



Asia-Pacific Economic Cooperation

APEC Senior Officials

**2000 Report on
Economic and Technical Cooperation**

Ministerial Meeting XII

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FOREWORD

When I took on the position of Chair of the ECOTECH Sub-committee (ESC) in early 2000, I was informed that the role of SOM Sub-committee on ECOTECH is to assist the Senior Officials' Meeting (SOM) in coordinating and managing the economic and technical cooperation agenda, and in identifying value-added initiatives for cooperative action. The ESC also seeks to advance more effective implementation of the *1996 Manila Framework for Strengthening Economic Cooperation and Development* through consultation with APEC fora, and the development of policy management tools and guidelines for projects.

It was quite obvious that the scope of work of the ESC is quite complex and wide-ranging. So, in order to help myself understand the task at hand, I have rearranged the scope of work of the ESC into three categories: coordination, dissemination, and participation. Coordination is a primary task whereby works from various working groups and fora are summarised and reported. The ESC was also asked by SOM to evaluate the effectiveness of the various ECOTECH projects undertaken by APEC working groups and fora. The outcome of some of these good projects is expected to be disseminated to the public, to inform them as well as to enlist their support of the APEC process. Participation can be considered as a part of value-added initiatives that the ESC could suggest to SOM so that activities on ECOTECH could be promoted or enhanced.

This year's report starts with the summary of activities from each APEC forum, and the ESC evaluation of completed HRD projects. Ours is probably the only report that summarises all the ECOTECH activities of APEC fora and presents them together in a comparative fashion. The ESC attempted to evaluate completed HRD projects early this year and found that, due to the complex nature of these projects, we could not do it well without some external assistance. As for other work on the remaining themes of ECOTECH as indicated in the *Manila Action Agenda*, Australia, Indonesia and Mexico have completed their tasks and the results were debated in the third ESC meeting. Other important accomplishments this year include: Malaysia's proposal for a Network of Skills Development Centres; the implementation of the *APEC Agenda for Science and Technology Industry Cooperation in the 21st Century*; the completion of the review of the implementation of Part II of the *Osaka Action Agenda*; the revision of the *ECOTECH Weighting Matrix* and the *Guidance on Strengthening Management of APEC's ECOTECH Activities*; and the analysis of the ECOTECH aspects of the APEC Food System.

Perhaps one of the most exciting accomplishments this year is the completion of the ECOTECH Information Clearing House project. This project provides a website that indexes all relevant information on APEC ECOTECH activities, and provides fast and direct access to a unique collection of information that will benefit private/business sector investment decision making as well as public policy decision making and academic studies. The increased emphasis on public outreach activities as evidenced by Thailand's proposal to publish a report on 'Making APEC Matter to the People through ECOTECH' is also a most welcome change.

I wish to express my sincere gratitude to Lead Shepherds/Chairs of APEC fora, friends and colleagues who greatly contributed to the preparation and completion of this report. I wish to thank Pehin Lim Jock Seng and his staff at the Brunei APEC Secretariat who provided great friendship, encouragement and assistance to me as an inexperienced ESC Chair. The APEC Secretariat under the direction of Ambassador Serbini Ali provided its most able staff to help in not just the preparation of this report, but also the management of ECOTECH activities throughout the year. Special thanks to Mohan Mathews who, almost single-handedly, drafted and put this report together in its present form. Last, but not least, I wish to thank Director General Kobsak Chutikul and his staff at the Thai Ministry of Foreign Affairs who supported my nomination as the ESC Chair in the first place, and provide the necessary assistance, budgetary and otherwise, that enables me to carry out my duty as the ESC Chair from Thailand.



Medhi Krongkaew
ESC Chair

EXECUTIVE SUMMARY

In 1998 Ministers welcomed the Senior Officials' Meeting (SOM) report on Economic and Technical Cooperation (ECOTECH) activities and called for the report to be submitted annually. The requirement provides an ideal opportunity for a stocktake of ECOTECH activities across APEC fora. The attention of this year's report is assessments on the implementation of ECOTECH initiatives, continued work on improving coordination of ECOTECH activities and the launch of the ECOTECH Clearing House.

The year 2000 report is in nine chapters with 12 Annexes. It includes an assessment of the number and types of ECOTECH projects being conducted by APEC fora, reports from individual fora on their ECOTECH activities and an evaluation of completed human resources development projects. Progress in the implementation of each of the six priority themes under the *1996 Manila Declaration* is discussed in the third chapter. For the first time since its introduction in 1995, implementation of Part II of the *Osaka Action Agenda* has been assessed and the outcome is discussed in chapter four. Next, the implementation of ECOTECH initiatives announced in 1998 relating to skills development and science and technology cooperation is reviewed. How well the guidance provided by the SOM Sub-committee on Economic and Technical Cooperation (ESC) is being followed by APEC fora in the implementation of projects is discussed in chapter six. A short description on the ECOTECH Clearing House follows, before the recommendations and conclusions of this year's ECOTECH report are presented.

The highlights of this year's report are:

- With a modest budget of around US\$2 million annually for ECOTECH projects, a remarkable number of projects is being conducted across APEC fora.
- There is a good spread of projects across most of the six ECOTECH themes, with almost one-third aimed at developing human capital, many of which are not just information gathering or sharing activities, but involve training.
- There are examples of good HRD projects and some useful lessons learnt that could be drawn on by all APEC fora. Those HRD projects aimed at achieving a better informed, more knowledgeable private/business sector – employers and workers – in turn lead to actual improvements in the way companies do business.
- The ESC has identified 17 ECOTECH initiatives that have been launched since 1995. Many of these provide directions for specific areas of work. However, it can take up to two years from Ministers and Leaders issuing an initiative or directive to its translation into projects.
- The APEC Finance Ministers' process ensures high-level political support for structural reform, with Finance Ministers reporting to Leaders. Current activities are focused on building sound domestic institutions in the region, with a strong emphasis on capital markets.
- Among the economic infrastructure projects, particular attention was drawn to the 'APEC-PECC Regional Integration for Sustainable Economies' (RISE) project which is proving to be most exciting. Pilot scale work with Regional Growth Centres (RGCs) in Jiangmen (China) and Manado-Bitung (Indonesia) has commenced with a view to improving holistic regional development plans.
- Because of its cross-cutting nature, sustainable development issues need to be better coordinated so that the common objective of developing sustainable growth in the Asia-Pacific region can be realised.
- The Common Policy Concepts laid down in Part II of the OAA remain as relevant today as they were five years ago. APEC fora should continue to draw on them in framing their work programs and activities.

- **Good progress has been made in the implementation of the *Kuala Lumpur Action Program on Skills Development and the APEC Agenda for Science and Technology Industry Cooperation into the 21st Century*.**
- **APEC fora have observed the ECOTECH guidelines, particularly in avoiding duplication and in involving the private/business sector in projects. Almost all ECOTECH projects submitted for funding in July 2000 identified benefits that flowed on to the private/business sector and/or involved private/business sector participation. However, when projects are being formulated, sufficient attention is still not being paid to the outcomes of projects, how they actually relate to specific ECOTECH objectives and initiatives, and how the results can be used for outreach purposes.**
- **The ECOTECH Clearing House, to be launched in November 2000, will provide facilities for the exchange of information between potential partners in ECOTECH activity; in particular the identification of ECOTECH requirements and the capacity to provide appropriate expertise to meet those needs. It will include an electronic notice-board to support better coordination of ECOTECH activities.**

YEAR 2000
SOM REPORT ON ECONOMIC AND TECHNICAL COOPERATION
TO THE TWELFTH MINISTERIAL MEETING

1 INTRODUCTION

Economic and Technical Cooperation (ECOTECH) in such areas as energy, fisheries and telecommunications developed, in the first instance, through the 10 APEC Working Groups established in 1990-91. Cooperation was advanced further by the addition of special groups dealing with aspects of agricultural technical cooperation, infrastructure, and small and medium enterprises (SMEs). However, in the early days there was no holistic view of what should be accomplished through economic and technical cooperation.

APEC Economic Leaders, at their first meeting at Blake Island, in 1993, envisioned a community built upon cooperation in the region. Built on this vision, in 1995 the essential elements of ECOTECH—the common policy concepts for each Working Group, the activities and policy dialogue that each of them should undertake—were set out under Part II of the *Osaka Action Agenda*. The following year, the goals and organising themes for ECOTECH activities were further defined with the adoption of the *Declaration on an Asia-Pacific Economic Cooperation Framework for Strengthening Economic Cooperation and Development (Manila Declaration)*.

APEC's ECOTECH goals, under the *1996 Manila Declaration*, are to:

- attain sustainable growth and equitable development in the Asia-Pacific region;
- reduce economic disparities among APEC economies;
- improve the economic and social well-being of the people; and
- deepen the spirit of community in the Asia-Pacific.

Its guiding principles are:

- mutual respect and equality;
- mutual benefit and assistance;
- constructive and genuine partnership; and
- consensus-building.

The ECOTECH goals complement and support APEC's broader trade and investment liberalisation and facilitation objectives, by recognizing that liberalisation will not be effective unless developing economies have the systems and understanding to meet their obligations. Ministers emphasised that ECOTECH activities should be “goal-oriented with explicit objectives, milestones, and performance criteria”. The private/business sector was encouraged not only to participate, but also to initiate ECOTECH activities in line with APEC goals and objectives.

APEC does not have a huge central fund for general economic development purposes. Therefore, APEC's ECOTECH agenda focuses on capacity building and cooperation to upgrade the ability of member economies to meet their Bogor goal commitments of free and open trade and investment. In practice, ECOTECH has focused on policy dialogues, sharing best practices and experience, sharing information to promote transparency and knowledge, harmonisation of standards or mutual recognition and training in support of the *Bogor* goals and implementation of international commitments.

Participation in these joint activities is on a voluntary basis. Activities can be wholly or partly financed from APEC central funds, self-financed by member economies or carried out with contributions from outside sources.

As the number of projects conducted by APEC fora increased, it became apparent that there was a need for APEC's ECOTECH agenda to be managed more strategically. Following Ministerial endorsement in Vancouver, in 1997, the SOM Sub-committee for Economic and Technical Cooperation (ESC) was established in April 1998 to assist Senior Officials in coordinating and managing APEC's ECOTECH agenda, as well as identifying value-added initiatives for cooperative action. The Terms of Reference of the ESC are given in Annex 1.

One of the first tasks before the ESC was the organisation of project information according to the six ECOTECH themes. It allowed Ministers, for the first time, to have a clearer picture of the number of projects being carried out by each APEC forum under each of the six ECOTECH themes — and where the gaps were. The ESC, in its first year, also prepared the *Guidance on Strengthening Management of APEC ECOTECH Activities*, which was endorsed by the SOM in Kuching. The guidelines encouraged fora to develop outcome-oriented projects in response to the six ECOTECH themes, greater private/business sector involvement in projects and the Secretariat to improve information flow through the development of a Projects Database.

In response to the recommendation for a more dynamic retrieval of project information, the Secretariat established a Projects Database in 1999. With better information on projects, the ESC was able to categorise ECOTECH activities by type to determine how much effort was being devoted to information sharing through seminars/workshops, websites/databases and how much to delivering practical outcomes such as training programs.

The ESC met on three occasions this year in Brunei. The first meeting was 16-17 February 2000, following which the SOM endorsed the ESC's year 2000 work program (Annex 2). The second meeting was held 30-31 May 2000, and the third 19-20 September 2000. Dr Medhi Krongkaew of Thailand chaired the meetings.

This year's ECOTECH report analyses the projects that have been carried out by fora, recommends how coordination of ECOTECH activities can be enhanced and reports on the implementation of the various ECOTECH initiatives, recommendations and management tools.

2 ECOTECH PROJECTS IMPLEMENTED IN 1999-2000

The ESC, with assistance from the APEC Secretariat, assessed ECOTECH projects that were in progress in 1999-2000 or completed in 2000. Project information was sourced from the APEC Secretariat's Project Database and, where available, from project progress and evaluation reports. The ESC broadly evaluated the activities with the following in mind:

- Avoidance of duplication
- Identification of gaps
- ECOTECH priorities and goals of the *Manila Declaration*
- Relevance to specific ECOTECH initiatives
- Whether the outcomes met the intended objectives
- Relevance to private/business sector, including participation and/or funding
- Compliance with the *Guidance on Strengthening Management of APEC ECOTECH Activities*
- Compliance with the *ECOTECH Weightings Matrix*
- Shortcomings

Information on ECOTECH projects and activities undertaken by APEC fora in 2000 can be accessed through the Internet at <http://203.127.220.68/Apecp1.nsf?OpenDatabase>. A table summarising the number of projects conducted by APEC fora under each ECOTECH priority theme is at Annex 3 and that summarising the types of ECOTECH activities conducted by APEC fora is at Annex 4.

2.1 Key Findings

With a modest budget of around US\$2 million annually for ECOTECH projects, a remarkable number of projects is being conducted across APEC fora. This is made possible because the cost of individual projects, in many cases, is substantially supplemented by contributions (monetary and in-kind) from participating member economies. That act, in itself, is a manifestation of the cooperative spirit that prevails and the will of members to fulfil the ECOTECH goals of deepening the community in the Asia-Pacific and improving the economic and social well-being of the people.

- The number of projects categorised by ECOTECH themes are as follows:

| | |
|---|------------|
| Developing human capital | 70 |
| Developing stable, safe and efficient capital markets | 7 |
| Strengthening economic infrastructure | 21 |
| Harnessing technologies for the future | 49 |
| Promoting environmentally sound growth | 51 |
| Strengthening the dynamism of SMEs | 22 |
| Total | 220 |

An analysis of ECOTECH projects in-progress or completed in 2000 shows that there is a good spread of projects across most of the six ECOTECH themes, with almost one-third aimed at developing human capital (Annex 3). It is equally satisfying that a good proportion is not just information gathering or sharing, but training.

However, the number of projects under the capital markets theme is disproportionately low, especially when capacity building and institutional strengthening in response to the financial crisis are important APEC short-term objectives. Of the seven projects, only the three projects by the Finance Working Group are directed towards institutional strengthening. The ESC understands, however, that four more training-related projects

by the Finance Working Group, not included in this year's table, have been approved by the Budget and Management Committee (BMC) for implementation next year.

Recommendation: In implementing the six ECOTECH themes of the Manila Declaration, the ESC urges fora to pay more attention to the joint activities identified in the Osaka Action Agenda.

For the second year, the ESC has classified APEC projects according to broad categories that best describe the type of activities being undertaken by APEC fora (Annex 4). The exercise shows that around 34% of the projects involve information gathering (e.g. studies), 44% information sharing (e.g. seminars and websites), and 17% training. The remaining activities were directed at developing standards, conducting expositions and establishing APEC centres.

- The number of projects categorised by type of activity are as follows:

| | |
|--------------------------|------------|
| Survey/Study/Report | 75 |
| Workshop/Seminar | 59 |
| Training | 38 |
| Standard/Best Practice | 4 |
| Database/Website/Network | 37 |
| APEC Centre/Exposition | 7 |
| Total | 220 |

The ESC has identified 17 ECOTECH initiatives that have been launched since 1995. Many of these provide directions for specific areas of work. However, the lag between when an initiative or directive is issued by Ministers and Leaders and its translation into projects is a matter of concern to the ESC. In some cases up to two years may elapse before projects are implemented. The ESC is pleased to note the BMC discussed this matter at its meeting in July 2000, and agreed to recommend to Ministers an arrangement which will enable it to approve urgent projects more quickly.

Recommendation: APEC fora should allow time to implement the tasks identified in the existing 17 ECOTECH initiatives, while allowing a flexible process for the consideration and approval of ECOTECH projects and early implementation of urgent projects.

2.2 Activities by APEC Fora

Agriculture Technical Cooperation Experts Group (ATCEG)

One of the ATCEG's main tasks has been the implementation of the APEC Food System. A workshop on 'Agricultural Technology Transfer and Training' in January 2000, the symposium on 'Rural Issues in APEC Regions' in March 2000, which covered environmental issues, and the workshop on 'Alternative Quarantine Treatments and Post-harvest Handling Methods' in May 2000 were, in part, in response to the recommendations of the APEC Food System Report, taking into account the ABAC recommendations.

The ATCEG held a symposium on 'Rural Issues' in March, as a follow-up to 1998 FEEEP report recommendation for further information on "rural issues facing member economies, taking into account demographic and economic growth patterns, in order to find appropriate means to revitalize rural communities". The importance of continuing discussion on rural issues in the ATCEG was recognised.

The ATCEG has placed importance on capacity building during the year, notably on the exchange of information. A workshop focusing on animal-health-related risk assessment

was held in Queensland, Australia in April 2000. The objectives of the workshop were to enhance member economies' knowledge and understanding of the process involved in developing health import risk analyses (including specific case studies as examples) and the principles the SPS Agreement and other standards and guidelines used in import risk analyses.

The ATCEG also conducted a workshop from 31 October to 3 November 2000 in Chinese Taipei, to analyse the current status of conservation and utilisation of aquatic genetic resources in APEC region. It also facilitated the sharing of expertise among APEC member economies on conventional and innovative technologies for the conservation and utilisation of plant, animal and aquatic genetic resources.

Biotechnology is an emerging issue for cooperative action under the ATCEG. As requested by Ministers in Auckland, the ATCEG submitted a report on biotechnology to SOM II in Brunei and the Trade Ministers' Meeting in June in Darwin, Australia, which endorsed the report and its recommendations. As a follow-up to the recommendations in the report, a workshop on 'Agricultural Biotechnology in APEC: Managing Technical Capacity, Safety and Communications into the 21st Century' was held in October 2000, in Vancouver, Canada.

Energy Working Group (EWG)

The work of the Energy Working Group covers a wide range of ECOTECH related activities and is aimed at making a difference to the daily lives of APEC communities. Energy is an essential input to economic development. The EWG's activities aimed at facilitating energy market reform and private/business sector investment will directly benefit APEC communities through improved energy infrastructure. Developing energy infrastructure is an essential prerequisite to the development of economic, social and community infrastructure.

