

SUMMARY

APEC in Sustainable Development 1999

Responding to the Leaders reiterated commitment in Kuala Lumpur, in 1998, to advance sustainable development across the entire spectrum of the APEC work plan, a significant range of activities on sustainable development have been introduced and carried out by APEC fora in 1999. This demonstrates that APEC continuously place sustainable development issues as one of its priorities.

APEC Leaders in Kuala Lumpur in 1998 outlined the priorities on sustainable development in the area:

- Cleaner production,
- Protection of the marine environment,
- Sustainable cities,
- Food, energy, and the environment in relation to economic and population growth (FEEEP); and
- The APEC Framework for Capacity Building Initiatives on Emergency Preparedness.

There are 42 activities related to sustainable development in 1999 compared to 60 activities in 1998. Out of 42 activities, 4 are related to the Cleaner Production Initiatives, 8 related to the Sustainability of Marine Environment initiatives and 6 are activities on Emergency Preparedness

Examples of projects include “Training on Cleaner Production for the Metal Finishing Industry in the APEC Member Economies” which is to enhance environmental performance and productivity in the metal finishing industry. An activity which is carried out by Industrial, Science and Technology Working Group to implement Cleaner Production Initiatives. “Ocean Model and Information System for APEC Region” is an activity under the auspices of the Marine Resource Conservation Working Group which aims at developing useful ocean information systems for member economies, and allowing member economies to apply useful and friendly ocean information to policy making for marine resources conservation. This is to implement the APEC Strategy for Sustainability of the Marine Environment.

In the area of Emergency Preparedness, a training on “Disaster Recovery / Contingency Planning” will be carried out in order to design, develop, implement and evaluate a training course on Disaster Recovery and Contingency Planning. The Industrial Science and Technology Working Group will carry out the activity. Furthermore, activities which answer to Emergency Preparedness include within its scope: earthquakes, emerging infectious diseases and enhance preventive and responsive measures for natural disasters.

Regrettably, this year there is no new activities drawn directly from the Sustainable Cities initiative, and neither on FEEEP. Some projects touch on these issues but not as primary focus. However, the list of projects and activities in this overview is not exhaustive. Apart from the projects and activities listed in this year overview, they are many on-going projects and activities on sustainable development undertaken by APEC fora that have been introduced in the previous years.

APEC's work on environment and sustainable development takes place against the background developments in the global environment agenda. Developments in global fora can inform and assist APEC in its regional work on environment and sustainable development.

The East Asian financial crisis has resulted in new threats to the environment and emerging opportunities for environmental management to ensure sustainability in the ensuing recovery. These issues have begun to be analyzed in national and international contexts. APEC economies could have valuable insights to gain from working more closely on environmental aspects of the recovery, in parallel with work on more direct financial and economic issues arising from the crisis.

Recommendations for Sustainable Development Priorities in APEC

- APEC fora should be directed to continue its work on sustainable development in APEC, particularly continuing efforts to add value to ongoing activities, avoid duplication, share innovative approaches, and support local empowerment.
- There is significant number of activities which APEC fora are pursuing. However, more coordination is required at a senior level to ensure focussed results. Experts' advisory is needed to address gaps and enhance further consolidated efforts among APEC fora in developing a more well directed work.
- Business participation in APEC activities on sustainable development in 1999 is encouraging. Nonetheless, APEC should further encourage the participation of the private sector, which is one of the major players in promoting sustainable development. APEC fora should encourage more private sector involvement from the planning of the project to its implementation. Dialogue with private sectors could lead to a more focussed and result-oriented outcome.
- In response to an APEC Leaders' call for "joint actions" in the food sector, ABAC has proposed an "APEC Food System". The proposal is aimed at promoting social and economic development and ensuring that the region's growth and development is sustainable. The main consideration of this proposal, which is being carried out by an Ad Hoc Task Force, is to study the ABAC's proposal, and necessary follow-up by APEC fora. It will demonstrate APEC commitments to work together with private sector in order to build a more prosperous and sustainable community in the region.

