Force will report regularly or upon request of the ISTWG, and the ISTWG will report the progress made on the Cleaner Production Strategy to the SOM.

Article 2:

1. Promote and coordinate, with approval by ISTWG, implementation of the Cleaner Production Strategy within APEC, including encouraging member economies to develop proposals in areas of identified needs.

2. Recommend through ISTWG, as necessary, modifications or revisions to the Cleaner Production Strategy.

Article 3: Scope of Activity

1. The Implementation Task Force will compile information on cleaner production activities occurring within APEC, and report progress on the implementation of the Cleaner Production Strategy to the SOM through ISTWG.

2. The Implementation Task Force will, through ISTWG, support development of proposals that implement the Strategy through various working groups.

3. The Implementation Task Force may, through ISTWG, provide advice to member economies on the relevance of particular proposals to implementing the Cleaner
Production Strategy.

4. The Implementation Task Force will, with the approval by ISTWG, liaise as appropriate with other related international organizations and fora to ensure that efforts are complementary.

**Article 4: Administrative Structure and Mechanisms**

1. The Implementation Task Force will, with approval by ISTWG, include participation from appropriate APEC fora.

2. The Implementation Task Force will have a Chair and a Vice Chair, selected on a consensus basis from the Implementation Task Force membership.

3. The Implementation Task Force will consult through all available means and meet as required, as determined by the Task Force membership.

4. Through the APEC Secretariat, the Implementation Task Force will invite other APEC fora to provide the Task Force with information on projects or proposals which they consider contribute to the Cleaner Production Strategy.

**Article 5: Time Frame**

The Implementation Task Force will exist for a period of two years from the date of its establishment by ISTWG. This time frame may be amended by the ISTWG.
ANNEX 2

The following mechanisms may be available to advance or facilitate cooperation under the Cleaner Production Strategy:

- APEC Sustainable Development Training and Information Network;
- Virtual Center for APEC Environmental Technology Exchange;
- APEC Centers for Technology Exchange and training for Small and Medium Enterprises (ACTETSME)
- APEC Clean Coal Technology Information Network
- Regional clean technology and cleaner production information centers;
- Regional energy efficiency centers;
- EnviroNet;
- UNEP's Cleaner Production Center;
- World Bank Clean Technology Initiative for Asia;
- Cleaner production programs of specific member economies (e.g., US-Asia Environmental Partnership);
- Industry - and NGO - led initiative (e.g., chemical industry's Responsible Care program);
- Other APEC and working groups.