The EWG has undertaken several capacity building workshops and seminars aimed at transfer of technical and professional skills. The ongoing use of Implementation Facilitation Assistance Teams is aimed at the development and transfer of skills, knowledge and expertise in the field of energy market reform. Experts from the private/business sector throughout APEC are invited to attend to contribute to discussion in the specific area nominated by the inviting economy.

The EWG is currently undertaking a project examining opportunities for, and barriers to, microeconomic reform in member economy energy markets. The project will result in general recommendations on how member economies can improve the efficiency with which their energy markets operate. Activities associated with the implementation of Best Practice Principles for Independent Power Producers and the Natural Gas Initiative are aimed at improving investor confidence and reducing risks associated with the financing of energy infrastructure development projects

APEC Economic Leaders have identified energy as a potential bottleneck to regional economic growth. APEC Energy Ministers, at their fourth meeting (San Diego, California, 12 May 2000) underscored to APEC Leaders the important role energy plays in facilitating the region's economic recovery, and in building the region's economic and social future. The growth in regional energy demand, particularly in the electricity generation sector, is the major driving factor behind all other regional energy issues. Directly associated with this rapid growth in demand for electricity is the demand for capital to underwrite the investment in infrastructure required to meet electricity demand. It is estimated that approximately US\$1.6 trillion worth of investment capital for power infrastructure (for total system costs, not just electricity generation) will be required to meet electricity demand in the APEC region to 2010.

Investment in infrastructure development is critical given the projected growth in energy demand in the APEC region. For the past two and a half years, an initiative aimed at facilitating investment in power infrastructure has been an important component of the EWG's work program; and the role of the EWG Business Network (EBN) in that process is central to its success.

The EWG and EBN, collaboratively, have developed Implementation Facilitation Visit Teams. These teams consist of energy experts from the public and/or private/business sectors of member economies who provide advice to members on options and approaches to reform in both the power generation and natural gas sectors. In recognition of the close linkages between trade and investment issues and technology issues, and the broad nature of the APEC energy program, host economies are encouraged to consider trade and investment requirements as well as technology requirements in offering invitations to visit teams. The visit team's activities are aimed at providing practical support to economies wishing to take concrete steps toward meeting their infrastructure development challenges, whilst ensuring that these challenges are met in the most efficient and environmentally benign way.

The EWG seeks to maximise technology assimilation by making members more able to assess, operate and maintain new and renewable energy technologies. It does so through its Expert Group on New and Renewable Energy Technology, and through a number of specific initiatives.

A 'Green Buildings Workshop' was held in Taipei, Chinese Taipei from 16 to 18 October 2000. Its objectives were: to promote environmentally sound, private/business sector investment in the commercial buildings sector; collect and disseminate state-of-the-art information on Green Building technologies; and provide information on multi-disciplinary approaches to their application. APEC member economies will benefit through:

- expanding the capacities of participating economies to absorb existing green building and construction technologies;
- enhancing the ability of participating economies to develop new and innovative commercial building project delivery techniques; and
- improving the uptake and market penetration within APEC economies of energy efficient technologies for the future.

Another EWG initiative, the *Environmentally Sound Energy Infrastructure Initiative* is examining effective policy practices that encourage clean technology transfers. It is examining barriers that may impede technology transfer and dissemination, such as lack of information on technologies available, or certain types of policies (not necessarily related to the environment). Clean energy technologies will include those associated with cleaner burning of fossil fuels, as well as those associated with new and renewable energy sources.

The forecast growth in energy demand for the APEC region will place an increasing strain on the environment, unless environmentally sound measures to minimise the adverse impacts of energy production and use are implemented. The EWG has developed its work program to mitigate the environmental impacts of energy production, delivery and use. Initiatives currently underway include 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.

The *Environmentally Sound Infrastructure Initiative* is seeking to capture from within APEC the best practice policies and practices that encourage environmentally sound development of energy infrastructure. Other EWG work aims to encourage investment in environmentally sound natural gas supplies, infrastructure and trading systems. This will help members to increase their use of cleaner energy and help to reduce emissions.

The EBN was established in March 1998 to provide a private/business sector perspective on energy-related issues that can be considered through the APEC process. Leaders have acknowledged that governments and multi-lateral financing institutions alone can not fund the expansion in energy infrastructure development required to meet growing demand. Greater private/business sector participation in power projects is essential. Energy Ministers recognise that the advice of the private/business sector network is central in moulding a framework for ongoing development that is conducive to such private/business sector investment.

At the project level the EWG is actively encouraging private/business sector participation. For example, at the October 2000 workshop on Green Buildings, private sector businesses are being invited to present case studies of recent work demonstrating current practices and methodologies. These will be complemented by presentations from leading technical experts on the design, construction, maintenance and refurbishment of commercial buildings using state-of-the-art energy efficiency technologies being developed throughout APEC.

Fisheries Working Group (FWG)

The Fisheries Working Group's activities focus on three main areas - fisheries management, trade liberalisation and aquaculture - in meeting ECOTECH objectives.

Capacity building has been a major feature of the FWG's work program in recent years. Major activities include a technical workshop on 'Quality Assurance in Fish Inspection Laboratory', training program on 'Seafood Inspection Procedures', project on 'Collaborative Aquaculture Education Program', research program on 'Grouper Virus Transmission' and technical conference on 'Quality and Safety of Fishery Products'.

The FWG seeks to promote the growth of SMEs and development of safe efficient capital markets through studies it is conducting on promoting free trade and investment:

- Nature and Extent of Subsidies in the Fisheries Sector in APEC Member Economies
- Free Trade and Investment in Fisheries Sector of APEC
- Trade and Investment Liberalization in Fisheries
- Reducing Impediments to Liberalization in the Fisheries Sector

The FWG contributes to improving technology in fishery disease control through ongoing projects on grouper virus transmission and vaccine development:

The sustainable use of fisheries resources and the sustainable development of aquaculture are key objectives for the FWG. An ad hoc workshop on fisheries management was held in order to follow-up the Food and Agriculture Organization's activities and discussions in other regional and international fora. The workshop also adopted three recommendations: on fishing capacity for large scale tuna longline; the issue of flag of convenience (FOC) fishing vessels; and illegal, unregulated and unreported fishing.

To facilitate the fisheries information sharing, the FWG is working on the 'APEC Seafood Information Systems' project to develop an integrated, commercial marketing service for fishing, aquaculture and fish processing industries in APEC. The website is expected to be up and running by the end of 2000.

Human Resources Development Working Group (HRDWG)

Much of HRDWG's work is in support of ECOTECH goals, in building the capacity of the people within the APEC region.

Developing Human Capital is the mainstay of the HRDWG's work program. The HRDWG carries out its activities under eight medium-term strategic priorities adopted in 1997 and continuously strengthened with Leaders' and Ministerial instructions. These priorities are: quality education, improved labour market information, skills development, lifelong learning, increased teaching quality, mobility of qualified persons through mutual recognition, enhanced development of labour and workplaces, and strengthened cooperation in education and training in support of the Trade and Investment Liberalization Fund (TILF).

In 2000, these priorities have been further strengthened with the identification by Education Ministers in April of four strategic areas for the transition of educational systems into the 21st century:

- Use of IT in teaching and life-long learning;
- Enhancement of teaching quality and teacher development;
- Cultivation of sound management practices among policy-makers and practitioners; and
- Active engagement of APEC member economies in education.

In contributing towards developing human capital, the HRDWG also examines skills shortages in order to meet the dynamic challenges of HR training needs, including projects to study skill shortage and training needs in HRD Strategies of multinational enterprises in APEC economies, and a study on HR management policies.

The youth component in HRD activities is also an important priority. The event 'APEC Youth Networking: Youth Preparation for APEC Society in the Next Millennium' was held in Bangkok from 12 to 20 July 2000 to bring together APEC youth to learn about APEC, promote cross-cultural mutual understanding and build a youth network across the region. Over 150 attendees from 13 economies participated in a series of lectures and panel discussions, cross-cultural simulation exercises, exhibitions and home stays.

Towards achieving stable, safe and efficient capital markets, the HRDWG developed a project on 'Corporate and Nonprofit Governance and the Restoration of Prosperity in the APEC Region: Perspectives and Principles'. The resulting conference will provide a forum for dialogue on alternative perspectives and principles of governance for publicly-owned corporations, as well as for private- and family-owned firms, and for state-owned enterprises. Their implementation and use in the context of the APEC region will be examined and recommendations will be made for improvements.

The HRDWG also undertakes projects on social safety nets, and labor market adjustment. Some of these programs flowed from the work of the group's Task Force on 'the Human Resource and Social Impacts of the Financial Crisis', which recommended new or expanded projects in key areas of crisis response, and from the Action Plan on HRD endorsed by HRD Ministers in 1999. A seminar was held in May 2000 on human resource management strategies to minimize the effects of job retrenchments. An 'APEC Forum on Human Resources Development focusing on HRD in the Manufacturing Industry' was held in Chiba, Japan in October 2000.

In contributing to the priority of *Harnessing Technologies for the Future*, an APEC symposium on 'IT Enablement for Trainers in the New Millennium' was held from 18 to 20 July 2000 in Brunei Darussalam with more than 700 participants. The symposium addressed the issue of equipping the modern workforce with IT skills in the face of global technical innovation and the changes needed in education and training systems.

Participants were able to exchange information with each other as educators and trainers in the region on the latest IT teaching methods, knowledge and strategy for both the public and private/business sectors.

Among activities to promote *Sustainable Development* in APEC, the HRDWG is conducting a project to encourage the food industry sector to adopt cleaner production processes. The project is expected to produce teaching and training materials that will develop the HR management skills needed in Cleaner Production (CP) processes, including skills that are aimed at developing and implementing appropriate technological solutions. It is envisaged that a pilot regional training program aimed at improving the CP awareness and management skills of middle and senior level personnel in the food industry sector will be introduced.

An 'APEC Masters of Sustainable Development' (AMSD) program is also being designed to enhance the professional capacities, technical skills and knowledge base of managers responsible for environmental management and policy development in the region. The program offers scholarships to candidates from developing APEC economies and involves the establishment of region-wide consortia of education providers.

There has been much recent work on HRD elements of SME development. The 'Symposium on Capacity-Building of APEC Executives on International Business Management' was held in Yantai, China 2 to 3 August 2000, to build the international business management capacity of executives, especially those from developing economies and SMEs. Case studies and training materials will be distributed to these target groups.

To promote the application of Total Productive Maintenance (TPM) in SMEs in the region, the HRDWG is conducting a workshop to provide training and education to personnel concerning the principle, technique and practice of TPM and will assist in developing and implementing member economies' own action plans on TPM.

Industrial Science and Technology Working Group (ISTWG)

The Industrial Science and Technology Working Group is implementing three major initiatives identified by APEC Ministers and Leaders:

- *The Agenda for S&T Industry Cooperation into the 21st Century*
- *The Mexico Declaration on Partnerships and Networks*
- *The Cleaner Production Initiative*

The implementation of these initiatives constitutes a major element in the delivery of the APEC ECOTECH theme 'Harnessing Technologies for the Future'. Member economies have been encouraged to target specific technology areas like IT and other new and emerging technologies when developing new project proposals. Among the 19 new proposals endorsed at recent ISTWG meetings, ten were identified as developing or facilitating the development of technologies for the future, and four contributed to encouraging maximum participation from member economies, notably women's participation in S&T.

The Agenda for S&T Industry Cooperation into the 21st Century (S&T Agenda) is an ambitious statement, covering a wide range of activities. Of the 63 ISTWG projects, 90% address particular elements of the S&T Agenda. Following its introduction at the 17th ISTWG meeting held in August 1999, policy dialogue on the S&T Agenda has been a regular item at ISTWG plenary meetings. Japan and Brunei have agreed to coordinate preparation for the next policy dialogue so as to promote discussions to a more strategic level.

Sustainable development continues to be an important element of ISTWG projects and is a major objective in the 2000 Operational Plan. A particular focus is the implementation of the Cleaner Production Strategy for which a Task Force has been established and whose mandate runs until December 2000.

Infrastructure Workshop (IWS)

The Infrastructure Workshop held its inaugural meeting on 29 May in Brunei, following Ministers' decision last year to remove it from under the umbrella of the Economic Committee and to re-constitute it as an *ad hoc* forum under the ESC. Representation on the IWS is being reviewed by individual member economies to reflect the new mandate.

The IWS has agreed to focus on on-going activities in the immediate future, notably the *Regional Integration for Sustainable Economies (RISE)* project, work on 'Economic Regulation and Creditworthiness Enhancement', and this year's Public-Private/Business Sector Infrastructure Dialogue

A key deliverable this year is the RISE project (<http://www.riselink.net/>). This joint APEC-PECC-private/public sector initiative supports rural-urban linkages, development of secondary urban/economic hubs and integrated infrastructure investment. Its specific purpose is to accelerate diversified economic development in secondary market centres throughout APEC emerging economies. RISE focuses on Regional Growth Centre (RGC) strategies and programs, including individual projects from initial concept through the pre-commercial stage.

RISE is providing demonstrated, tangible, practical achievements for the two selected RGCs –Jiangmen City, Guangdong, China and the Manado-Bitung Integrated Economic Development Zone (KAPET Manado-Bitung), North Sulawesi, Indonesia. Beneficiaries are the rural populations, smaller cities (<100,000 persons) and two medium-size cities (<500,000 persons). The RISE project approach is designed to boost rural economies and with that food production, diversity and value; and improve food system operations (contributing to the APEC Food System). It is also designed to increase the scale and diversity of the urban economies of the regional hub and sub-hubs as a necessary compliment to rural development.

The 'Economic Regulation and Creditworthiness Enhancement' initiative was formulated with a single-economy model, Indonesia, supported initially through the official assistance programs of the US (now completed), Canada and the World Bank. A blueprint for economies to determine the policy, regulatory and institutional change requirements has been produced and will be opened to a wider application.

The 'Public- Private/Business Sector Infrastructure Dialogue', to be held in Melbourne in December, will review initiatives in infrastructure regulatory and policy frameworks across the region, other creditworthiness-enhancing measures for investment, and the RISE initiative. It is also being structured to provide critical inputs from all stakeholders with a view to recommending what the region needs to achieve in those areas in the immediate future.

The Marine Resources Conservation Working Group (MRCWG)

Marine resources are an important part of the APEC region's economic development. However, degradation of the marine environment, over-harvesting and contamination of fisheries resources can incur significant socio-economic costs, including adverse effects on tourism. Sustainability of the marine environment, therefore, is vital to ensure continuing socio-economic and environmental benefits. The MRCWG is responsible for coordinating the implementation of the *APEC Action Plan on Sustainability of the Marine*

Environment, which was approved by APEC Environment Ministers in June 1997. Its work covers a wide range of ECOTECH-related activities.

The MRCWG has undertaken several capacity building workshops and seminars aimed at transferring better management skills and information on marine resources. 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; and the establishment of an APEC Marine Environmental Training and Education Center in Korea. Experts from business, academia and government throughout APEC are invited to attend to contribute to discussions in specific areas nominated by the inviting economy.

The MRCWG held its first joint session with the Fisheries Working Group last year to identify common interests and strengthen cooperation related to sustainability of the marine environment. The two working groups agreed to: strengthen ongoing communication regarding issues and activities of joint concern; meet together at least every other year; and develop collaborative projects. The first of these projects will be on destructive fishing practices and their impacts. A draft strategy for a Virtual Task Force on destructive fishing practices was also endorsed.

The MRCWG this year, at its 13th meeting, endorsed a strategic approach for the implementation of the *APEC Action Plan on Sustainability of the Marine Environment* that will ensure that the full scope of objectives within the Action Plan is addressed comprehensively. It has also organized a number of meetings related to sustainability of the marine environment. The MRCWG also has a complementary network, the Ocean Model and Information System, designed to link centers of excellence in APEC economies.

Following a conference on 'Sustainability of the Marine Environment - What Can the Private Sector Do?' in September 1999 to promote public and private/business sector participation and partnership in advancing sustainable use of the marine environment, six teams involving government, academia and industry were formed to consider:

- The role and function of the private/business sector,
- Marine resource conservation and community participation,
- Coastal recreation and marine eco-tourism,
- Marine aquaculture,
- Coastal engineering and pollution control, and
- Ocean industries and networks.

The reports of the task teams were reviewed at the Roundtable on Public-Private Partnerships, held in Chinese Taipei, in April 2000 and served as the basis for developing a report on *Action Strategies and Work Programs: Engaging the Private Sector in Sustainable Management of Marine Resources in the APEC Region*. The roundtable concluded that the MRCWG must further explore the possible roles and functions the private/business sector might play in various groups. The strategies and work programs recommended by the roundtable were endorsed by the MRCWG and viewed as valuable to the common benefit of all member economies and to strengthening the dynamism of SMEs and marine resource conservation.

Policy Level Group on Small and Medium Enterprises (PLGSME)

In Auckland, New Zealand, last year, APEC Economic Leaders welcomed the outcomes of the SME Ministerial Meeting in Christchurch, New Zealand, which endorsed a work program to promote SME growth. In response to Leaders' and Ministers' calls to expand SME-related work in the HRDWG, promote awareness and usage of electronic

commerce, consider venture capital programs and provide better access to capital markets, the PLGSME has been implementing the following projects:

- **HRD Related Projects/Initiatives**
 - **Training and Certification for Small Business Counsellors- Phase III (Canada/Philippines)**
 - **Consumer Education and Protection Initiative (USA)**
 - **APEC Centre for Entrepreneurship (Indonesia)**
 - **APEC SME Seminar for Management Capacity Building (Japan)**
- **Information and Communication Technology Related Projects**
 - **APEC SME Business Network Promotion Forum (Japan)**
 - **Business Participation Initiative (USA)**
 - **Electronic Commerce Impact Study for SMEs (Chinese Taipei)**
 - **Workshop on 'Electronic Commerce: Towards Building a Favourable Environment for an Accelerated Adoption of E-commerce by APEC's SMEs' held 20-22 June 2000 in Brunei Darussalam)**
 - **Making Financial and Capital Markets more Accessible to SMEs**
 - **Workshop for APEC SMEs on 'Financing and Business Management' (Japan)**
 - **Seminar on 'Securing Initial Capital Funding for Start-up Companies - the Birth and Growth of Start-ups and SMEs in a Knowledge-based Economy', held in Chinese Taipei, 16-18 May 2000 (Chinese Taipei)**
 - **Strategic Alliance Related Project**
 - **APEC Business Matching and Advice Program (Japan)**

SME Ministers in Christchurch also tasked the PLGSME, in consultation with other relevant APEC fora and the APEC Secretariat, to develop a methodology for reporting on progress in identifying major barriers and compliance costs to SMEs for incorporation into IAPs. At the meeting in Peru in March 2000, the PLGSME agreed that member economies should consider adopting, on a voluntary basis, the approach suggested by New Zealand for reporting on measures to reduce compliance costs of SMEs.