The SOM may wish to consider:

- Inviting relevant APEC fora to examine their activities in the light of developments in the global environment agenda
- Inviting relevant APEC fora to examine their activities in the light of new and emerging opportunities to ensure that development in the wake of the East Asian financial crisis is put on an environmentally sustainable footing
- Encouraging Senior Environment Officials to work together to provide analytical inputs on the environment and sustainable development to relevant APEC fora,

including development of criteria to provide a basis for objectively assessing future progress on sustainable development. It could be useful for Senior Environment Officials to review APEC sustainable development objectives from time to time to ensure they reflect the evolving priorities of member economies.

- Encouraging Senior Environment Officials to develop environment and sustainable development project proposals for consideration by relevant APEC fora.

OVERVIEW OF APEC ACTIVITIES IN SUSTAINABLE DEVELOPMENT FOR 1999

1. INTRODUCTION

The Ministerial Meeting of Sustainable Development held in Manila, July 1996 recommended that APEC Senior Officials annually review sustainable development work in APEC. Senior Officials tasked the APEC Secretariat to prepare a stocktaking exercise on sustainable development and report back findings in 1997. This overview was updated in 1998 and incorporated into the SOM report to Ministers on economic and technical cooperation.

This overview updates the stocktaking exercise on sustainable development for 1999. It therefore focuses on activities undertaken this year. To obtain a complete historic overview of sustainable development, readers should refer to the 1997 and 1998 Overviews. These include other activities that are still on going, which are not included in this Overview, such as networks, database, center, etc.

2. SUMMARY OF APEC ACTIVITIES RELATED TO SUSTAINABLE DEVELOPMENT

There are 42 activities related to sustainable development in 1999 compared to 60 activities in 1998. Only One third of these activities were drawn directly from the priorities on sustainable development given by Ministers and Leaders. Others relate to the sustainable issues only indirectly.

Out of 42 activities, 4 are related to the Cleaner Production Initiatives, 8 related to the Sustainability of Marine Environment initiatives and 6 are activities on Emergency Preparedness. Furthermore, there is no activity on the Sustainable Cities Initiative. Some other projects touch on this issue, but not as primary focus.

The 42 projects and activities are fairly evenly distributed among the fora. (IST WG is most active to have 15 projects and activities). Study/Research/Report/Publication lead with 16; Workshop/Symposium with 10 activities; Database/network have 8; Training/Technology Exchange with 7 activities. The category of Policy Reform/Standards Harmonization is the least with only 1 project.

Business participation is encouraging. Even though 17 projects did not specify any business participation, twelve of which are self-funded projects, the rest include business sector involvement. Six workshops / symposium involved the business sector as speakers as well as the participants. Four projects involved business in implementation. Three projects were designed with the active participation of business right from the planning stage. Meanwhile the NGO involvement was limited to only four projects.

3. BACKGROUND

The Environment Ministers' meeting on Sustainable Development, held in Toronto, Canada, 9-11 June 1997, agreed to advance work in the three areas identified in Manila; i.e. 1) clean technology/clean production, 2) sustainable cities, and 3) the sustainability of the marine environment. The meeting emphasized that APEC activities in the three areas should be collaborative and mutually reinforcing.

The Toronto meeting also discuss the issue of "the Impact of Economic Growth and Expanding Population on Food, Energy and Environment"(FEEEP), and Ministers urged environment officials to be actively involved in ensuring that environmental considerations be addressed as an important element in the FEEEP exercise.

Overall, ministers called for improved coordination to integrate the many sustainable development initiatives underway in APEC.

The APEC Ministers in their meeting in Kuala Lumpur, November 1998, reiterated the importance of APEC's work on sustainable development in following up on the initiatives of Environment Ministers in respect of clean oceans, cleaner production and sustainable cities. Further, the Ministers directed the appropriate APEC fora to progress work in these areas.