The PLGSME reaffirmed the usefulness of sharing information and experiences of APEC member economies in their implementation of various initiatives, programs and regulatory frameworks undertaken to promote the development of SMEs under the Integrated Action Plan of SME Development (SPAN). The PLGSME welcomed the progress reports on the implementation of SPAN by China, Japan, Malaysia, Peru, Chinese Taipei and Thailand at the two PLG meetings held this year. The group encouraged other members to report regularly on SPAN and to share their experiences on a voluntary basis so as to strengthen policy dialogues on SMEs.

As instructed by the SME Ministers, the PLGSME has also updated the *Guide for SMEs in APEC-Helping Your Business Grow* which is now available at the Secretariat website.

Telecommunications Working Group (TELWG)

The TELWG is undertaking around 30 projects and other related activities that respond to ECOTECH priority themes and initiatives. In the area of Developing Human Capital the TELWG has been working on a 'Distance Learning Pilot Project', designed to develop and deliver courses to APEC economies using the World Wide Web as the delivery medium. Phases I and II have been completed and Phase III commenced in May 2000. Distance learning has also been employed to meet specific needs. For example, the 'Distance Learning Project on Basic Telecommunications Technology' was launched in

January 2000 to provide member economies with the opportunity to share knowledge and information.

In April 2000 the TELWG organised a symposium on 'Collaborative Strategies for Multimedia World Wide Web Skills Development'. This project was designed to share expertise in multimedia skills development as the first step to map out an action plan for multimedia skills development in APEC. The TELWG has also been involved in capacity building projects in support of its liberalisation work. The 'MRA Implementation Support Project', which aims to assist member economies in the implementation of the Mutual Recognition Arrangement (MRA) for Telecommunications Equipment, was completed this year. This will be followed by the 'MRA HRD Project', which will provide training for regulators to enable them to implement the MRA.

The TELWG has also undertaken a number of activities that contribute to the theme of 'Harnessing Technologies for the Future'. The TELWG has recently completed the 'Interactive Medical Curriculum Pilot Project' that aims to accelerate the deployment of multimedia and online services in healthcare. The project brought together medical specialists and IT experts to develop a medical curriculum for Asia. The TELWG also held a seminar to discuss the diverse applications of the Global Positioning System.

Strengthening economic infrastructure has been an important aspect of the TELWG's work. The TELWG has been instructed by Ministers for the Telecommunications and Information Industry to develop, as a matter of priority, the Asia Pacific Information Infrastructure (APII). To this end, APEC established the APII Cooperation Centre in Korea to develop cooperative projects focused on development and support of applications over the APII, research and development activities, and advancement of the Internet as a seamless co-operative platform. The APII Technology Centre was also set up in Japan to conduct experiments on network interconnectivity and interoperability, applications development and applications experiments, engineer training, and to interconnect test-beds and networks.

The TELWG has also carried out work in support of SMEs. In September 1999 the TELWG released a report based on a survey of 3,000 SMEs in the 21 APEC member economies to assess the penetration and uptake of electronic commerce (e-commerce). The report contains recommendations that will assist member economies in responding to the call from APEC Ministers responsible for Trade for a work plan to assist small business uptake of e-commerce. In addition the TELWG has been conducting an ongoing series of e-commerce awareness seminars to raise awareness of the benefits of, and requirements for, electronic commerce among SMEs.

Tourism Working Group (TWG)

The key focus of the TWG's deliberations has been the development of the APEC Tourism Charter. The first APEC Tourism Forum was held in Hong Kong, China on 29 April 2000. It attracted around 300 representatives from key private/business and public sector tourism-related organizations. Among the organizations that attended were the Pacific Asia Travel Association (PATA), the World Tourism Organization and the World Travel and Tourism Council. The objective of the forum was to gain private/business sector inputs to the Charter and determine private/business sector expectations on what the Charter should achieve if it were to be successful. Ministers were also invited to attend the forum, along with Senior Officials, to hear first hand the views of the private/business sector.

The resulting *Seoul Declaration on an APEC Tourism Charter*, adopted at the inaugural APEC Tourism Ministers' Meeting in Seoul in July 2000, represents a commitment by 21 APEC member economies to improve the economic, cultural, social and environmental well-being of APEC communities through tourism. The charter establishes four key policy goals and an agreed process to realise those goals by:

removing trade barriers; enhancing competitiveness; promoting positive policies for the development of tourism; discouraging practices which have a negative impact on economies and on the image of tourism; and identifying emerging issues impacting upon tourism. The charter is consistent with the *Bogor Goals*, it responds to the 'Auckland Challenge', and takes into account the *Framework for the Integration of Women in APEC*. It can be downloaded from the APEC Secretariat website at <http://www.apecsec.org.sg/whatsnew/announce/tourismMinStatement2000.html>

Commitments to the policy goals in the charter are to be demonstrated through the submission of individual and collective action plans (IAP and CAP). They will reference three key delivery dates, as relevant to the respective economy – namely 2005, 2010 and 2020. The IAP/CAP processes will provide for regular peer review and independent assessment to ensure transparency and accountability in the delivery of charter outcomes. Implementation of the charter by the TWG will be reviewed by Ministers responsible for Tourism in two years time (Mexico 2002).

The APEC Tourism Ministers also endorsed a business plan for the TWG that should help foster a partnership with the private/business sector for the delivery of APEC objectives, including the development of tourism in the APEC region.

The TWG is undertaking two APEC-funded projects: 'Best Practices in Sports and Recreation for Tourism Development within APEC Economies' and 'Tourism Occupational Skill Standards Development in the APEC Region: Bridging Projects'. Both projects should be concluded by the end of 2001 and should provide economies with clear and balanced ideas for the promotion of tourism services, infrastructure and human resources development.

Trade Promotion Working Group (WGTP)

The mandate and work priorities of the Trade Promotion Working Group are designed to improve trade skills and training, trade information networking and cooperation among private/business and public sectors (trade promotion organizations, TPOs). Particular efforts have been made in organising trade promotion activities and the sharing of related experiences in addressing the needs and concerns of developing economies and SMEs. New elements in the work program, such as challenges and opportunities of e-commerce, are addressed as they arise.

The WGTP has undertaken training programs, workshops and seminars aimed at helping member economies build up the trade-related skills and knowledge required in the current global trade environment. The activities have included projects on credit guarantee systems, strategic alliance and technology transfer, trade and investment insurance, trade promotion skills, logistics management and marketing strategy/skills. These programs have assisted the participants and their member economies to acquire trade skills and knowledge and develop cooperation opportunities in the region. To meet the challenges presented by economic globalization and e-commerce, the WGTP has facilitated internal discussions on:

- how to strengthen the trade promotion activities through cooperation among public and private/business sectors; and
- how to improve the management of TPOs and their services through provision of Internet services, organizational restructuring, performance measurement, work flow reform, and ISO9000 certification of operations.

The website, APEC Information Center for Trade Promotion established in 1998, lists 50 trade measures from eight APEC economies and provides easy access to information on trade promotion organizations (TPOs) and trade-related agencies of member economies. Furthermore, APECNet, launched in 1998, allows SMEs to establish business links with

possible buyers and suppliers in the region and to have access to the information on markets and laws/regulations of member economies.

Helping SMEs to export has been one of the essential parts of the WGTP agenda. Training programs and seminars have been organized to meet the needs of SMEs in trade financing, marketing strategies, e-commerce, and logistics management. At WGTP annual meetings member economies share experiences and information on the implementation of their assistance programs/initiatives in support of SMEs. Issues discussed have included the setting up of on-line service centers, a cyber-showcase, and various business-matching systems.

APEC International Trade Fairs and Exhibitions are held regularly to enhance the access of SMEs to the international market and facilitate their forging of partnerships with international businesses. The trade fairs are well attended by SMEs and have generated substantial immediate and potential business results. The APEC Fair in October 2000 focused on promoting e-commerce to SMEs in the region.

Transportation Working Group (TPTWG)

The Transportation Working Group includes Steering Committees on more competitive transportation, safe and environment-friendly transportation and human resources development. Although the Safe and Environment-friendly Transportation Steering Committee oversees specific projects and activities pursuing the overall safety and environment-related goals agreed upon by APEC Transport Ministers in 1995 and 1997, ECOTECH projects overseen by the More Competitive Transportation Steering Committee also contribute in part to sustainable development. ECOTECH projects in progress in 2000 include:

- An Intermodal Task Force developing guidelines, standards and options associated with an integrated transportation system which will help improve or eliminate transport congestion points in the region;
- Implementing a Framework of Standards for Intelligent Transportation Systems (which are a means of alleviating congestion);
- The preparation of a “best practice” manual to address urban transport problems;
- Two projects aimed at reducing or eliminating substandard shipping in the APEC region (which will contribute to decreasing the threat of major environmental incidents); and
- The examination of environmental considerations (such as dredging) and capacity building initiatives on emergency preparedness (such as earthquake countermeasures) as part of the TPTWG’s efforts to identify common issues and develop recommendations for improved capacity and efficiency of APEC ports.

The TPTWG takes into account the *Guidance for Strengthening Management of ECOTECH Activities* in planning its activities. It has developed its own project guidelines to improve the process by which projects are endorsed internally, in conformity with prevailing BMC and ESC guidelines. The private/business sector is represented in many member delegations at TPTWG meetings and at the 17th TPTWG meeting, in March 2000, the group reviewed and endorsed proposals to invite new guest organisations in the transportation field, and to renew existing guest approvals. Those recommendations were approved at the SOM II and the TPTWG has since established or renewed contact with eight international organisations.

Economic Committee (EC)

The Economic Committee has been focusing on three major research projects, all of which have been undertaken collaboratively with member economies and the results of which will be published in time for the Ministers' and Leaders' meetings in November.

The *APEC Economic Outlook*, the EC's key annual analytical exercise, reviews recent developments in and short-term prospects of APEC economies, and addresses topical structural issues bearing on APEC policy priorities. The year 2000 report, which is being coordinated by the Philippines, will feature regional trading agreements (RTAs), with particular focus on their implications for the multilateral trading system. It will also review the evolution of analytical thinking about RTAs, with a view towards developing a framework that highlights the positive outcomes of the approach, and will explore policy measures and new areas of cooperation within APEC that can be taken under this new-regionalism framework.

The *APEC Economies Beyond the Asian Crisis* (the Crisis Project) is a two-year project, which began in 1999. It focuses on long-term prospects of APEC economies beyond the Asian crisis, highlighting key issues awaiting the APEC economies in the next few decades. Its value-added contribution to APEC is twofold. First, the project fosters a sense of direction on the prospects of APEC economies and necessary policy actions. Second, it provides the analytical basis for refocusing and strengthening APEC cooperation activities. This project is being carried out as a collaborative task led by four economies: Japan (growth potentials and project coordination), Korea (trade and investment), Chinese Taipei (SMEs), and the Philippines (social policy). The final report will emphasize the importance of capacity building in APEC economies in meeting the challenges of future growth posed by the Asian crisis and the new economy. It will identify priority areas of cooperation for APEC including strengthening markets; e-commerce and technology cooperation; entrepreneurship and SME development; education and life-long learning; and social safety nets.

In their *Declarations* in both Kuala Lumpur in 1998 and Auckland in 1999, Leaders underscored the importance of knowledge as a key driver of future economic growth, and pledged to ensure that APEC economies be at the forefront of efforts at building and sharing expertise in this vital area. The 'Promotion of Knowledge-based Economies (KBE) in the APEC Region' project takes up that challenge. It aims to provide the analytical basis to promote effective use of knowledge, and to accelerate the creation and dissemination of knowledge among APEC economies. The work, which is being carried out by Korea (coordinator), Australia and Canada, addresses the following areas:

- Assessment of knowledge infrastructure
- Policy environment conducive to expanding the knowledge base
- Possible areas of APEC cooperation for promoting knowledge-based economies

The final report will identify potential areas for cooperation in promoting KBEs in APEC. Key areas include business environment, innovation systems, human resource development, and information and communication technology.

The results of the three major research studies will be valuable in terms of providing policy makers in APEC with policy options and direction on key macroeconomic issues directly affecting the region. The projects also offer recommendations on possible areas for strengthening economic cooperation among APEC member economies towards long-term and sustainable growth in the region and contribute to human resources development and capacity building.

Committee on Trade and Investment (CTI)

While the main focus of the Committee on Trade and Investment is on the trade and investment liberalisation and facilitation (TILF) agenda, the CTI is also contributing, in a substantial way, to APEC's ECOTECH agenda. It implements a wide range of activities and projects each year, many of which respond to at least one of the six ECOTECH priority themes, underlining the complementary role that ECOTECH plays in the TILF process.

It is noteworthy that the theme 'Developing Human Capital' was the thrust of majority of the activities. These activities took the form of training programs. The Sub-committee on Customs Procedure (SCCP) undertook a comprehensive series of multi-year technical training programs to assist member economies in the implementation of the Collective Action Plans in the area of customs procedures by the established target dates. The Sub-committee on Standards and Conformance (SCSC) implemented technical cooperation projects to promote participation in mutual recognition arrangements while the Informal Experts' Group on the Mobility of Business People (IEGBP) intensified the work on the training on immigration facilitation. ECOTECH is also promoted through another set of multi-year training programs under the 'Partners for Progress' (PFP) mechanism. A number of such PFP projects have been implemented in the areas of standards and conformity assessment, industrial property rights and competition policy.

In addition, there were also a number of activities which addressed the ECOTECH priorities of strengthening economic infrastructure; developing sound, safe and efficient capital markets; harnessing technologies for the future; and strengthening the dynamism of the small and medium enterprises (SMEs). Notable among these were the symposium and training program undertaken by the Investment Experts' Group (IEG) to enhance the environment for investment. Another example is a series of workshops conducted jointly by the SCSC and the HRDWG with a view to increasing SME competitiveness through the integration of standards-based management systems into management systems.

ECOTECH is also an integral part of the APEC's Early Voluntary Sectoral Liberalisation (EVSL) process managed by the CTI. Several ECOTECH activities were developed and implemented to support each of the sectoral initiatives. A summary of such activities and the progress achieved is presented at Annex 5.

2.3 Evaluation of completed HRD Projects

The ESC, at its meeting in May, considered the responses from member economies and APEC fora on the outcomes of completed HRD projects, including responses on the lessons learnt from their involvement in the projects. As it was the first time member economies and fora had been asked by the ESC to provide such information, the responses were not of a uniform standard. Many provided information on outputs instead of outcomes and although there was anecdotal information on the success of projects, APEC fora generally were not able to articulate clearly how member economies and/or the community at large had benefited from the activities. Nevertheless, the ESC appreciated the effort that had been put into the preparation of the responses and was able to draw some general observations from them.

The ESC notes that there are examples of good HRD projects and some useful lessons learnt that could be drawn on by all APEC fora. Those HRD projects aimed at achieving a better informed, more knowledgeable private/business sector – employers and workers – in turn lead to actual improvements in the way companies do business. For example, a recent conference on safety and health was not an attempt to produce new regulations on the subject, but instead allowed workers and managers to review the very positive effects that safety investments can have on a company's productivity. In fact,

nearly half of the 300 participants at that conference said they had learned something that they could apply immediately in their own workplaces. This underscores the importance of engaging private/business sector decision-makers in projects and ensuring that the appropriate audience has access to project' results.

Another important lesson is one that seems so self-evident: when planning professional development activities and initiatives, it is essential to involve, from the outset, the group the training is intended for. In this context, the ESC notes that very few fora have mechanisms to post project ideas or draft proposals for comment, particularly by other fora or, indeed, by external experts in a particular field. The ESC urges those fora that do not have an electronic noticeboard on their own website to make full use of the ECOTECH Clearing House noticeboard (when developed) for that purpose.

The ESC understands that some fora, for example the HRDWG and ISTWG, have developed their own procedures to assess the effectiveness of projects, including the formation of small review groups. These, to a great part, are constituted on an *ad hoc* basis to prepare the evaluation report that has to be submitted to the BMC on the completion of individual projects. The ESC encourages all fora to consider extending that role for training-related projects by conducting follow-up work with a view to reporting to the ESC/SOM on what changes have occurred, or how economies are benefiting, as a result of those projects.

Based on its experience following this initial exercise, the ESC believes that there is merit in conducting an effectiveness evaluation for each of the remaining ECOTECH themes. Unlike the individual evaluation reports submitted to the BMC by the project overseer, a thematic effectiveness evaluation would allow the ESC to report on how ECOTECH projects are meeting their stated objectives and flesh out some common trends and lessons. That in turn could assist APEC fora to better design future ECOTECH projects.

However, it is clear that if the ESC were to conduct a deeper, more thorough effectiveness evaluation it may require the assistance of external experts. The ESC, therefore, is examining the possibility of engaging the Asia Pacific International Assessment Network (APIAN) to assist it with its evaluations. The ESC would also like to see the resources within the Secretariat augmented by having a seconded officer with experience in conducting project evaluations to assist it with its work.