In Kuala Lumpur, APEC Leaders also reiterated their commitment to advance sustainable development across the entire spectrum of the APEC workplan. Leaders noted five sustainable development priorities for 1999:

- Cleaner production,
- Protection of the marine environment,
- Sustainable cities,
- Food, energy, and the environment in relation to economic and population growth (FEEEP); and
- The APEC Framework for Capacity Building Initiatives on Emergency Preparedness.

APEC's work on environment and sustainable development takes place against the background developments in the global environment agenda. Developments in global fora can inform and assist APEC in its regional work on environment and sustainable development.

The East Asian financial crisis has resulted in new threats to the environment and emerging opportunities for environmental management to ensure sustainability in the ensuing recovery. These issues have begun to be analysed in national and international contexts. APEC economies could have valuable insights to gain from working more closely on environmental aspects of the recovery, in parallel with work on more direct financial and economic issues arising from the crisis.

4. SPECIFIC INITIATIVES RELATED TO SUSTAINABLE DEVELOPMENT BEING CONDUCTED BY APEC FORA

A. Committee Initiatives

The Committee on Trade and Investment (CTI) is responsible for coordinating APEC's work in pursuit of trade and investment liberalization facilitation as outlined in the Osaka Action Agenda. The CTI and its sub-fora assist, where appropriate, in integrating relevant environmental concerns into APEC's TILF activities.

One example of their activities is the project "APEC Experts-Trainers-Executives Workshop on International Quality Assurance System (IQAS). It aims to contribute to greater competitiveness of SMEs through capacity building of human resources managers, business professionals, and trainers in integrating quality and environment management systems in the workplace.

The Economic Committee (EC) is responsible for coordinating APEC's response to the Leaders' request to study "The Impact of Economic Growth and Expanding Population on Food, Energy and the Environment" (FEEEP).

In 1998, the Committee has developed a final report on FEEEP, setting out possible joint actions to address emerging issues in this area for discussion by Leaders. To complement its report to Leaders and Ministers, the Committee published the proceedings of FEEEP symposium, which was held in Saskatoon, Canada, in September 1997.

Following the completion of its work in 1998, the Committee's Task Force on was instructed by SOM to undertake "a program of sharing or disseminating results of work on the costs and benefits of trade liberalization and agricultural reform policy". The Committee has been pursuing ways of implementing this work in the course of 1999.

The SOM Sub-Committee on Economic and Cooperation (ESC)

The SOM Sub-Committee on ECOTECH serves as a forum to discuss, formulate and coordinate action oriented integrated strategies in consultation with existing APEC Fora and the business community. This is necessary to implement the APEC Framework for Strengthening Economic Cooperation and Development which has identified "Safeguard the quality of life through environmentally sound growth" as one of the six priority themes."

B. Working Group Initiatives

The Human Resources and Development Working Group (HRD WG)

The HRD WG in 1998 designated a focal point on sustainable development to more efficiently coordinate working group activities in this area, not only within the HRD WG but also in relation to other APEC fora. The focal point is responsible for reviewing how HRD WG activities respond to the recent directions from APEC Leaders and Ministers; and how HRD WG activities may complement the activities of other APEC working groups.

In the HRD WG, various projects have been designed and carried out to support the APEC Leaders' priority on sustainable development, there were mainly channeled through the HRD WG's work to build broad-based capacity and mechanisms to educate, train and manage economic, administrative, social and environmental institutions. Many of the HRD WG's activities will make important contributions in the mid and longer term.

In 1999, following the culmination of the HRD-BMN project on Human Resources for Sustainable Development, HRD WG inaugurated a program of APEC Masters of Sustainable Development (AMSD). The program is fully funded by Australia and aimed to address the capacity building requirements for establishing environmentally sound economic development in the APEC region. The AMSD program is designed to enhance the professional capacities, technical skills and knowledge base of middle to senior level managers responsible for environmental management and policy development in the Asia-Pacific region. The program offers scholarships to candidates from developing APEC economies.

On the Cleaner Production Initiative, the HRD WG is conducting a project which is to encourage the adoption of cleaner production processes management systems in the food industry sector throughout the APEC region by collectively developing resource and training materials for practical use among member economies.