The ESC recommends that:

- ***All fora should pay particular attention to evaluating the outcomes of projects with a view to communicating how those projects have benefited governments, the private/business sector or the community.***
- ***The views of those for whom training is designed, other relevant APEC fora and external experts should be sought when project proposals are being developed.***
- ***In order to maximise the leverage of APEC resources, the ESC urges the HRDWG and other relevant fora to help define the needs within the region for capacity building required to attain APEC goals, so as to facilitate cooperation with the private/business sector, appropriate international organisations or other regional partners that could respond to those needs.***
- ***Project evaluations of the remaining ECOTECH themes be conducted with external assistance.***
- ***The APEC Secretariat, when filling a future vacancy, should seek the secondment of an officer with experience in project evaluation.***

3 IMPROVING COORDINATION OF ECOTECH ACTIVITIES

3.1 Developing Human Capital

3.1.1 Dialogue on Human Resources Development

Brunei Darussalam, under the auspices of the SOM Chair's Office, hosted a 'Dialogue on Human Resources Development' on 29 May 2000 with the theme "*Delivering to People on Education and Training*". The purpose of the dialogue was to harvest a broad spectrum of views from academics, HRD officials, and the private/business sector, on how to engage stakeholders more effectively in APEC's HRD work. Ways to raise the profile of HRD in the capacity-building agenda for Leaders' endorsement in the November meeting were also considered. One other focus at the dialogue was for the effective implementation of the recommendations put forward by the ESC's coordination paper, *Developing Human Capital*, which was endorsed by the Ministerial Meeting in Auckland in 1999.

Key conclusions of the Dialogue included the need

- for project funding to be leveraged using multilateral and bilateral funds
- for improvement in the dissemination of project outcomes, with a view to increasing the visibility of APEC's contribution to HRD, and
- for an evaluation of the impact projects have on the community in the economy where they are implemented.

Recommendation: The HRDWG should have a broader role to play in coordinating HRD efforts across APEC fora and in defining the criteria for the development of an appropriate action plan.

3.1.2 Implementation of last year's recommendations

One of the recommendations in last year's ESC coordination report was for the HRDWG, in full consultation with the other Lead Shepherds, to develop a 3-year work plan and priorities for APEC's HRD activities. The ESC was advised that the HRDWG has focused on a restructuring of its sub-groups from 5 to 3, as a result of last year's self review, and to responding to the Brunei HRD theme. Development of the 3-year plan apparently is still under consideration.

The use of electronic means such as the ASTWeb (APEC Science and Technology) as a tool to work together with other fora on HRD matters has not so far been taken up, although consultation between fora will still take place as a matter of practice. However, the ESC notes that the electronic noticeboard facility associated with the ECOTECH Clearing House project will provide fora with an opportunity to communicate with each other not only on HRD matters but also on other cross-cutting ECOTECH themes.

With respect to project evaluation, as noted earlier, the ESC is exploring the possibility of using the APEC International Assessment Network (APIAN) to carry out an assessment of APEC's human resource development activities of the past few years.

The HRDWG has incorporated the ESC's ECOTECH guidelines in its Project Management Guide, which has been amended further to incorporate elements of the Framework for the Integration of Women.

Last year the ESC recommended that fora place greater emphasis on the participation of as many economies as possible in their HRD-related projects, to ensure both widespread impact and greater benefit for the investment of APEC funds. HRDWG projects held this year have had widespread attendance such as the *IT Enablement for*

Trainers in the New Millennium in Brunei, which attracted more than 700 participants. Another HRDWG project *Global Advantage through People* will cover key HR management policies and practices of all 21 member economies.

Recommendations:

- ***That fora consider using the electronic noticeboard facility of the ECOTECH Clearing House to communicate with each other not only on HRD matters but also on other cross-cutting ECOTECH themes, in order to improve the quality of projects and to avoid duplication of effort.***
- ***That the HRDWG continue to implement the recommendations identified in last year's coordination paper.***

3.2 Developing Sound, Safe and Efficient Capital Markets

A key element of Leaders' strategies to promote sustained recovery and cooperative growth strategies in the region has been the development and implementation of policies to promote stable, safe and efficient capital markets. Most of APEC's work in promoting capital market efficiency has been undertaken by APEC Finance Ministers. However, other APEC fora, including the EC, CTI, EWG, and the PLGSME, have also undertaken specific activities that have contributed to the implementation of Leaders' directives. Australia's coordination paper (see Annex 6) aims to review implementation of APEC work in developing stable, safe and efficient capital markets. It is not intended to be a comprehensive evaluation of APEC's work in this area, but rather to serve as a guide to current activities and to make some general recommendations to improve coordination and effectiveness.

Current activities in the Finance Ministers' process are focused on building sound domestic institutions in the region, with a strong emphasis on capital markets. This places economies in a stronger position to realise the economic benefits flowing from trade liberalisation. In the wake of the Asian financial crisis, Finance Ministers' main focus has been on prudential reform and good governance in the region. The EC is also playing an important role by identifying issues, such as the linkages between growth and financial sector policies and the importance of access to finance for entrepreneurs, which impact on the stability and efficiency of capital markets. In pursuing the TILF agenda, various CTI activities related to investment, strengthening markets and financial services have contributed to developing stable, safe and efficient capital markets in a broad sense. At the sectoral level, APEC Energy Ministers are promoting regional economic recovery by implementing strategies to increase private/business sector participation in the energy sector and to ensure the efficient allocation of capital. Similarly, APEC work on SMEs is emphasizing the importance of access to capital and the role of governments in developing appropriate policies to foster SMEs and the private/business sector as the major source of capital.

Many of the current initiatives in the APEC Finance Ministers process and other fora are funded by international institutions and/or government organisations. This funding has proved effective, and has generally enabled projects to get under way quickly. Nonetheless, limited financial resources have restricted the ability of APEC fora to pursue detailed technical analysis of reforms or support for implementing them. This is, therefore, an area where increased, and streamlined, funding of appropriate technical assistance or cooperative efforts with other international organisations could be beneficial. The APEC Finance Ministers' process is well suited to pursuing regional work on the financial sector and corporate restructuring and should be consulted on proposals relating to the development of stable, safe and efficient capital markets by other APEC fora.

Recommendations:

- ***Funding by international institutions and/or government organisations should be encouraged as it has proved effective and has generally enabled projects to get under way quickly.***
- ***The Finance Ministers' process and other fora may benefit from increased APEC funding of appropriate technical assistance or from cooperative efforts with other international organisations. This would enable further detailed technical analysis of reforms, in addition to the substantial body of work already accomplished in the Finance Ministers' process.***
- ***To support economic growth in the region, there is also a strong need for on-going institutional capacity building.***
- ***Given the core expertise of Finance Ministers and their leading role in this area, they should be consulted on proposals by other APEC fora for work relating to the development of stable, safe and efficient capital markets.***

3.2.1 APEC Finance Ministers' Process

At their 9-10 September 2000 meeting in Bandar Seri Begawan, Brunei, the Finance Ministers welcomed the significant improvement in the prospects for growth in the region since their last meeting in May 1999; resolved to continue to pursue sound economic and financial policies; and to carry out the structural reforms necessary to sustain this progress. The Finance Ministers also:

- Welcomed the progress made in developing international standards, codes and best practice guidelines in a wide range of areas, including regulation and supervision of banking, securities, and insurance; corporate governance; economic data dissemination; and transparency of monetary, financial and fiscal policies;
- Called on all international financial institutions to continue their efforts to strengthen their own governance and accountability, and to improve transparency; and
- Tasked their Deputies to work with private/business sector groups such as the APEC Financiers' Group, ABAC and the Pacific Economic Cooperation Council (PECC) to study business recommendations for strengthening financial markets and institutions and implementing them in on-going work.

The Finance Ministers also reviewed progress on their various collaborative initiatives to strengthen regional financial and capital markets and to support freer and more stable capital flows in the Asia-Pacific region. Work has proceeded on a range of initiatives, as described below.

- **Promoting freer and more stable capital flows.** The Finance Ministers resolved to continue policy reforms that enable economies to take advantage of the opportunities available in international capital markets. They resolved to establish within APEC a voluntary policy dialogue on strengthening financial markets, particularly focusing on issues related to the implementation of international financial standards and codes.
- **Strengthening financial systems.** Ministers instructed their Deputies to undertake a study of APEC economies' experience in managing bank failures, with the goal of developing a set of recommendations based on case studies that illustrate the various lessons learned from the management of bank failures in the APEC region.

The Ministers welcomed the progress made in strengthening financial systems through the development of training programs for banking supervisors and securities regulators. They resolved to extend this initiative for a further two years, focusing on more intensive work to assist national regulatory organizations to implement model curricula and continued provision of regional courses. Ministers also welcomed Australia's offer to lead a three-year project on managing regulatory change in the life insurance and pensions sector.

- **Strengthening economic and corporate governance.** Ministers welcomed the efforts of the Organization for Economic Cooperation and Development (OECD) and the World Bank to raise awareness of, and the commitment to corporate governance reforms in the region through Roundtable discussions. They announced that APEC would undertake a policy dialogue on strengthening corporate governance in the APEC region, starting in early 2001. The Ministers have also formed a taskforce on company accounting and financial reporting to improve the quality of financial disclosure and auditing practices in APEC economies. Ministers also recognized the importance of strengthening transparency and disclosure standards for all market participants and look forward to the results of the survey of Credit Rating Agencies that has been undertaken.
- **Fighting financial crime.** Ministers welcomed the agreement to establish an APEC working group that would conduct a survey of the domestic legal and regulatory frameworks for fighting financial crime, building on work already completed by APEC members of the Asia/Pacific Group on Money Laundering. Ministers also encouraged the international financial institutions to work further with their members in developing sound financial and capital markets and good governance.
- **Improving social safety nets.** The on-going review of administration of social safety nets in the APEC region has developed three main themes: (1) the need for adequate pre-crisis safety net planning; (2) the importance of accurate and timely information on poor and vulnerable groups; and (3) the need to have a range of instruments to ensure adequate targeting and coverage. The Ministers undertook to develop a set of guidelines for responsive and fiscally manageable social safety nets to present to APEC Leaders.
- **Creating new opportunities with information technology.** Ministers called on economies to formulate and implement appropriate policies and arrangements to facilitate electronic financial transactions and supported efforts by APEC member economies and the international financial institutions to ensure that the benefits of information technology are as widely shared as possible. They agreed to establish a working group on electronic financial transactions systems to develop and implement programs to foster paperless trading in collaboration with the E-commerce Steering Group. Ministers also urged APEC Customs officials to enhance harmonization of customs data elements, taking into account the outcomes of the G 7 Experts' work.

3.3 Strengthening Economic Infrastructure

APEC Leaders, Ministers, ABAC, SOM and fora have repeatedly emphasised the importance of the role infrastructure plays in our economies. They have emphasised the need to build up capacities in every aspect of infrastructure delivery from planning through investment and technologies. They have also called upon fora to address the needs in relation to strengthening the framework and improving the environment for infrastructure investment; promoting sustainable development; supporting the APEC food chain; fostering application of information technology, and strengthening energy and transportation networks. Infrastructure, particularly telecommunications, e-commerce, roads and transportation is also a key element in supporting the development of SMEs in developing economies and remote regions. Developing the

framework and policies that will attract large-scale, longer-term capital and channel savings towards infrastructure-related bonds is also an important potential support to the strengthening of capital markets, particularly for developing economy members.

Of the 21 projects that respond to the ECOTECH theme 'Strengthening Economic Infrastructure', the fruition of the APEC-PECC Regional Integration for Sustainable Economies (RISE) project is proving to be the most exciting. It is a multifaceted project encompassing not only improvement of rural infrastructure, but also the dissemination of technological advances in food production and processing, and fostering of sustainable growth.

Pilot-scale work with regional growth centres (RGCs) in Jiangmen (China) and Manado-Bitung (Indonesia) has commenced with a view to improving holistic regional development plans. The project will comprehensively and efficiently provide rural-urban infrastructure links, vertically integrated production and trade schemes and provide infrastructure support, including basic social infrastructure in rural areas. It has built close cooperative links between the public and private/business sectors, and drawn support from major institutions including the Asian Development Bank and the World Bank. Similar linkages with the infrastructure-related bilateral agencies, and national infrastructure planning agencies in the recipient economies are being developed.

In Jiangmen, China, an understanding has been reached between the RISE initiative, local governments and the provincial agricultural research institution, to work together in the selection and fostering of the introduction of new crop varieties (utilising the results of extensive biotech research) and environmentally sound farming techniques. Preliminary assessments of the scope for introducing more value-added processing and packaging of agricultural products is also taking place.

Preliminary discussions for the development of additional growth centres in other areas of Indonesia, China and several other economies are taking place. The ESC considers that, given the cross-cutting nature of this initiative and its relevance to the work program of a number of other APEC fora, the IWS should keep them informed on progress and examine how best APEC resources could be directed to the RISE initiative. Further information on the RISE initiative can be obtained from its website <http://www.RISElink.net>.

There is a trade-off between activities in infrastructure being 'focused' and addressing a more 'integrative'/'holistic' approach to infrastructure and its interaction with wider economic, social, and environmental development. There is also a trade-off between building up the near-term capacity to achieve mutual benefits from globalisation without widening the gap between more advanced communities and the less privileged at a domestic and regional scale. The ESC and the infrastructure-related fora are well placed to play a pivotal role in making that trade-off clearer and facilitating economies' choices and outreach to a global community which is very concerned in this area. This would go along way to both ensure relevance to local immediate concerns as well as contributing, as APEC and the multilateral institutions are well placed to do, towards a wider community consensus on the priorities and means to address immediate and interest group-specific needs, which are of great social concern; as well as working towards broad and long-term improvement in the quality of life to which infrastructure and integrative development approaches can make a fundamental contribution.

Recommendations

- ***The ESC consider to what extent interaction between cooperation, development and commercial investment streams, as demonstrated by the IWS RISE project furthers APEC goals and can be adopted within APEC activities more generally***

- ***Fora addressing economic infrastructure issues should continue on the cross-cutting areas set out under the Vancouver Framework for Enhanced Public-Private Partnerships in Infrastructure Development, Sustainable Cities Program of Action, rural infrastructure development and the APEC Food System.***
- ***In implementing the above initiatives, priority should be attached to the application of the Framework for the Integration of Women in economic infrastructure fields. Fora should also give priority to capacity building in support of the implementation of the voluntary principles endorsed by the Vancouver Framework.***
- ***The IWS, in consultation with relevant fora, should develop specific coordination mechanisms for:***
 - ***improving the framework and capacities for infrastructure provision and private participation***
 - ***infrastructure and sustainable development in support of the APEC Food System***
 - ***infrastructure support to sustainable urban development.***

3.4 Harnessing Technologies for the Future

'Harnessing technologies for the future' is a cross-cutting theme that is being implemented principally by the ISTWG, whose work is defined by three major initiatives by APEC Leaders and Ministers:

- *The APEC Agenda for S&T Industry Cooperation into the 21st Century*
- *The Mexico Declaration on Partnerships and Networks*
- **The Cleaner Production Initiative**

The ESC notes that the ISTWG has taken steps to implement the recommendations in last year's coordination paper on harnessing technologies, notably:

- **Medium-term work plan.** This recommendation has been included in the ISTWG Operational Plan for 2000, which states that this Medium-term Plan "should take into account the progress made in implementation of the relevant Leaders' initiatives, and identify actions to be taken in the future to further enhance the follow-up activities." Australia will be leading the drafting of the Medium-term Plan, which will identify all of the strategic implementation tasks agreed by the WG for a five-year period and will contain timelines for different tasks. It is anticipated that the document could be finalized and submitted to relevant APEC authorities in the second half of 2001.
- Member economies of the ISTWG have been encouraged to target specific technology areas like IT and other new and emerging technologies in developing new project proposals. Among the 13 new proposals endorsed at the 17th WG meeting and six endorsed at the 18th WG meeting, ten were identified as developing or facilitating the development of technologies for the future. It was also noted that four of those proposals contributed to encouraging maximum participation from member economies, especially women's participation in S&T.
- The ISTWG is also taking steps to highlight APEC's efforts in harnessing technologies for the future. It will be contributing to Thailand's offer to bring together information on APEC's outstanding ECOTECH projects in a publication *Making APEC Matter to People through ECOTECH*.

Other fora are also responding to this ECOTECH theme. The TWG, for example, has an Intelligent Transport Systems Experts' Group. However, it is not clear to what extent those fora are responding directly to the three specific ECOTECH initiatives given above or, indeed, to related objectives such as the involvement of women in S&T projects.

Overall, this year's report by the ISTWG shows that since the adoption of the *Agenda for Science and Technology Industry Cooperation* in 1998, much has been done by APEC economies to implement its objectives. The review has also identified a number of deficient areas and has recommended focusing efforts in those areas in the coming year. This is discussed further in Chapter 5.2 of this report. A glossary of the definitions used in the *Agenda for S&T Industry Cooperation* report is at Annex 11.

Recommendations

- ***That all APEC fora should endeavour to strengthen science and technology policy dialogue.***
- ***While all APEC fora should endeavour to strengthen collaboration in the technology areas identified in the Agenda for Science and Technology Industry Cooperation, the ESC should assume more responsibilities in coordinating its implementation***
- ***That all APEC fora should endeavour to strengthen the involvement of women in science and technology and should develop specific initiatives and activities to facilitate this.***

3.5 Safeguarding the Quality of Life through Environmentally Sound Growth

In November 1998, in Kuala Lumpur, Malaysia, APEC Leaders reiterated their commitment to advance sustainable development across the entire spectrum of the APEC's work. Ministers and Leaders outlined the priorities on sustainable development in the following four areas:

- Cleaner Production;
- Protection of the Marine Environment;
- Sustainable Cities; and
- The APEC Framework for Capacity Building Initiatives on Emergency Preparedness.

There are 58 projects/activities being carried out across APEC fora that address the sustainable development ECOTECH theme (some of these do not have this theme as the primary objective in the APEC Database). Out of those, almost two-thirds directly relate to the above initiatives: with 11 projects on the Cleaner Production Initiative, nine on Sustainability of the Marine Environment, four on Sustainable Cities, and ten on the Emergency Preparedness Initiative. The remaining meet more general sustainable development objectives. The ISTWG, the most active group, has more than 20 projects on sustainable development, followed by the EWG and the MRCWG. The ESC considers the level of response to the four specific sustainable development initiatives to be exemplary.

The expansion of principles, guidelines and relevant advances on innovative integral approaches applied to principal issues of sustainable development must be a priority for APEC working groups and committees and within each economy.

The sustainable cities strategy launched voluntarily by individual member economies, needs to be promoted in each economy and through inter-institutional local agreements

between urban and environmental sectors. The aforementioned is necessary to give continuity to activities and to advance in inter-linked actions integrating issues related to coastal management, tourism, infrastructure, cleaner production, energy, and small and medium enterprises.