The Industrial Science and Technology Working Group

In 1999 sustainable development continues to be a major element of IST WG projects. IST WG has established an "Initiative Coordination Group" in order to optimize implementation of the major Leaders' and Ministers' initiatives including the Cleaner Production Strategy. The role of the group is to facilitate a comprehensive approach to implementing the Leaders and Ministers initiatives in balanced way for all elements across relevant APEC groups.

Through its 1999 Action Plan, IST WG continues to focus on the objectives of the Cleaner Production Strategy. To this end, the IST WG has extended the mandate of the Task Force on Cleaner Production until December 2000.

The Energy Working Group

The Energy Working Group (EWG) continues to implement its work program to mitigate the environmental impacts of energy production, delivery and use. It seeks to do so by:

- Promoting the advantages of clean fossil energy technologies;
- Encouraging the adoption of policies and programs promoting energy conservation and the application of energy efficient technologies; and
- Maximising the degree of technology assimilation by increasing the ability of members to assess, operate and maintain new and renewable energy technologies.

As instructed by Energy Ministers the EWG is undertaking a work program designed to provide impetus to the application to the APEC electricity sector of environmental policy practices that are predictable, transparent and consistent. The EWG is also pursuing a work program aimed at establishing a low risk environment to encourage investment in natural gas supplies, infrastructure and trading systems. This will help members increase

the use of cleaner energy and assist in reducing harmful emissions into the atmosphere. Finally the EWG is promoting the uptake of environmentally sound and efficient measures in the area of minerals and energy exploration and development.

The EWG is also promoting the adoption of common test standards for laboratories that measure the efficiency of energy-using equipment, and the mutual acceptance of test results throughout the region. This will help encourage sales of energy efficient equipment and promote the uptake of more energy efficient technologies.

The Transportation Working Group (TPT WG)

The Transportation Working Group has a Steering Committee on Safe and Environment-Friendly Transportation Systems (including new technologies) to oversee projects and activities which pursue the achievements of the overall safety and environment-related goals agreed upon by APEC Transport Ministers. Specific TPT-WG projects, completed or in progress in 1999, which address environmental concerns include the following:

- Implementing a Framework of Standards for Intelligent Transportation Systems.
- The preparation of a best practice manual to address urban transport problems.
- Work by the Maritime Safety Expert Group, including the recent presentation of a summary of maritime safety issues and problems in the region and a set of recommendations for improvements; and the initiation of a project to reduce or eliminate substandard shipping in the APEC region which will contribute to decreasing the threat of major environmental incidents and to ensuring the sustainability of the marine environment.
- Maintaining an Inventory of Regional Cooperation on Oil Spill Preparedness and Response Arrangements, a summary of which is available on the APEC web site.
- The promotion of high quality instruction for seafarers consistent with the requirements of the revised provisions of the IMO Convention on the Standards of Training, Certification and Watchkeeping (STCW) which will contribute to greater safety in maritime transport as well as safeguards to the marine environment.
- Ongoing work on the Road Transport Safety Project.
- The examination of environmental considerations as part of the Ports Experts Group's efforts to identify common issues and recommendations for improved capacity and efficiency of APEC ports.

The Telecommunications Working Group (TEL WG)

There are three activities of the Telecommunications Working Group in 1999, which relate to the Sustainable Cities Initiative. They are the Disaster Recovery and Contingency Planning Seminar, APII Test-bed Project and the Telework Manual. One activity also addresses Emergency Preparedness. The project aims to design, develop, implement and evaluate a training course on Disaster Recovery and Contingency Planning. It is expected that through this particular project, APEC economies will be better equipped to protect their telecommunications networks which are themselves critical resources for disaster recovery planning and practice.

The Tourism Working Group (TWG)

The Tourism Working Group has held two seminars related to sustainable development in 1999. The first one was held on 12-15 April in Cairns, Australia. The project gathered examples of best practice environmental initiatives in the APEC region to encourage the adoption of sustainable tourism principles among member economies.

The other Seminar was held in Manzanillo, Mexico on 13 May, during the XIV TWG Meeting. The theme of the seminar was "Tourism and the Environment". The goals of the Seminar were to allow APEC Economies to assist economies in preparing for the new and dominant tendencies of the tourism industry, which relate increasing travel flows towards those areas which not only boast natural beauty and interesting cultural attractions but also to respect sound environmental practices. The purpose of the Seminar was to establish a few, basic principles and practices required for sustainable tourism in APEC Economies, and helped to define tools necessary for decision makers to adopt in order to put into place the basic requirements for the implementation and monitoring of all current and future sustainable tourism projects in APEC Economies.

The Marine Resources Conservation Working Group (MRC WG)

The Marine Resource Conservation Working Group (MC) is responsible for coordinating the implementation of the APEC Action Plan on Sustainability of Marine Environment, which was approved by APEC Environment Ministers in June 1997. At its 12th meeting this year, the WG established an ad hoc group to draft a new approach that will ensure that the full scope of objectives within the Action Plan are addressed comprehensively, and will develop improved links and coordination with other APEC fora.

Since the last report, the MRC WG has organized a number of meetings related to sustainability of the marine environment, including the high level Oceans Conference. Current activities include projects on management and mitigation of harmful algae blooms; strengthening the coordination of integrated coastal management; assessment of the environmental safety of aquaculture farms; implementing recommendations from the Workshop on Decommissioning of Offshore Oil and Gas Platforms; and establishing an APEC Marine Environmental Training and Education Center in Korea. The MRC WG also has two complementary networks designed to link centers of excellence in APEC economies; the Ocean Model and Information System and the Ocean Research Network for the Pacific.

During its 12th meeting, the MRC WG also held its first joint session with Fisheries WG to identify common interests and strengthen cooperation related to sustainability of the marine environment. The two WGs agreed to strengthen ongoing communication regarding issues and activities of joint concern, meet together at least every second year, and develop collaborative projects. The first of these will be on destructive fishing practices and their impacts.

The Fisheries Working Group (FWG)

The FWG is continuing to implement a number of collaborative regional projects to address environmental and sustainable development issues. The projects include the development of a regional research and development network focusing on the culture of live reef fishes, and the development of a common approach to aquaculture education and training. These projects will work towards developing the skills to meet the challenges of

a growing aquaculture industry whilst maintaining environmental integrity and long term sustainability of aquaculture operations.

At the same time the FWG is trying to address the issue of cyanide fishing and other destructive fishing practices and will be working with the Marine Resources Conservation Working Group on a multi-year program to deal with the problem, including holding inter-sessional discussions specifically focusing on coral reef issues.

The FWG is not only promoting sustainable development and growth but also promoting the role of women in aquaculture. The project Women in Aquaculture will define the role played by women in aquaculture operations and examine potential opportunities to develop education, training and extension strategies for women in this field.

The FWG is also holding a workshop on cooperative fisheries management in July 1999. The aim of the workshop is to develop strategies to implement international recommendations and instruments for responsible fishing in order to support the sustainability of fisheries resources.

Trade Promotion Working Group (TPWG)

Trade Promotion Working Group (TPWG) has addressed issues on sustainable development indirectly through its ongoing activities. In this regard, the Third APEC International Trade Fair held in November, 1998 at Kuala Lumpur set its main theme as “Enhancing Global Competitiveness Through Technology and Human Resource Development”, and the fair focused on how new technology and skilled manpower contribute to the economic development of APEC economies.

The fair also adopted “Emergency Preparedness in APEC” as its sub-theme to highlight products, services and technologies related to emergency preparedness in APEC as part of the initiatives to develop expertise in this area. The background paper on Emergency Preparedness in APEC Capacity Building and Institutional Strengthening that was deliberated at SOM II, 1998 contained a recommendation to hold a one-off trade exhibition to identify needs and solutions unique to the APEC region for alleviating the deleterious impacts of smoke, haze and forest fires.