It is essential to promote demonstrative pilot cooperation projects that arise and share integrated approaches built on exiting initiatives. This could mitigate several common barriers related to the effective use of knowledge, common indicators, as well as the assessment of different instruments, the integration of public and private agendas and among different government levels or social participation. Quest tool is an innovative initiative that responds to this approach, and has been applied in several cities of the Asia Pacific region.

Under the direction of the APEC Ministers in 1996, the APEC Secretariat was tasked to compile an annual overview of sustainable development activities across APEC fora. This year's report is given in **Annex 8** and the ESC's coordination paper on *Promoting Environmentally Sustainable Growth* is at **Annex 9**.

Recommendations

Recalling the outcomes of the Ministerial Meeting on Sustainable Development held in Toronto, Canada, in 1997 and the work being conducted by other relevant international fora, the ESC recommends that all APEC fora should endeavour to:

- ***strengthen and assess progress on environmental priorities, within the sustainable development framework provided at the Toronto meeting;***
- ***seek to establish a specific strategy for sustainable development that accurately reflects APEC's priorities on environmental issues;***
- ***encourage appropriate participation of relevant sectors, levels of government, business and communities on environmental priorities, in sustainable cities activities whilst recognising the heterogeneity of the region; and***
- ***recognise that the integration of women is essential for sustainable development.***

3.6 Strengthening the Dynamism of Small and Medium Enterprises (SMEs)

The ESC notes that the PLGSME has taken into consideration the recommendations in last year's ESC coordination report in its management review process. The Management Review report was endorsed by SME Ministers at their meeting in Brunei Darussalam, 22-23 June 2000.

The PLGSME took note of the two weaknesses identified by the ESC last year:

- Of the five areas to be addressed (access to capital, information, human resources, market access and technology), projects on access to capital or financing and technology were limited.
- Despite the economic significance of SMEs in APEC economies, there are only two venues for SME-fostering discussions at present: the annual SME Ministerial Meeting and PLGSME meeting(s). These meetings have some limitations. The fostering of SMEs needs the cooperation of other fora and the absence of systematic consultation between fora may lead to duplication of effort.

The PLGSME also took note of the ESC paper's eight recommendations for improving coordination and effectiveness of SME support activities within APEC. Efforts to address items one, three, four and eight which dealt with reporting and/or monitoring of work

and efforts to address those deficiencies, are in progress. They include the improvement of the APEC database, the APEC website, and the implementation of the Revised Guidelines on APEC Projects. The rest of the items (two, five, six and seven) require the PLGSME to deepen its work on substantive SME issues. It is in this area that the PLGSME has to focus more and where a strategic outlook in its work will yield better outcomes.

In responding to the ESC's observations and recommendations, the PLG advised that it had considered the following:

- the current workload of the PLGSME, the ESC and the APEC Secretariat, and
- Article 4 of the Group's Terms of Reference (TOR) and the TOR of the ESC.

To improve its effectiveness in carrying out the work on SMEs, the ESC notes that the PLGSME will implement the following:

i) Organisational adjustments without a major revision of its TOR

- Formation of a troika comprising the Chair and 2 Vice Chairs, with specific roles for each of them. The troika will meet before the PLG.
- Formation of five teams each based on one of the five issues:
 - access to financing
 - access to market
 - access to technology
 - access to human resources
 - access to information
- Functions:
 - identify issues that will improve the competitiveness of SMEs
 - prepare medium to long term work programs
 - manage the work progress of work programs

ii) Proposed Mechanism for Streamlining Coordination Work on SMEs

- APEC Secretariat:
 - providing the clearing house on all databases on SMEs
 - assisting in information dissemination
 - collection and advisory support role on meetings and on outstanding issues.
- PLGSME.
 - concentrate on strategic policy directions for work on SMEs
 - propose and evaluate projects on SMEs, particularly those that have immediate relevance to the SME Ministerial Meetings whilst taking into consideration, however, complementation and value-adding on projects in other fora.
- ECOTECH Sub-committee
 - play a more active role in managing SME-related projects in all fora and working groups, including the selection and prioritisation of projects.

iii) Increased private/business sector involvement

The SME Ministers have specifically instructed the PLGSME to develop further interaction between government and the private/business sector.

Beginning last year the private/business sector, through the interactive and joint sessions with SME Ministers, has had the opportunity to present its views at the Ministerial level. The process was continued this year with some improvements.

- **Based on last year's feedback from the Business Forum, the duration of this year's joint session between SME Ministers and the SME Business Forum was extended to 2.5 hours. The interactive sessions between the Ministers and the private/business sector went well and was very productive.**
- **In an effort to broaden the involvement of various groups in business, several events prior to and/or in parallel with the SME Ministerial Meeting were organized. These included A Young Entrepreneurs' Conference, a Business Forum and a Women's Leaders' Meeting.**

Recommendation

The ESC endorses the recommendations proposed by the PLGSME for implementation by the APEC Secretariat and itself. However, as managing SME-related projects across all fora, including the selection and prioritisation of projects, has broader policy implications, the ESC should take this matter up at the Joint Fora meeting in 2001.

4 IMPLEMENTATION OF PART II OF THE OSAKA ACTION AGENDA

The six ECOTECH organising themes and priorities under the *Manila Declaration* are meant to provide a framework for the implementation of ECOTECH projects. While they remain a valuable framework it is important that, with 17 ECOTECH initiatives to contend with, APEC fora not overlook the specific tasks that they were meant to carry out under Part II of the *Osaka Action Agenda* (OAA). In many cases, APEC fora have been so intent on classifying their projects under one or more of the six themes that they have neglected to identify the Ministerial or Leaders' initiative or directive the project is meant to implement.

This year, with the endorsement of the SOM, the ESC decided to undertake a review of Part II of the OAA to see how much has been accomplished since 1995 and to determine whether it needs revision. Of the 13 fora addressed in the OAA in 1995, the Trade and Investment Database Working Group has since completed its task and has been dissolved and the Infrastructure Workshop has been reconstituted from under the EC to the ESC. Details on how each forum has responded to the tasks identified in the OAA are given at Annex 10.

The ESC wishes to express its appreciation of the effort that had been put into the development of the *Osaka Action Agenda*. It is impressive that it remains a fundamental reference document, which manifestly articulates APEC's sectoral ECOTECH goals and provides a clear road map for activities that shape policy dialogues and projects by APEC fora.

The ESC finds that the Common Policy Concepts laid down in the OAA remain as relevant today as they did five years ago. APEC fora should continue to draw on them in framing their work programs and activities. However, many of the activities identified for implementation by individual fora have since been accomplished. The Transportation Working Group has completed all but one of the seven joint activities contained in Part II of the OAA, and has moved on to new ECOTECH joint activities or further developed some of the earlier activities. Following the completion of the database and related tasks the Trade and Investment Data Review Working Group has been dissolved. Moreover, in the past five years more than a dozen new ECOTECH initiatives have been launched by Ministers and Leaders and tasks associated with them are not necessarily reflected in the OAA. Accordingly, the ESC considers that it would be appropriate for the Joint Activities/Dialogue sections of Part II of the OAA to be revised next year so that they better reflect on-going priorities for individual fora.

Recommendations

- ***The Common Policy Concepts articulated in the Osaka Action Agenda should continue to be used as a reminder of the goals that individual fora are expected to achieve.***
- ***The ESC, in consultation with APEC fora, should review the Joint Activities/Dialogue sections of the OAA in 2001 with a view to removing tasks that have been accomplished and incorporating new initiatives that have been launched since 1995 in an appropriate form.***

5 IMPLEMENTATION OF ECOTECH INITIATIVES ENDORSED BY LEADERS IN KUALA LUMPUR IN 1998.

5.1 Kuala Lumpur Action Program on Skills Development

The 1998 *Kuala Lumpur Action Program on Skills Development* provides a framework for advancing HRD in APEC. This is to be done by building the skills base of the region's workforce in four specific areas:

- **upgrading the industrial skills base towards optimum utilisation of resources;**
- **spawning new entrepreneurs** by encouraging entrepreneurial skills and promoting their growth;
- **equipping the workforce with technology skills for the new millennium;** and
- **strengthening institutional infrastructure to facilitate trade and investment liberalisation** by building the capacity required for members to respond effectively to market demands.

The HRDWG's work on upgrading the industrial skills base in the region as identified in the Action Program includes consideration of broader HR policy in its projects implemented this year. For example, a *Compendium of Successful Practices in Human Resources Development in the Workplace: Contributions from Labor, Management and Government* covered topics such as training and skills development programs, uses of technology and other workplace-related HRD issues as well as cases of successful collaboration between the parties. The project 'Global Advantage Through People: Human Resource Management Policies and Practices in APEC Economies' will produce a systematic descriptive analysis of key HR management policies and practices at a macro-level in APEC economies, providing the basis for a series of micro-level case studies that focus on key areas of organizational/industry performance.

In upgrading the industrial skills base due attention has also been given to vocational training policy and practice. The 'APEC Human Resources Development: Vocational Training towards 21st Century Forum' held in July 1999 discussed vocational training policies to cope with difficulties caused by the economic and financial crisis and changes caused by technological innovations and globalization in the region. The 'Trainers Training Program in Industrial HRD School-Industry Linkages' project will promote such linkages through development of training programs which will enhance the training competencies of participants and will provide industries and training centres in the APEC economies a working knowledge of how to initiate and implement school-industry linkages. Such linkages may prove to be effective at transferring technology from industry to school, by giving priority to the upgrading of competencies of in-plant trainers. The 'Vocational Training Program' is also conducted annually for vocational instructors/teachers in Korea.

The 'APEC Youth Skills Camp' hosted by Korea in September provided youths with the opportunity to network, exchange information on vocational education and training, and receive exposure to contemporary as well as new technologies in industry.

The Industrial Science and Technology Working Group (ISTWG) conducted several projects focusing on developing skills in the area of S&T, including one involving hands-on training as a pilot activity for the establishment of an APEC Center for Materials Evaluation Technology which aims to bridge the gap between R&D organizations, innovative enterprises, and the market place within member economies in order to stimulate the diffusion of new materials-related sectors of industry.

One of several HRD-related projects undertaken by the Agriculture Technical Cooperation Experts' Group (ATCEG) is the 'APEC Institutional Linkage for Human Resources Development in Post-harvest Technology' which seeks to pool available

resources and enhance postgraduate education and training programs addressing the problems and needs of the post-harvest industry, including by establishing university-industry linkages.

SME development continued to be given a high priority in the year. Among actions undertaken towards spawning new entrepreneurs as recommended in the Action Program include the holding of symposia to build up SMEs' capacity and knowledge. The symposium on 'Capacity-Building of APEC Executives on International Business Management' was held in August in China to enhance knowledge of international business management for executives from APEC economies, especially from the developing economies and SMEs. It emphasized the importance of human resources development in developing the competitiveness of enterprises in this region. The project 'Application of Total Productive Maintenance (TPM) in Small and Medium Industry' trains SMEs in the principles, technique and practice of TPM with the aim of increasing their productivity and efficiency.

An APEC symposium on 'IT Enablement for Trainers in the New Millennium' was held from 18 to 20 July 2000 in Brunei Darussalam. The symposium addressed the issue of equipping the modern workforce with IT skills in the face of global technical innovation and changes needed in education and training systems.

The project on 'Integration of Information and Communication Technologies (ICTs) Through Teacher Professional Development and Pre-service Teacher Training' supported economies in enhancing and improving the integration of ICTs into the learning experience through the professional development of teachers and pre-service teacher training. Materials from the project including economy reports were disseminated at a workshop in December 1999.

The symposium on 'IT Enablement for Trainers in the New Millennium' held in July in Brunei Darussalam gathered together educators, trainers and policy makers to address the issue of equipping the modern workforce with IT skills in the face of global technical innovation and the changes needed in education and training systems. Information and experiences were exchanged on the latest IT teaching methods, knowledge and strategies.

The Kuala Lumpur Action Program also identifies strengthening institutional infrastructure as an important feature in facilitating trade and investment liberalisation. To this end, the HRDWG conducts programs to build the environment within which liberalisation can be undertaken. The 'Trade and Investment Insurance Training Program', which is conducted in phases, trains those who are working with institutions that provide trade and investment insurance in APEC economies such as Export Credit Agencies (ECAs).

Another ongoing project which facilitates trade and investment is 'Alternative Dispute Resolution - Executive Education Project 2000' (ADR-EEP 2000), by raising awareness about ADR, enhancing the skills of business people and their professional advisers in negotiation and promoting the use of ADR methods for commercial dispute resolution.

The Action Program also calls for pursuance of skills development on an ongoing basis, and to sustain the momentum there can be voluntary sponsorship/joint sponsorship from APEC economies.

To ensure that APEC HRD activities are demand-driven by the needs of the workforce, participation of the private/business sector is encouraged. Furthermore, smart partnerships between the public and private/business sectors as a supplementary source of project funding should be explored.

The project 'Skill Shortages, Training Needs & HRD Strategies of Multinational Enterprise (MNEs) in APEC Economies' is an example of what public-private/business

sector collaboration can achieve. It aims to ascertain the nature and extent of skill shortages and training needs faced by companies operating in the APEC economies; the methods by which these companies cope with the problems created by these skill shortages; and the nature of, and scope for, public sector – private/business sector collaboration on the development of education and training programs essential to a rapid building up of the skills base of the region's workforce.

The Action Program also suggests that an APEC network of skills development centres will facilitate development, exchange of training modules/instructors and sourcing of instructors/equipment, as well as complement other APEC initiatives on HRD such as mutual recognition of skills training qualifications. A proposal for the development of such a network is currently before the ESC. It aims to facilitate continuous exchange of information on successful skills development models across APEC through shared learning, resource and cost sharing, exchange of programs and adoption of best practices.

Recommendation: The HRDWG to consider the Malaysian proposal for an APEC network of skills development centres.

5.2 APEC Agenda for Science and Technology Industry Cooperation into the 21st Century.

The formulation of an *APEC Agenda for Science and Technology Industry Cooperation into the 21st Century* (the “*S&T Agenda*”) was originally proposed by China during the APEC Leaders’ meeting in 1997 in Vancouver; developed in detail by the ISTWG in 1998; endorsed at the 3rd APEC S&T Ministers’ Meeting in Mexico in October 1998; and further approved by Leaders at their Kuala Lumpur meeting in November 1998.

As stipulated in the S&T Agenda, “All APEC fora, particularly the Industrial Science and Technology Working Group, should develop and take responsibility for designing and implementing within a reasonable timeframe specific initiatives and activities that support the vision and principles under this S&T Agenda.” It further stated that “The SOM Sub-committee on Economic and Technical Cooperation will oversee the implementation and follow-up work on this S&T Agenda. Annual progress in the implementation of the S&T Agenda shall be reported to Ministers with the initial report to be presented at the 11th Ministerial Meeting in 1999”.

The first report was an encouraging document in terms of its rich content and exhaustive analysis. It showed that within the APEC frame, there remained a large number of substantial activities addressing the objectives of the S&T Agenda.

In preparing this second report, it has been observed again that the relevant APEC fora, especially the working groups, have been active in implementing the *S&T Agenda*, and substantial achievements have been made over the past two years. Compared with the positive first Report and its comprehensive analysis, the second report has been less exhaustive in its analysis but rather more exemplary. It also tried to link the major relevant APEC events or documents, which are in line with the directions of the *S&T Agenda*.

5.2.1. Further Progress and Findings since the First Report

Overall, all the relevant APEC fora, especially the working groups, have been active in further implementation of the *S&T Agenda*. One outstanding example is the ISTWG, whose mandate closely relates to the *S&T Agenda*. Being fully aware of its responsibilities for implementing the *S&T Agenda*, the ISTWG has spared no efforts: out of the 63 current ISTWG projects, more than 90% address particular elements of the *S&T Agenda*. Twenty of these projects are new. Efforts were also observed from other

APEC fora. For example, the Transportation Working Group has initiated six new projects or joint activities, which directly or indirectly address implementation of the *S&T Agenda*, including the 'APEC Paperless Trading Demonstration Project' and its Intelligent Transport Systems Experts' Group.

5.2.2 Mechanisms

The *S&T Agenda* sets out the following mechanisms through which the objective of building a prosperous and sustainable APEC community is to be achieved:

1. Improved availability of and access to information
2. Improved human resource development
3. Improved business climate
4. Enhanced policy dialogue and review
5. Facilitation of networks and partnerships

The following are some examples of projects under the mechanisms:

Mechanism 1: Improved Availability of and Access to Information

- The objective of the 'Dissemination of Earthquake Disaster Mitigation Technologies for Humanistic Concerns' project is to call attention to the important issue of earthquake disaster mitigation by providing a forum for discussions; improving technological information and creating a network for further dissemination of information available. The enhanced availability of information will assist APEC economies to formulate appropriate policies in this area. (ISTWG 2000, project in progress)
- The objectives of the 'Workshop on Animal Health Risk Analysis' were to enhance, within member economies, the knowledge and understanding of the process involved in developing health import risk analyses as well as of principles in SPS Agreement and other standards and guidelines used in import risk analysis. The project workshop included discussion on the use of the world wide web in disseminating risk analysis. (ATCEG, 1999, project in progress)

Mechanism 2: Improved Human Resource Development

- The 'Feasibility Study for the Development of a Post-harvest Network for the APEC Region' is to establish a network by web page including various layers, and a "Virtual Post-harvest R&D Center" will be created. A meeting on the subject was held in Bangkok. (ISTWG 1999, project in progress)
- The 'Public Awareness Activities for Science and Technology' are to encourage cooperation by the science and technology museums and educational laboratories of the APEC economies; and to implement the APEC joint projects designed to attract youngster's attention to science and technology. (ISTWG 1997, project in progress)

Mechanism 3: Improved Business Climate

- The 'Business Consultation Forum during the 4th APEC Fair 2000' enables an increase in information exchange on the latest economy and market requirement and promotes intra-trade and cooperation in various fields among the members. (TPTWG 2000, project in progress)
- The 'Study on R&D Internationalization Industrial Section among APEC Member Economies' aims to provide useful information on R&D internationalization to the public and private/business sectors and to promote international R&D activities in the industrial private/business sector among APEC member economies. (ISTWG 1998, project concluded)

- The APEC Centre for Technology Exchange for Small and Medium Enterprise facilitates the transfer of technology through information, technology and training exchange, and aims to develop, apply and commercialize industrial S&T. The network includes a “Let’s Do Business” page which is an on-line business facilitation information service for SMEs in the region. (ISTWG 1999, project in progress)

Mechanism 4: Enhanced Policy Dialogue and Review

- The ‘APEC Network of Pharmaceutical Regulatory Science - APEC Joint Research Project on Bridging Study’ will be established to enhance the policy dialogue in regulatory science of new drug’s approval. The APEC network of pharmaceutical regulatory science will include representatives from the regulatory authority, academia and industry of each corresponding APEC economy. Workshops will be held regularly. (ISTWG 1999, project in progress)
- The objective of ‘The Fourth Biotechnology Workshop’ in Vancouver, Canada, in October 2000 is information exchange and capacity building aimed at facilitating the uptake of biotechnology and developing scientifically sound national processes and procedures for evaluating biotechnology products. It will also complete a best practice guide to communicating agricultural biotechnology. (ATCEG 1999, project in progress)

Mechanism 5: Facilitation of Networks and Partnerships

- The aims of the ‘Development of Life Cycle Assessment Network in the Region’ are to develop a life cycle assessment (LCA) network among experts and practitioners in the APEC region and promote the use of LCA in APEC member economies. This will contribute to the sustainable development of industries in APEC member economies. (ISTWG 2000, project in progress)
- The aims of the ‘APEC Network of Science and Technology Industrial Parks’ are to establish an APEC Network for the communication and exchange of information amongst the S&T Industrial Parks in the APEC region, and to promote trade in technology-driven sectors. (ISTWG 1999, project concluded)

5.2.3 Other Cross-Sectoral Themes

The first Report submitted last year identified two themes that cut across different APEC fora. They were Gender and Private/business Sector Involvement. As suggested by the first report, these two themes will be further explored in this report.

(a) Gender

At the Ministerial Meeting on Women held in 1998 in Manila, gender was identified as a cross-sectoral APEC theme. It is also a major theme in ISTWG activities, and the WG has established an *Ad hoc* Group on Gender and S&T to address this issue. The 2nd APEC Ministerial Meeting on Science and Technology held in 1996 in Seoul actually set Gender as one of the main themes, and Ministers agreed at the meeting to improve the recruitment and retention of women in science and technology. This is thus very relevant and conducive to the implementation of the S&T Agenda.

(b) Private/business Sector Involvement

APEC is about economic cooperation, and any economic-related initiatives would be incomplete without the participation of the private/business sector. Hence, in all APEC fora, and in all subject areas examined under the aegis of APEC, enhancing private/business sector participation has always been a major goal. The *Osaka Action*

S&T Agenda endorsed by Leaders in 1995 already referred to the involvement of the private/business sector wherever possible, and the *Manila Declaration* endorsed by Leaders in 1997 further encouraged the private/business sector to participate in, and initiate, economic and technical cooperation activities in line with APEC goals.

The *S&T Agenda* has given special attention to the role of the private/business sector, and has stated that collaborative activities should, whenever possible, ensure the active participation of the private/business sector, especially small and medium enterprises. The *S&T Agenda* has also suggested that “facilitation of networks and partnerships” should be one of the tools that could help achieve the *S&T Agenda*’s objectives. The 3rd APEC Ministerial Meeting on Science and Technology held in 1998 in Mexico City further elaborated on the “facilitation of networks and partnerships” as one way to include networks and partnerships with the private/business sector.

However, as correctly pointed out in the first report, certain areas of technology identified in the *S&T Agenda* may not have been adequately addressed. These include advanced materials, a broad group of technologies which are increasingly seen as among the fundamental enabling technologies of the 21st century. Efforts in this regard are being called for.

Due to the limited resources available, the lack of a comprehensive, detailed and up-to-date database on APEC activities, exact numbers of new projects addressing the *S&T Agenda* and the specific mechanisms in use are still pending. These areas could be duly reflected, if possible, in future reports.

Definitions of the terms used in this analysis are in Annex 11

5.2.4 Responses to Recommendations from the First Report

- *SMEs and the Knowledge-based Economy (KBE)*

ISTWG has closely monitored the work of the Economic Committee on ‘Cooperative Potentials for Promoting KBE in APEC’ and will consider how to reflect the outcomes of that work in its Operational Plan for 2001.

- *Involvement of women in S&T*

In the ISTWG gender has always been an issue of common concern and women’s participation in S&T activities has been relatively active. For example, in each of the two previous WG meetings (the 17th and 18th), more than 35% of the delegates were women, and almost one third of the WG’s focal points are women. Moreover, the *Ad Hoc* Sub-group on Gender and S&T covered the following areas of concern: education, research, the workplace, APEC fora and activities. The ISTWG’s own activities include setting priorities for collection of sex-disaggregated data, collecting and developing examples of good practices which increase the participation of women in science and technology, and disseminating information. It emphasized the need to compile a registry of distinguished women in S&T and to encourage greater participation of women in APEC projects.

- *Policy dialogue*

Following a pilot policy dialogue on public-private/business sector research linkages at its 17th meeting, the ISTWG agreed at its 18th meeting to institute a formal policy dialogue as a permanent feature of its regular WG meetings. Topics for the dialogue will vary to reflect the consensus of the member economies, and the next policy dialogue will take place at the 19th WG meeting in October 2000 in Brunei Darussalam. It is believed that this mechanism will significantly enhance the work of the ISTWG in the strategic

level, as well as its overall performance.

- *Strengthen ECOTECH project coordination*

To strengthen ECOTECH project coordination, the ISTWG has established an electronic discussion forum involving the Lead Shepherds/Chairs of all APEC fora. It has also developed and implemented sophisticated electronic project management tools which facilitate the exchange of information and comments about new ISTWG project proposals across all APEC fora. All these are salient features amongst the functions of the APEC S&T Web (ASTWeb), which is currently being administered by Australia

- *Deeper analysis of private/business sector involvement and the impact of projects on intended beneficiaries*

These issues are of widespread interest across all APEC fora. Further, the investigation of the nature of private/business sector involvement and of project benefits is likely to require relatively intense analysis of specific projects. This is best conducted by the relevant APEC fora responsible for the projects under analysis. Consequently, the ISTWG considers that these issues are best addressed in a coordinated exercise led by the ESC.

5.2.5 Recommendations

This report concludes that on the whole APEC fora are implementing the *S&T Agenda for Science and Technology Industry Cooperation into the 21st Century* in a comprehensive way. The breadth and depth of the projects demonstrate the commitment of the 21 member economies to this cause.

The ESC recommends, therefore:

- ***That the ESC develop and coordinate an approach across all relevant APEC fora to provide a clearer picture of the nature and depth of private/business sector involvement in APEC ECOTECH projects, and of the impact of projects on intended beneficiaries;***
- ***That all the relevant APEC fora, especially the working groups, should strengthen science and technology policy dialogue to enhance their work on the strategic level;***
- ***That all APEC fora should strengthen communication and collaboration in the technology areas identified in the S&T Agenda, particularly in broad enabling technologies, such as advanced materials;***
- ***That the APEC Secretariat, the ESC and all the relevant APEC fora should make joint efforts in further strengthening ECOTECH project coordination; and in this connection the ASTWeb of the ISTWG could be utilized as a discussion forum or clearing house for future activities and projects addressing implementation of the S&T Agenda; and***
- ***That in view of the advantageous position of the ESC, it should assume more responsibility in coordinating the Progress Reports of the S&T Agenda in collecting necessary data and soliciting facilitation from other APEC fora.***

6 IMPLEMENTATION OF THE GUIDANCE ON STRENGTHENING MANAGEMENT OF APEC ECOTECH ACTIVITIES

6.1 Implementation of the Guidance by APEC Fora

Senior Officials approved the *Guidance on Strengthening Management of APEC ECOTECH Activities* in June 1998, in Kuching, Malaysia. Since then, the ESC has been monitoring its implementation by APEC fora and the Secretariat.

The ESC is satisfied that APEC fora have observed the ECOTECH guidelines, particularly in avoiding duplication and in involving the private/business sector in projects. Almost all ECOTECH projects submitted for funding in July 2000 identified benefits that flowed on to the private/business sector and private/business sector participation. There is also evidence that private/business sector input is being sought in the project formulation stage.

However, it remains concerned that not sufficient attention is being paid, when projects are being formulated, to the outcomes of projects, how they actually relate to specific ECOTECH objectives and initiatives, and how the results can be used for outreach purposes. Furthermore, the ESC considers that more can be done by APEC fora to ensure that projects have the active participation of a large number of economies.

The ESC is also satisfied that the APEC Secretariat has been effectively carrying out its role in the management of ECOTECH activities, as identified in the ECOTECH guidelines. The Secretariat continues to provide valuable comments on project proposals seeking APEC funding including their compliance with the *Guidebook on Financial Procedures and the Format for Projects*. Comments by the Secretariat on the evaluation reports of completed projects have been constructive and useful. The Secretariat has also contributed to improvements to the *Guidebook on Financial Procedures*. The ESC notes that the project proposal, progress report and evaluation forms have been revised to include questions relating to gender issues and some ESC suggestions, for example, information on the project type.

Overall, however, the current project funding guidelines do not comply with technical cooperation methodologies – such as the Logical Framework – used widely by international cooperation agencies and organizations. This has limited the ability of some APEC developing economies to successfully develop project proposals.

The Secretariat has worked closely with the consultants developing the ECOTECH Clearing House to ensure that the information stored in the APEC Project Database is compatible. It is also considering a number of proposals put forward by the ESC to improve the utility of the Project Database. Following a request by the ESC and the BMC's subsequent approval, the Secretariat has changed the Project Database setting to allow the 'approved budget' of each project to be viewed. The ESC understands that further enhancements to incorporate its remaining suggestions will be considered once input from other fora has been obtained and the resource implications are known.

Recommendation

- ***The ESC strongly recommends further improvements to the Guidebook on Financial Procedures and the Format for Projects in order to make them simpler and more comprehensible, with a view to allowing the participation of a broader spectrum of APEC economies in ECOTECH projects.***

6.2 Implementation of the ECOTECH Weightings Matrix

In the interest of ensuring outcome-oriented and value-added projects, as directed by Ministers and Leaders, in 1999 the ESC developed an *ECOTECH Weightings Matrix* to

assist APEC fora and the BMC determine a project's importance measured against APEC's ECOTECH objectives. It sought to provide fora with a better appreciation of the overall ECOTECH priorities of APEC, including desired project outcomes, as opposed to the possibly narrower interests of the particular forum proposing the project.

Projects submitted to the July 2000 BMC meeting provided the first opportunity for the ESC to examine how APEC fora have completed the *ECOTECH Weightings Matrix* on a self-assessment basis. Out of a batch of 44 projects the ESC found that:

- 1 project was submitted without the *ECOTECH Matrix*
- 1 project used the wrong form and could not be considered
- 6 projects were exempt because they were website-related, publications or TILF projects
- 29 were submitted without adequate justification/supporting information and, of those, 2 apparently did not respond to specific instructions from Leaders/Ministers
- 7 were exemplary. Disappointingly, working groups that submitted projects with good supporting information for the score claimed also submitted other projects with inadequate information.

The assessment demonstrated that APEC fora had not paid sufficient attention to providing adequate information in support of scores claimed before submitting project proposals to the BMC. There was a tendency to award maximum scores by loosely interpreting the relevance of the project to specific questions. It could be argued, therefore, that perhaps someone other than the project proponent should complete the matrix, e.g. the Secretariat. However, the ESC would prefer the project proponents to complete the matrix so as to encourage them to think more carefully about how their project meets specific ECOTECH objectives and how governments, the private/business sector or the community in general could benefit from the project. The ESC recognises that in some cases project proposals might be prepared by those not necessarily familiar with APEC processes. It expects, however, that Lead Shepherds/Chairs will ensure that the forum's internal review of projects is rigorous enough to pick up any deficiencies and correct them before projects are submitted to the BMC for funding.

Recommendation: The ESC strongly urges APEC fora to clearly articulate the outcomes of projects when completing the ECOTECH matrix, including how governments, the private/business sector or the community will benefit from individual projects.

In the light of the assessment of the *ECOTECH Weighting Matrix* submissions this year, the ESC has redesigned the form and re-drafted some of the questions to make them clearer (Annex 12). The ESC encourages fora, including the BMC, to use the matrix as a checklist in determining the ECOTECH value of a project, focusing on the criteria that the project meets rather than its overall score.

Recommendation: The revised ECOTECH Weighting Matrix should be adopted by the BMC and used as a guide in determining the ECOTECH value of a project. The BMC should not consider any ECOTECH project that is submitted without a completed ECOTECH matrix (unless an exemption is sought) and should return to proponents those that do not contain satisfactory supporting information.

7. ECOTECH INFORMATION CLEARING HOUSE

The concept of the APEC ECOTECH Clearing House was developed in response to Leaders and Ministers' priorities of strengthening the coordination of the ECOTECH agenda, and improving the effectiveness of economic and technical cooperation activities.

The establishment of the ECOTECH Clearing House was an urgent initiative that emerged from the 1999 Auckland Leaders' and Ministers' Meetings and will be a major deliverable for APEC Leaders in 2000.

The ECOTECH Clearing House is a website that indexes all relevant information on APEC economic and technical cooperation activities. It provides fast and direct access to a unique collection of information, which demonstrates the investment and benefits of APEC economic and technical cooperation activities.

The Clearing House will also provide facilities for the exchange of information between potential partners in ECOTECH activity, in particular the identification of ECOTECH requirements and the capacity to provide appropriate expertise to meet those needs.

7.1 Phase 1 of the ECOTECH Clearing House

Phase 1 of the ECOTECH Clearing House is now complete and it is operational at www.apec-ecotech.org. Users now have fast and direct access to:

- over 825 items of ECOTECH information in the form of publications, databases, projects and project websites, which have all been classified by ECOTECH theme, initiative, lead APEC fora, lead economy, and date;
- working group/forum websites;
- a quality assured list of external websites relevant to economic and technical cooperation activity;
- a customised ECOTECH search engine which enables users to search both APEC ECOTECH information and the external economic and technical cooperation websites; and
- a web-based facility to enable easy update of information in the Clearing House by the APEC Secretariat Information Manager.

The Clearing House does not store the actual information item but uses web technology to enable its rapid retrieval. The Clearing House catalogues the information (title, short description, lead APEC fora, lead Economy, relevant ECOTECH themes, initiatives etc.) so that it can be found easily.

7.1.1 Improved Dissemination

Working groups/fora can use the Clearing House to disseminate information widely. The Clearing House provides a recognised, central repository of ECOTECH information, and fast, direct access to that information.

7.1.2 Avoid Duplication & Strengthen Strategic Alignment

By searching the Clearing House, working group/forum members can identify work that is currently underway, or has been completed in the past, in a particular topic area. Project Overseers of related "in progress" projects can be contacted directly by email. The Clearing House makes it easy to review the work completed to date by all fora in a particular theme or initiative. Working group/forum members can then build on that work.

7.1.3 Promoting APEC

The Clearing House is a highly visible tool that brings a unique collection of ECOTECH information to an international public audience, demonstrating the investment made by APEC in economic and technical cooperation.

7.2 Phase 2 of the Clearing House

Phase 2 of the Clearing House will be completed by November 2000 in time for an official launch of the site at the Leaders' Meeting in November 2000. Phase 2 extends the functionality of the Clearing House to:

- allow users to register on the Clearing House, describe their areas of interest and then receive automatic email notification whenever new information, which matches their interests, is added to the Clearing House; and
- include an electronic notice-board to support the initiation of economic and technical co-operation partnerships. The notice-board would enable Senior Officials/ESC contacts, working group/forum members, development agency personnel, private/business sector contacts, researchers & academics etc. to discuss opportunities to work together on cooperation activities. It would facilitate the survey of members of the economic and technical cooperation community. The notice-board can be used to communicate areas of requirement and corresponding areas of expertise.

7.2.1 Who's doing what?

By registering with the Clearing House all working group/forum members can be immediately notified of new ECOTECH information affecting their area of interest, thus helping to avoid duplication, and promoting collaborative effort amongst groups and people working in similar areas, or with similar objectives.

7.2.2 Push rather than pull

Automatic email notification of new ECOTECH information means that dissemination of working group/fora information becomes 'push' rather than 'pull'. Links to new information produced by working groups/fora will be distributed directly to the target audience rather than waiting for the audience to visit the website.

7.2.3 Early and Inclusive Collaboration

The use of the electronic notice-board to discuss *proposed* ECOTECH activity can:

- strengthen collaboration and communication within and between APEC fora, and
- promote external collaboration with members of the wider economic and technical cooperation community.

Importantly it can make it easier for collaboration and communication to take place at the initiation stage of the project cycle.

7.3 Utility

The ECOTECH Clearing House is a platform for coordinating ECOTECH activity and information - reducing duplication and focusing development. Acting as an "Information Exchange" the Clearing House can bring together partners with mutual interests in ECOTECH activity.

The Clearing House is a flexible information management tool. Adding content to the Clearing House is quick, easy and does not require technical expertise.

The Clearing House has been designed to grow and expand with APEC. Information on the introduction of a new ECOTECH initiative, a new working group/forum or member economy etc. is easily added to the Clearing House.

Through the Clearing House APEC provides a widely available and influential resource for all participants in economic and technical cooperation activity in the APEC region.