The web-site of APEC WGTP, APECNet, enables the business/private sector to search for business opportunities or post inquiries which cover also energy, chemicals and engineering/technological services.

The Agricultural Technical Cooperation Experts Group (ATC EG)

Sustainable agriculture is one of the 7 key areas of cooperation for ATC EG. The ATC EG has set up one sub-group on sustainable agriculture in July 1998 which had its first seminar-workshop on 12-14 June 1999, in the Philippines. The workshop emphasized the need to share information on policies, to build capacity in technologies for the sustainable development of agriculture and to establish a framework for future cooperation across the APEC region.

The Ad Hoc Policy Level Group on Small and Medium Enterprises (PLG-SME)

The Integrated Plan of Action for SME Development (SPAN) which was endorsed by APEC Leaders in Kuala Lumpur, in November 1999, recognized that one of the strategic directions in addressing the access to technology is the need to create and increase awareness of environmental friendly and cost effective technology. However, the Group has had no specific projects addressing sustainable development issues this year.

Infrastructure Workshop (IWS)

The Workshop has been holding an annual Public-Private Dialogue since 1994. In 1997, the Sustainable Cities Program of Action was included as the subject of a special symposium of experts and policy makers on the fringes of the Dialogue.

In KL, Ministers welcomed the APEC Infrastructure 1998 Report on activities to implement the 1997 Vancouver Framework. Ministers recognised that investment in infrastructure development can contribute to economic recovery in the region and called for further progress in the five areas of:

- creating an Asia-Pacific Information Society;
- creating an Integrated Asia-Pacific Transportation System;
- economically viable and environmentally sustainable energy infrastructure;
- infrastructure for Sustainable Cities; and
- Infrastructure to Support Rural Integration and Diversification, including innovative ideas for financing rural infrastructure development.

In 1998, the theme for the Dialogue was *Public-Business/Private Dialogue on Infrastructure and Sustainable Development*, which furnished the business sector with an important opportunity to address the role of infrastructure development in supporting economic recovery in the APEC region.

In 1999, the Infrastructure Workshop is overseeing a major project, part funded from the APEC Central Funds, called Regional Integration for Sustainable Economies (RISE) (formerly Infrastructure to Diversify and Integrate Rural Economies). The project is focusing attention on building rural commercial viability to create more efficient and productive agricultural trade.

Early Voluntary Sectoral Liberalization

The Committee on Trade and Investment has assisted SOM in coordinating further work on EVSL, in particular, the implementation of the sectoral work programs on ECOTECH, facilitation and other non-tariff elements of the initiatives. The 15 sectoral initiatives selected by Leaders in Vancouver contains a number of activities that contribute to sustainable development. These will reinforce the market opening and trade facilitation measures included in the EVSL package. Proposed liberalization in the environmental goods and services area will expand global trade by enhancing market access and removing impediments, thereby assisting the adoption of environmentally friendly practices in APEC economies. In the forestry and fisheries sectors, sustainable management programs aim to ensure that increased trade does not lead to unsound practices. Both sectors benefit from Ecotech focus on sustainable development measures such as resource conservation and management and human resource development support.