Recommendation

- ***That APEC fora use the ECOTECH Clearing House notice-board facility to work together on cooperation activities and to communicate areas of requirement and corresponding areas of expertise.***

8. SUMMARY OF RECOMMENDATIONS

S2.1

- 1. In implementing the six ECOTECH themes of the *Manila Declaration*, the ESC urges fora to pay close attention to the joint activities identified in the *Osaka Action Agenda*.**
- 2. APEC fora should allow time to implement the tasks identified in the existing 17 ECOTECH initiatives, while allowing a flexible process for the consideration and approval of ECOTECH projects and early implementation of urgent projects.**

S2.3

3. The ESC recommends that:

- all fora should pay particular attention to evaluating the outcomes of projects with a view to communicating how those projects have benefited governments, the private/business sector or the community.**
- the views of those for whom training is designed, other relevant APEC fora and external experts should be sought when project proposals are being developed.**
- in order to maximise the leverage of APEC resources, the ESC urges the HRDWG and other relevant fora to help define the needs within the region for capacity building required to attain APEC goals, so as to facilitate cooperation with the private/business sector, appropriate international organizations or other regional partners that could help respond to those needs.**
- project evaluations of the remaining ECOTECH themes be conducted with external assistance, if necessary.**
- the APEC Secretariat, when filling a future vacancy, should seek the secondment of an officer with experience in project evaluation.**

S3.1.1

- 4. The HRDWG should have a broader role to play in coordinating HRD efforts across APEC fora and in defining the criteria for the development of an appropriate action plan.**

S3.1.2

5. The ESC recommends that:

- fora consider using the electronic notice-board facility of the ECOTECH Clearing House to communicate with each other not only on HRD matters but also on other cross-cutting ECOTECH themes, in order to improve the quality of projects and to avoid duplication of effort.**
- the HRDWG continue to implement the recommendations identified in last year's coordination paper.**

S3.2

6. The ESC recommends that:

- funding by international institutions and/or government organizations should be encouraged as it has proved effective and has generally enabled projects to get under way quickly.**
- the Finance Ministers' process and other fora may benefit from increased APEC funding of appropriate technical assistance or from cooperative efforts with other international organizations. This would enable further detailed technical analysis of reforms, in addition to the substantial body of work already accomplished in the Finance Ministers' process.**

- to support economic growth in the region, there is also a strong need for on-going institutional capacity building.
- given the core expertise of Finance Ministers and their leading role in this area, they should be consulted on proposals by other APEC fora for work relating to the development of stable, safe and efficient capital markets.

S3.3

7. The ESC recommends that:

- the ESC consider to what extent interaction between cooperation, development and commercial investment streams, as demonstrated by the IWS RISE project, furthers APEC goals and can be adopted within APEC activities more generally.
- fora addressing economic infrastructure issues should continue on the cross-cutting areas set out under the Vancouver Framework for Enhanced Public-Private Partnerships in Infrastructure Development, Sustainable Cities Program of Action, rural infrastructure development and the APEC Food System.
- in implementing the above initiatives, priority should be attached to the application of the *Framework for the Integration of Women in Economic Infrastructure Fields*. Fora should also give priority to capacity building in support of the implementation of the voluntary principles endorsed by the Vancouver Framework.
- the IWS, in consultation with relevant fora, should develop specific coordination mechanisms for:
 - improving the framework and capacities for infrastructure provision and private participation.
 - infrastructure and sustainable development in support of the APEC Food System.
 - infrastructure support to sustainable urban development.

S3.4

8. The ESC recommends that:

- all APEC fora should endeavour to strengthen science and technology policy dialogue.
- while all APEC fora should endeavour to strengthen collaboration in the technology areas identified in the *Agenda for Science and Technology Industry Cooperation*, the ESC should assume more responsibilities in coordinating its implementation
- that all APEC fora should endeavour to strengthen the involvement of women in science and technology and should develop specific initiatives and activities to facilitate this.

S3.5

9. Recalling the outcomes of the Ministerial Meeting on Sustainable Development held in Toronto, Canada, in 1997, and the work being conducted by other relevant international fora, the ESC recommends that all APEC fora should endeavour to:

- strengthen and assess progress on environmental priorities, within the sustainable development framework provided at the Toronto meeting,
- seek to establish a specific strategy for sustainable development that accurately reflects APEC's priorities on environmental issues,

- encourage appropriate participation of relevant sectors, levels of government, business and communities on environmental priorities, in sustainable cities activities whilst recognising the heterogeneity of the region; and
- recognise that the integration of women is essential for sustainable development.

S3.6

10. The ESC:

- endorses the recommendations proposed by the PLGSME for implementation by the APEC Secretariat and itself. However, as managing SME-related projects across all fora, including the selection and prioritisation of projects, has broader policy implications, the ESC should take this matter up at the Joint Fora meeting in 2001.

S4

11. The ESC recommends that:

- the Common Policy Concepts articulated in the *Osaka Action Agenda* should continue to be used as a reminder of the goals that individual fora are expected to achieve.
- the ESC, in consultation with APEC fora, should review the Joint Activities/Dialogue sections of the OAA in 2001 with a view to removing tasks that have been accomplished and incorporating new initiatives that have been launched since 1995 in an appropriate form.

S5.1

12. The ESC recommends that

- the HRDWG consider the Malaysian proposal for an APEC network of skills development centres.

S5.2.5

13. The ESC recommends that:

- the ESC develop and coordinate an approach across all relevant APEC fora to provide a clearer picture of the nature and depth of private/business sector involvement in APEC ECOTECH projects, and of the impact of projects on intended beneficiaries;
- all the relevant APEC fora, especially the working groups, should strengthen science and technology policy dialogue to enhance their work on the strategic level;
- all APEC fora should strengthen communication and collaboration in the technology areas identified in the S&T Agenda, particularly in broad enabling technologies, for example advanced materials;
- the APEC Secretariat, the ESC and all the relevant APEC fora should make joint efforts in further strengthening ECOTECH project coordination; and in this connection the ASTWeb of the ISTWG could be utilized as a discussion forum or clearing house for future activities and projects addressing implementation of the S&T Agenda; and
- in view of the advantageous position of the ESC, it should assume more responsibility in coordinating the Progress Reports of the S&T Agenda in collecting necessary data and soliciting facilitation from other APEC fora.

S6.1

14. The ESC strongly recommends

- **further improvements to *the Guidebook on Financial Procedures and the Format for Projects* in order to make them simpler and more comprehensible, with a view to allowing the participation of a broader spectrum of APEC economies in ECOTECH projects.**

S6.2

15. The ESC strongly urges APEC fora to

- **clearly articulate the outcomes of projects when completing the ECOTECH matrix, including how governments, the private/business sector or the community will benefit from individual projects.**

S6.2

16. The ESC recommends that

- **the revised *ECOTECH Weighting Matrix* should be adopted by the BMC and used as a guide in determining the ECOTECH value of a project. The BMC should not consider any ECOTECH project that is submitted without a completed ECOTECH matrix (unless an exemption is sought) and should return to proponents those that do not contain satisfactory supporting information.**

S7.3

17. The ESC recommends that

- **APEC fora use the ECOTECH Clearing House notice-board facility to work together on cooperation activities and to communicate areas of requirement and corresponding areas of expertise.**

9. CONCLUSIONS

Economic and technical cooperation is an important means for APEC members to achieve the goals of attaining sustainable growth and equitable development, reducing economic disparities, improving the economic and social well-being of the people, and deepening the spirit of community among APEC economies.

ECOTECH covers a variety of capacity building and information sharing activities conducted by APEC bodies. However, the sheer number of ECOTECH projects being implemented may well diffuse the effectiveness of APEC's limited resources. Pursuing fewer, more focused projects and/or using more innovative means of funding, including through external sources, should be a high priority for APEC fora. The ESC could assist fora in developing quality, outcome-oriented projects through periodic review of its guidance and the ECOTECH Matrix, as appropriate, to make sure that they remain relevant.

The application of the *Framework for the Integration of Women* is at early stage. APEC fora, in developing ECOTECH projects, should take every opportunity to integrate its principles and take into account likely impacts on women.

The coordination of cross-cutting themes, particularly when individual projects relate to diverse initiatives, requires an overseeing body. The ESC is best suited to assume this role to ensure that the overall objectives are met. With the introduction of the ECOTECH Clearing House, APEC fora should, correspondingly, make full use of the electronic notice-board to support better coordination of ECOTECH activities.

APEC fora should incorporate outreach strategies for more effective communications with member economies and communities. Evaluation of individual projects should also cover the effectiveness of the outreach program. Tools such as the ECOTECH Clearing House and the outreach programs by the Secretariat or member economies should be fully utilized in support of APEC's goal of "delivering to the community".

APEC fora face an increasing number of ECOTECH priorities and initiatives each year, which poses a challenge for them to respond in an effective and timely way. Implementation of existing initiatives is vital to the delivery of expected outcomes. The Joint Activities/Dialogue sections of Part II of the OAA, therefore, should be reviewed so as to remove tasks that have been accomplished and incorporate new initiatives that have been launched since 1995, in an appropriate form. However, the Common Policy Concepts articulated in the *Osaka Action Agenda* continue to be relevant and should be used as a reminder of the goals that individual fora are expected to achieve.

ANNEX 1

Terms of Reference of the SOM Sub-committee for Economic and Technical Cooperation

TERMS OF REFERENCE OF THE SOM SUB-COMMITTEE FOR ECONOMIC AND TECHNICAL COOPERATION

A. BACKGROUND

1. SOM has been mandated by Leaders to mandate and coordinate the APEC Economic and Technical Cooperation (ECOTECH) agenda. In Vancouver, Ministers have committed to further strengthen economic and technical cooperation in APEC by fully implementing *the Framework for Strengthening Economic Cooperation and Development*, which was agreed in Manila. In this connection, Ministers endorsed the proposal by Senior Officials to establish a SOM Sub-Committee for Economic and Technical Cooperation.
2. The SOM Sub-Committee will assist the SOM in coordinating and managing APEC's ECOTECH agenda, as well as identifying value-added initiatives for cooperative action.

B. OBJECTIVES

3. The main objective of the SOM Sub-Committee is to advance more effective implementation of the APEC's ECOTECH agenda by consulting with and integrating the efforts of various APEC fora through a results-oriented, outcomes-based approach which benefits all member economies; providing a policy management tool for strengthening and streamlining APEC's work; and providing guidance on possible actions which could be undertaken to achieve APEC ECOTECH goals, namely:
 - To attain sustainable growth and equitable development in the Asia-Pacific region;
 - To reduce economic disparities among APEC economies;
 - To improve the economic and social well-being of the people; and
 - To deepen the spirit of community in the Asia-Pacific.
4. The pursuit of the ECOTECH goals through concrete projects will take into consideration members' diverse and complementary capabilities and guided by the principles of :
 - Mutual respect and equality;
 - Mutual benefit and assistance;
 - Constructive and genuine partnership; and
 - Consensus building.
5. The SOM Sub-Committee will serve as a forum to discuss, formulate as well as coordinate action oriented integrated strategies in consultation with existing APEC groups and the business community, as necessary to implement the *APEC Framework for Strengthening Economic Cooperation and Development* which has identified the following six priority themes:
 - Develop human capital
 - Develop stable, safe and efficient capital markets
 - Strengthen economic infrastructure
 - Harness technologies for the future
 - Safeguard the quality of life through environmentally sound growth
 - Develop and strengthen the dynamism of SMEs

Activities

5. **The SOM Sub-Committee will :**
- **Report to SOM on its proposed work program and assist the SOM to effectively implement the 1996 Framework for Strengthening Economic Cooperation and Development. In so doing, the SOM Sub-Committee shall ensure that all the elements of the Framework are developed.**
 - **Review progress of APEC activities towards achieving APEC ECOTECH goals.**
 - **Identify and recommend for Senior Officials consideration specific issues and value added initiatives to assist the achievement of ECOTECH goals taking into account the economic situation, requirements and capacities of all member economies.**
 - **Examine and evaluate ECOTECH programmes and activities and recommend to Senior Officials means to achieve visible, targeted and result-oriented deliverables to address member economies priorities.**
 - **Assist the SOM to improve the management and coordination of ECOTECH activities among APEC fora, including APEC working groups and policy level committees, with a view to improving the identification and coordination of new cross-cutting issues.**
 - **Evaluate proposals to include new priority areas within the Framework for Strengthening Economic Cooperation and Development.**
 - **Encourage active participation of the private sector in the activities of economic and technical cooperation. Consider the recommendations of ABAC regarding the process of economic and technical cooperation in APEC.**
 - **Undertake ECOTECH-related tasks as directed by Senior Officials.**

C. ORGANIZATION AND OPERATION

6. **A Chairperson will be appointed who will be devoted to meeting the objectives of the SOM Sub-Committee.**
7. **A Vice-Chairperson(s) will be appointed to assist the Chair in managing the tasks and work programme of the SOM Sub-Committee.**
8. **The Chairperson and Vice Chairperson(s) will serve for a term of two years.**
9. **Membership of the SOM Sub-Committee will be open to all economies.**
10. **The SOM Sub-Committee shall meet regularly.**
11. **The SOM Sub-Committee would report regularly to the SOM.**
12. **The operation and effectiveness of the SOM Sub-Committee will be reviewed at the end of a 2-year term.**

ANNEX 2

ESC Work Program 2000

2000 WORK PROGRAM

The mission of the ECOTECH Sub-committee (ESC) is to assist the SOM in coordinating and managing APEC's ECOTECH agenda and identifying value-added initiatives for cooperative action. The ESC seeks to advance effective implementation of that objective in 2000 by:

- **Monitoring and evaluating implementation of the six priority themes of the *Manila Framework for Strengthening Economic Cooperation and Development*:**
 - **Developing human capital**
 - **Developing stable, safe and efficient capital markets**
 - **Strengthening economic infrastructure**
 - **Harnessing technologies for the future**
 - **Safeguarding the quality of life through environmentally sound growth**
 - **Developing and strengthening the dynamism of small and medium enterprises**
- **Reporting on the implementation of the *Kuala Lumpur Action Program on Skills Development and the Agenda for Science and Technology Industry Cooperation into the 21st Century*.**
- **Reviewing implementation of ECOTECH Joint Activities/Policy Dialogues identified in Part II of the *Osaka Action Agenda*.**
- **Implementing the *Strengthening Markets Road Map*.**
- **Identifying areas where relevant working groups/fora should intensify work, identifying gaps and potential duplication on cross-cutting issues and making appropriate recommendations to the SOM.**
- **Monitoring and evaluating implementation of the *Guidance on Strengthening Management of APEC's ECOTECH Activities and the ECOTECH Weighting Matrix*.**
- **Evaluating completed ECOTECH projects.**
- **Reviewing the ECOTECH component of EVSL to ensure that proposed activities support and contribute to the liberalisation and capacity building objectives of the sectors selected by Ministers in 1997.**
- **Overseeing the activities of the Infrastructure Workshop.**
- **Demonstrating the benefits of economic and technical cooperation through APEC's communications and outreach programs.**

ANNEX 3

Number of Projects Conducted By APEC Fora under Each ECOTECH Theme

NUMBER OF PROJECTS CONDUCTED BY APEC FORA UNDER EACH ECOTECH THEME

| <i>APEC Fora</i> | <i>ATC</i> | <i>EWG</i> | <i>FWG</i> | <i>HRD</i> | <i>IST</i> | <i>MRC</i> | <i>SME</i> | <i>TEL</i> | <i>TP</i> | <i>TPT</i> | <i>TWG</i> | <i>CTI</i> | <i>EC</i> | <i>ESC</i> | <i>FIN</i> | <i>SOM</i> | <i>TOTAL</i> |
|--|------------|------------|------------|------------|------------|------------|------------|------------|-----------|------------|------------|------------|-----------|------------|------------|------------|--------------|
| <i>Priority Themes</i> | | | | | | | | | | | | | | | | | |
| Developing human capital | 2 | - | 2 | 18 | 7 | - | - | 12 | 3 | 5 | 1 | 19 | - | - | - | 1 | 70 |
| Developing stable, safe and efficient capital markets | - | - | - | - | - | - | - | - | - | - | - | 2 | 2 | - | 3 | - | 7 |
| Strengthening economic infrastructure | 2 | 6 | - | - | - | - | - | 5 | - | 4 | - | - | 4 | - | - | - | 21 |
| Harnessing technologies for the future | 7 | 5 | - | - | 25 | - | - | 8 | 1 | 1 | - | 1 | - | 1 | - | - | 49 |
| Promoting environmentally sound growth | 2 | 6 | - | - | 28 | 8 | - | 1 | - | 5 | - | - | 1 | - | - | - | 51 |
| Strengthening the dynamism of small and medium enterprises | - | - | 1 | - | 3 | - | 10 | 3 | 4 | - | - | 1 | - | - | - | - | 22 |
| Total | 13 | 17 | 3 | 18 | 63 | 8 | 10 | 29 | 8 | 15 | 1 | 23 | 7 | 1 | 3 | 1 | 220 |

ANNEX 4

Types of ECOTECH Activities Conducted by APEC Fora

**SUMMARY TABLE OF THE TYPES OF ECOTECH PROJECTS
IN-PROGRESS OR COMPLETED BY APEC FORA IN 2000**

| I. APEC Fora | ATC | EWG | FWG | HRD | IST | MRC | SME | TEL | TWG | TP | TPT | CTI | EC | ESC | FIN | SOM | TOTAL |
|---------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-----------|------------|------------|-----------|------------|------------|------------|--------------|
| <i>Survey/Study/Report</i> | 3 | 7 | 2 | 7 | 24 | 5 | 2 | 8 | - | 2 | 10 | - | 5 | - | 0 | - | 75 |
| <i>Workshop/Seminar</i> | 5 | 6 | - | 9 | 15 | 1 | 4 | 4 | - | 1 | 2 | 7 | 2 | - | 1 | 1 | 58 |
| <i>Training</i> | 1 | 1 | 1 | 1 | 6 | - | 2 | 8 | - | 2 | - | 15 | - | - | 2 | - | 39 |
| <i>Standard/Best Practice</i> | 1 | - | - | - | - | - | - | 1 | 1 | - | 1 | - | - | - | 0 | - | 4 |
| <i>Database/Website/Network</i> | 3 | 3 | - | 1 | 14 | 1 | 2 | 8 | - | 2 | 1 | 1 | - | 1 | 0 | - | 37 |
| <i>APEC Centre/Exposition</i> | - | - | - | - | 4 | 1 | - | - | - | 1 | 1 | - | - | - | 0 | - | 7 |
| TOTAL | 13 | 17 | 3 | 18 | 63 | 8 | 10 | 29 | 1 | 8 | 15 | 23 | 7 | 1 | 3 | 1 | 220 |