5. EXPECTED “OUTPUTS’ FOR 1999

1. Study / Research / Report / Publication

- “Regional Integration for Sustainable Economies (RISE)” – to build a rural commercial viability to create more efficient and productive agricultural trade. EC
- “Colloquium on the technical issues of minimum energy performance standards” – to identify, assess the importance of, and record the major technical issues involved in designing a minimum energy performance standards program. EWG
- “The role of petroleum based and alternate transport (coal and natural gas derived) fuels in reducing emissions in the APEC region.” - The study will examine the more efficient and environmentally beneficial use of petroleum fuels including fuel quality improvements through reformulated and oxygenated fuels. The use of environmentally friendly alternative transport fuels such as compressed natural gas will also be examined. EWG
- “APEC joint project for the recovery and utilization of methane emitted from municipal land fills.” - The project will assess the quality and quantity of the land fill gas resource at selected sites in Thailand, Indonesia and the Philippines. Capturing and harnessing landfill gas has the potential to minimize energy costs, mitigate environmental impact and increase health and safety levels. EWG
- “Collaborative APEC Grouper Research and Development Network” – to develop a regional collaborative approach towards research into the culture of live reef fishes. FWG
- “Collaborative Aquaculture Education Program” – to adequately train a critical mass of technician and middle level managers at farm and government level in the science of aquaculture so as to develop skills to equip them adequately to meet the challenges of a growing industry in the next millennium. FWG
- “Women in Aquaculture” – to undertake research and to provide a report that will:
 1. define and describe the role played by women and the potential opportunities available to women in aquaculture;
 2. look for a method to develop education, training and extension strategies to raise the education levels of women to allow them to take potential opportunities in aquaculture as they arise; and
 3. propose a strategy that will allow the APEC Fisheries Working Group to decide how best to promote and contribute to the involvement of women in aquaculture. FWG
- “APEC – Wide Studies of Megacities and Technology and Learning in 2010 by the APEC Center for Technology Foresight” – to look into the longer-term future of science, technology, economy and society to identify emerging generic technologies likely to yield the greatest economic and / or social benefits. ISTWG

- “Development of Utilization Technologies for Waste Water for Production of Valued Substances” – to assist APEC economies to develop profitable utilization of wastewater for production for commercially valued substances. ISTWG
- “Study on Production of Valuable Agro-Chemicals from Unused Biomass by Cascade Utilization” – to study on how to extract and produce tannin derivatives for wood from unused woody biomass. ISTWG
- “Collaborative Research on Disaster Prevention” - To secure safety and prosperity by preventing and mitigating earthquake disasters. ISTWG
- “Development of Biodegradable Plastics” - To promote research on biodegradable plastics made from tropical farm products. ISTWG
- “Emerging Infectious Diseases: Influenza Virus Surveillance Focused on the Rapid Identification of Newly Emerging Viruses” - To help APEC economies strengthen the ability to respond to new influenza virus. ISTWG
- “International Cooperative for Cleaner Production” - Search for all CP database in government, industry and NGO sectors, made available to all users. ISTWG
- “Assessment of environmental safety of aquaculture farms using biochemical indicator of distress” – is aimed at establishing an effective assessment technique for environmental safety of finfish aquaculture sites, supporting the management of coastal zones, through new tools to monitor contaminant exposure. MRCWG
- “Telework Manual” – to develop a practice manual setting forth the advantages of telework, appropriate processes to follow when implementing a telework program, and related issues which need to be addressed in order to implement telework successfully. TELWG

2. Workshop / Symposium

- “Workshop on setting up and running an energy Performance Testing Laboratory” – The purpose of the workshop is for participants to gain an understanding of the practicalities and problems of setting up and running an energy performance testing laboratory, to define and address technical issues relating to harmonisation, including complying with requirements for mutual recognition and to disseminate the findings. EWG
- “Workshop on energy-efficiency retrofitting of commercial buildings” - The objective of this project is to provide a forum for government policy makers, energy service companies and firms involved in manufacturing energy-efficient components for buildings to share information and experiences related to retrofitting building-commercial and government, public and private. EWG
- “Environmental Cooperation Workshops for Sustainable Development of Mining Activities” – to discuss best practices in mining activities, clean technology for mining activities, and international regulations against the background of sustainable development in minerals and metals. EWG

- “Symposium on Domestic Refrigeration Appliances” – to identify existing differences in requirements for measuring the energy performance of domestic refrigeration appliances, to examine the reasons for those differences, and, where possible, to propose ways of overcoming those differences. EWG
- “APEC Cooperation for Earthquake Simulation” - To develop numerical simulation model for the earthquake generation and earthquake cycles in Asia Pacific region. ISTWG
- “Innovation and Apprenticeship in Pollution Prevention” – to provide to SMEs information on pollution prevention, economics, environmental insurance, environment management, process design and products design as well as operation control. ISTWG
- “Conference on Harmful Algae Management and Mitigation – to bring together scientists, officials responsible for management and certification of seafood products, and industry, to promote exchange information on best practices, provide training on detection and analytical methodology, and develop a framework for effective management and mitigation program. MRCWG
- “Environmentally Sustainable Accommodation for Tourism” – will gather examples of best practice environmental initiatives within the APEC region to encourage the adoption of sustainable tourism principle among member economies. TWG
- “Tourism and the Environment” – to establish a few, basic principles and practices required for sustainable tourism in APEC Economies, and helped to define tools necessary for decision makers to adopt in order to put into place the basic requirements for the implementation and monitoring of all current and future sustainable tourism projects in APEC Economies. TWG
- “APEC Experts-Trainers-Executives Workshop on International Quality Assurance Systems (IQAS)” – to contribute to greater competitiveness of Small and Medium Enterprises (SMEs) through capacity-building of human resources managers, business professionals, and trainers in integrating quality and environment management systems in the workplace. CTI

3. Database / Network

- “Conservation of Plant and Animal Genetic Resources” – to identify APEC-wide needs for genetic resources management based on the genetic resource database of individual member economies; establish an APEC information network for the exchange of genetic resources related information; develop APEC networks and channels for exchange of genetic resource materials. ATC
- “Sustainable Agriculture” – to establish APEC information network to assist the development of practices which will promote sustainable agriculture. ATC
- “Emerging Infectious Disease; Enhancing E coli 0157 surveillance” - To assist APEC economies to address a key pathogen related to food safety. ISTWG

- “A Feasibility Study for the Development of Post harvest Network for the APEC Region” - To establish a database on "Post harvest Network" for the APEC region (a website was created in 1999 – see <http://cape.uwaterloo.ca:80/postharvest/>). ISTWG
- “Ocean Model and Information System for APEC Region (Year 3)” – aims at developing useful ocean information systems for member economies, and allowing member economies to apply useful and friendly ocean information to policy making for marine resources conservation. MRCWG
- “Ocean Research Network for the Pacific” – is aimed at building a network of centers of excellence in ocean and coastal research and related technology to support the marine interest of the economies of the Pacific region. MRCWG
- “APII Test-bed Project” – to build effective APII and enhances interconnectivity and interoperability between test-beds. TELWG
- “Experts Group on Maritime Safety” – to identify maritime safety issues and problems in the region and propose recommendations for improvement. TPTWG

4. Policy Reform / Standard Harmonization

- “Maritime Initiative” – to develop an efficient, safe and competitive environment for maritime transport in the region. TPTWG

5. Training / Technology Exchange

- “Plant and Animal Quarantine and Pest Management” – to improve efficiency of quarantine systems in APEC economies and assistance to economies to comply with WTO obligations. ATC
- “APEC Master of Sustainable Development Program” – to enhance the professional capacities, technical skills and knowledge base of middle to senior level managers responsible for environmental management and policy development in the Asia-Pacific region. HRDWG
- “Training on Cleaner Production for the Metal Finishing Industry in the APEC Member Economies” – to enhance environmental performance and productivity in the metal finishing industry. ISTWG
- “Research Cooperation on Environmental Issues” – To better prepare various phenomena of the earth including setting up seismic network. ISTWG
- “Cleaner Production Auditing System of APEC member Economies” - To develop computer software to improve application and discrimination of cleaner production in industrial sectors in the APEC region. ISTWG
- “Emerging Infectious Diseases: Enhanced Use of Communications to Strengthen Surveillance and Control of New Infections in APEC” - To enhance awareness of the

emerging infectious diseases and share information and take collaborative action against such diseases in the APEC region. ISTWG

- “Disaster Recovery / Contingency Planning” – to design, develop, implement and evaluate a training course on Disaster Recovery and Contingency Planning. The project will involve a five-day training seminar for senior managers and engineers from telecommunications organizations within APEC. TELWG

July, 1999