ANNEX 5

Early Voluntary Sectoral Liberalisation - ECOTECH Elements

EARLY VOLUNTARY SECTORAL LIBERALISATION: ECOTECH ELEMENTS¹
(as at 20 September 2000)

| SECTOR | DETAILED ACTIONS | PROPOSED IMPLEMENTATION PLAN/ PROGRESS ACHIEVED |
|------------------------|--|---|
| Forest Products | <p>Candidate initiatives for economic and technical cooperation could include:</p> <p>(a) economic and technical cooperation to increase communities' forestry knowledge and their ability to develop solutions to such forest issues as forest resource assessment using criteria and indicators</p> <p>(b) economic and technical cooperation to enhance local industry development in a sustainable manner through training programs on sustainable forest practices (e.g. prompt reforestation, protection of water quality, protection of special sites, and logger training), and more efficient use of by-products</p> <p>(c) economic and technical cooperation to enhance collaborative work on forest fire prevention/ management and the development of forest fire monitoring and information systems</p> <p>(d) enhanced cooperation to facilitate a more liberalised trade in the forest product sector by:</p> <ul style="list-style-type: none"> • enhancing infrastructure, personnel and systems for standards conformance, and promoting exchange of information on standards, technical regulations and other provisions applied to the forest product sector in member economies by contributing positively to, and not duplicating, the work of the Sub-committee on Standards and Conformance of the APEC Committee on Trade and Investment; • making information available and developing training programs on paper making, paper stock collection and utilization; recycling and waste reduction; panel production; furniture design, finishing and packaging; and builders' carpentry and | <p>Significant progress in enhancing forest management and in facilitating trade liberalisation in this sector should be achieved by December 2002.</p> <p>To meet these goals, three ECOTECH proposals were approved by the Budget and Management Committee(BMC) in July 1999 for implementation from year 2000 onwards, viz.:</p> <ul style="list-style-type: none"> • Research on the Method of Assessing Forest Resources by Remote Sensing (China) • Study on Methods to Detect and Control Forest Damage Caused by Insects and Disease with Remote Sensing, GIS and GPS (China); and • Internet-oriented Multimedia Database of Assessment, Utilization and the Trade of Wood of Main Tree Species in APEC Members (China) <p>A 4th project, "<i>An Investigation and Exchange of Information on the Critical Factors Affecting the Trade and Export of Furniture of APEC Developing Economies in the Global Market</i>" proposed by the Philippines was subsequently approved in July 2000 for implementation in 2001.</p> <p>In addition, Australia undertook to develop an ECOTECH proposal to facilitate national implementation of the Asia-Pacific Forestry Commission '<i>Code of Practice for Forest Harvesting</i>'.</p> |

¹ Information extracted from detailed status reports as well as on latest known/available information.

| SECTOR | DETAILED ACTIONS | PROPOSED IMPLEMENTATION PLAN/ PROGRESS ACHIEVED |
|---|---|---|
| | <p>joinery design and finishing</p> <ul style="list-style-type: none"> • enhancing transparency on, and simplifying customs procedures applied to, the forest product sector in member economies by supporting work being undertaken by the Subcommittee on Customs Procedures (SCCP) of the APEC Committee on Trade and Investment; • promoting exchange of market information through cooperation among relevant associations in member economies; and • improving the information and monitoring systems associated with harmful forest pests. | |
| Environmental Goods and Services | <p>APEC members are encouraged to submit and support proposals for projects that will facilitate this initiative. This could also be done by drawing on existing resources and through existing channels such as the ISTWG's Cleaner Production Task Force and other APEC WGs/Committees.</p> | <p>To date, two ECOTECH proposals have been approved by the BMC for implementation in 1999/2000:</p> <ul style="list-style-type: none"> • "Survey of Environmental Markets in APEC" (Chinese Taipei); and • "Study on Impacts of Financial Crisis in SE Asia on Trade Liberalisation in Environmental Goods and Services within APEC Economies" (China) <p>Both projects are underway. The former is scheduled for completion end October 2000 while the work on the latter has just commenced.</p> |
| Fish and Fish Products | <p>The following ECOTECH initiatives were highlighted for potential funding. These initiatives are intended to contribute to the goals of fisheries conservation, trade facilitation and economic growth, including adjustment to trade liberalisation:</p> <ul style="list-style-type: none"> • Cooperation and technology transfer in sustainable aquaculture, capture fisheries and resource conservation and management (China is coordinating); • Technical cooperation to design and improve cost effective fishing technologies to incorporate environmental and conservation issues; • Technical cooperation to find practical means to address the problem of destructive effects of harvesting live fish (United | <p>The APEC Fisheries Working Group (FWG), at its tenth meeting in May 1999, agreed to assume general responsibility for the work arising out of the Early Voluntary Sectoral Liberalisation (EVSL) initiative.</p> <p>An ECOTECH project proposal was developed and submitted (by Korea) and approved by the BMC. A Steering Committee is being formed to consider implementation of the project.</p> |

| SECTOR | DETAILED ACTIONS | PROPOSED IMPLEMENTATION PLAN/ PROGRESS ACHIEVED |
|-------------|--|--|
| | <p>States is coordinating);</p> <ul style="list-style-type: none"> • Capacity building in the development and implementation of inspection systems based on risk assessment and quality systems such as Hazard Analysis and Critical Control Points (while providing sufficient time frame before imposing these conditions on member economies), in order to protect human health and to facilitate access to markets and also to assist member economies in meeting the requirements of the <i>Agreement on the Application of Sanitary and Phytosanitary Measures</i> generally; • Collaborative research on inherent properties of fish that relate to food safety, e.g., formaldehyde content in fish, etc.; • Enhanced cooperation in technical infrastructure (e.g., upgrading existing laboratories and equipment for testing of standards); • Economic and technical cooperation to explore opportunities for further investment expansion in the appropriate fisheries sub-sector and facilitate cooperation to attract foreign investment capital into those fisheries sub-sectors; • Economic and technical cooperation to adopt appropriate post-harvest technologies to improve product quality and to minimize fish wastage and discards; and • A study to eliminate barriers to early voluntary liberalisation in the fisheries sector (a draft project proposal developed by Korea has been approved by the BMC). | |
| Toys | <p>The Toys Experts' Group agreed in 1998 that, given the importance of ECOTECH, APEC members were encouraged to develop initiatives or a program for appropriate ECOTECH activities to facilitate implementation of liberalisation of trade in toys. Suggestions were welcome from APEC members, based on which a program of ECOTECH activities could be drawn up for implementation on a collective basis. The schedule of implementation would be developed in the light of proposals submitted.</p> | <p>The following two ECOTECH proposals were approved by the Budget and Management Committee (BMC) in July 1999 for implementation:</p> <ul style="list-style-type: none"> • Seminar on Implementation of the ISO Toy Safety Standard (the U.S. is the project overseer); • Program of Training and Development of Designers and Sample Makers in the Toys and Novelties Industry (the Philippines is the project overseer) |

| SECTOR | DETAILED ACTIONS | PROPOSED IMPLEMENTATION PLAN/ PROGRESS ACHIEVED |
|--------|--|---|
| | <p>At the Experts' Meeting in Kuantan, Malaysia, in September 1998, Japan put forward an ECOTECH proposal on toy safety. Members were encouraged to examine the proposal and approach Japan to develop possible cooperation projects, and kept the coordinator informed.</p> | <p>The APEC Seminar on the ISO Global Toy Safety Standard, IS 8124, was held on 20-22 March 2000 in Hong Kong. The seminar attracted 256 participants, including both government officials and private/business sector representatives, from ten APEC economies. Topics discussed in the seminar included the ISO standard and its relationship to the current U.S. and E.U. voluntary standards, and the role of governments in ensuring toy safety. There were also hands-on testing demonstrations highlighting technical methods of ensuring compliance with the ISO standard. To benefit those economies which were unable to attend the seminar, all relevant materials from the seminar are available on the Internet at www.ita.doc.gov/td/ocg/ECOTECH/seminar.html.</p> <p>The Philippines is developing the Program of Training and Development of Designers and Sample Makers in the Toys and Novelties Industry. As more time will be needed to further develop the project, the BMC has approved a request by the Project Overseer to postpone the implementation of the project from September 2000 to September 2001. Meanwhile, the Philippines has invited members' nominations for experts/consultants to bid for the project as well as to register for participation in the training program.</p> <p>At the Experts' Meeting in February 1999, the Philippines reported that they had made initial contact with Japan for bilateral assistance, and they would keep the experts' group informed of developments. Other members were encouraged to keep the experts' group informed of their bilateral contacts with Japan.</p> |

| SECTOR | DETAILED ACTIONS | PROPOSED IMPLEMENTATION PLAN/ PROGRESS ACHIEVED |
|---------------------------|---|---|
| Gems and Jewellery | <p>1. Promote joint research and development, flows of technological information, educational and training programs relating to gems, precious metals and jewellery. Programs under this initiative should not duplicate work underway in other international fora and should be narrowly targeted. Suggested areas of focus where APEC could make a particular contribution are: training in testing, assaying and appraisal, and other areas where technical expertise is critical; work related to harmonizing certification and labeling standards; hallmarking, and work to enhance safe and environmentally sound production techniques such as in areas of electroplating and small-scale refinery. Other areas of assistance may be the development and implementation of training programs covering design of jewellery and various aspects of jewellery manufacturing such as stone setting, engraving, casting, surface enhancements, merchandise development and lapidary. Training programs may also be developed and implemented to assist APEC economies in seeking advanced technology and expertise, upgrading their technical standards and to reach a common level of progress while reducing economic and technical disparities among APEC economies.</p> <p>2. In sharing the responsibilities for sustainable and equitable development in the Asia-Pacific region, APEC economies are encouraged to make voluntary contributions commensurate with their abilities to the cooperation. Initiatives of cooperation, which should seek to enhance safe and environmentally sound production techniques, could include technical assistance in the following areas:</p> <ul style="list-style-type: none"> • Heat processing of ruby and blue sapphire; • Colorful gemstone processing; • Finishing process of jewellery. • Heat processing of precious metals. <p>3. Convene an APEC Jewellery Conference with two 'streams': one with a technical focus to examine the latest problems and developments; the other having a policy focus to highlight trade</p> | <p>Two ECOTECH proposals were approved by the BMC for implementation in 1999/2000:</p> <ul style="list-style-type: none"> • Development/Implementation of Training Programs and Establishment of APEC Assay Centre for Jewellery Testing, Assaying and Hallmarking for APEC Member economies. (Philippines). This project is into its last phase of implementation, having finalized training module. A "Seminar-Workshop on Fine Jewellery Assaying and Hallmarking Among APEC Economies" will be held on 18-19 September 2000 at the Hong Kong, China, Fine Jewellery Centre. • APEC Gems and Jewellery Trade and Technology Seminar. (China). The Seminar was held in Beijing, China, from 15 to 19 May 2000. <p>The submission of another project, "Workshop on Gems and Jewellery for APEC SMEs and Exhibition for Indonesia's Gems and Jewellery" is being deferred until 2001.</p> <p>Australia will hold an "APEC Jewellery Conference" in Melbourne in August 2000, a self-funded ECOTECH project approved by the CTI. The conference will be held in Melbourne on 28-29 August 2000 and the program for the conference is being drafted.</p> <p>Member economies are urged to submit further ECOTECH proposals for future consideration by the experts' group or other relevant sub-fora.</p> |

| SECTOR | DETAILED ACTIONS | PROPOSED IMPLEMENTATION PLAN/ PROGRESS ACHIEVED |
|--|--|--|
| | <p>liberalisation initiatives, international cooperation and collaborative projects.</p> <p>4. Explore the possibility of establishing an APEC Gems and Jewellery Technology Center.</p> <p>* Technology transfer should also be considered.</p> | |
| Chemicals | <p>Proposed ECOTECH work program, aimed at: extending a responsibility program such as Responsible Care; strengthening the capacity of economies to address non-tariff measures included in this initiative (including customs facilitation, investment liberalisation, alignment of standards and testing, and other NTMs to be identified in the NTM study); and technical assistance and training programs to help regulators in APEC economies. Program to be implemented through workshops and funded mainly by industry.</p> | <p>The ECOTECH program for the region is conducted by the Asia-Pacific Chemical Industry Coalition. Several workshops on labelling regulations and Material Safety Data sheets (MSDS) training were held - in China, Korea, Malaysia, Mexico, the Philippines and Thailand. Other events, such as a workshop on emergency response and occupational safety for China's petrochemicals industry was held in Qingdao, China, in April 2000. A training course on chemical risk assessment and environmental toxicology was held in the Philippines in September, 2000, and a meeting with the Mexican Institute of National Ecology to develop plans for the creation of a national reference chemical list was held in Mexico City in June 2000. A second follow-up meeting is planned for October 2000.</p> <p>The industry is continuing to conduct such workshops on an ongoing basis.</p> |
| Energy | <p>Specific implementation plan and timetable for ECOTECH in the Energy Sector in accordance with the work program and timetable of the Energy Working Group. Refer to Energy Working Group for further details. Website: http://www.isr.gov.au/resources/apec-ewg</p> | |
| Medical Equipment and Instruments | <p>Given the importance of ECOTECH, APEC is encouraged to develop initiatives or a program for appropriate ECOTECH activities. This would be done by drawing upon the relevant technology of medical</p> | <p>Two ECOTECH proposals to facilitate the implementation of liberalisation of trade in medical equipment instruments were developed and approved</p> |

| SECTOR | DETAILED ACTIONS | PROPOSED IMPLEMENTATION PLAN/ PROGRESS ACHIEVED |
|-------------------------------------|--|--|
| | <p>equipment and instruments as well as the expertise of regulators and building upon existing/on-going working programs in other APEC fora, to facilitate implementation of liberalisation of trade in medical equipment and instruments.</p> <p>Member economies generally agreed that the ECOTECH proposals should preferably be based on an agreed set of principles being developed by the U.S. in consultation with the other APEC economies. However, this does not preclude other ECOTECH proposals.</p> | <p>for APEC funding by the BMC in July 1999:</p> <ul style="list-style-type: none"> • Establishment of Best Practices in Evaluation of Product Certification Applications and Monitoring System for Medical Equipment and Devices (Philippines) <p>The project promotes good manufacturing practices in production facilities, public health and safety, eliminates counterfeiting of medical devices and equipment, improves transparency in import requirements, and increases trade flow.</p> <ul style="list-style-type: none"> • Seminar for Government Regulators/ Harmonization of Medical Equipment Regulation (U.S.) <p>The seminar was held <i>at the Grand Hyatt Hotel in Singapore</i> on 1-2 March 2000. The seminar covered topics such as quality system requirements and guidance, pre-market review, vigilance and post-market surveillance and auditing.</p> |
| Food | <p>The Chinese proposal for a <i>Seminar on Reduction of Antibiotic Residues in Domestic Animal Products</i> was approved by the BMC.</p> | <p>The seminar is scheduled to be held in Beijing, China, on 15-19 October 2000 with the theme of <i>"Public Health Issues in Animal Production/Animal Products"</i>.</p> |
| Natural and Synthetic Rubber | <p>Cooperate in the mutually beneficial development of production technology between rubber producing economies and exchange information and strategies which address rubber life-cycle issues in APEC on an on-going basis.</p> | <p>One ECOTECH proposal (on adoption and promotion of "APEC standards" for rubber) was proposed by a member economy. However there were several comments (e.g., international standards for rubber already exist) by other economies, and the experts' group did not reach a consensus before the 2nd CTI meeting in 1999 for the proposals submission to the BMC.</p> |

| SECTOR | DETAILED ACTIONS | PROPOSED IMPLEMENTATION PLAN/ PROGRESS ACHIEVED |
|--------------------|--|---|
| Fertilizers | <p>Not applicable.</p> <p>Note: EVSL Sector experts, beginning at the Informal SOM Meeting held in Singapore (October 1997), have given thoughtful consideration to this element but, given the extensive array of international economic and technical assistance activities already underway, have recognized that this sector is extensively served by a wide number of readily available ECOTECH opportunities. These include the following:</p> <ol style="list-style-type: none"> 1) The International Fertilizer Industry Association (IFA) and its international membership provides a wide range of funded economic and technical activities in the fertilizer sector that include agronomic and research programs, training, sharing of “best practices” and other activities. This assistance is made readily available through a variety of readily accessible sources including web sites. See: www.fertilizer.org (IFA Website) 2) Longstanding ECOTECH assistance is also provided by a variety of industry funded technical resources including that provided by the Potash and Phosphate Institute (PPI) and the Potash and Phosphate Institute of Canada (PPIC). These organizations, funded by member companies who produce potash and phosphate in North America, provide a variety of information and technical assistance through strategically-located offices located in Asia (China and Singapore) and Latin America (including Mexico). See: www.ppi-far.com (PPI/PPIC web site) | <p>Ongoing. For example the programs of the Potash and Phosphate Institute were originally established in 1935.</p> |
| Automotive | <p>Ongoing auto-related ECOTECH programming in other APEC fora, such as standards harmonization, customs facilitation and the work of the Industrial Science and Technology Working Group and APEC Intellectual Property Rights Experts Group, will be identified and supported through the Automotive Dialogue.</p> | <p>The First Automotive Dialogue was held in Bali on 26-27 July 1999. It was attended by 175 senior officials and industry representatives from 12 economies who discussed a range of issues affecting the automotive industry, such as traffic congestion and the environment, automotive technical regulations, customs issues, intellectual property issues, effective</p> |

| SECTOR | DETAILED ACTIONS | PROPOSED IMPLEMENTATION PLAN/ PROGRESS ACHIEVED |
|--------------------------------------|---|---|
| | | <p>automotive policies and historical impacts of liberalised trade on economies.</p> <p>The second meeting of the dialogue was held in Manila, the Philippines, from 6 to 8 April 2000 to take forward the work initiated at the first dialogue and advance consideration of issues such as effective automotive policies and impediments to growth in the automotive sector.</p> |
| Oilseeds and Oilseed Products | Continue to work with the Infrastructure Workshop in the areas of biotechnology, post-harvest handling, sustainability, rural infrastructure development and other relevant areas. Member economies are encouraged to submit detailed ECOTECH proposals to coordinators. | A “Regional Integration for Sustainable Economies” (RISE) on rural infrastructure development has been approved by the BMC. |
| Civil Aircraft | <p>Proposal for the Establishment of a Joint Airworthiness Consortium among APEC Member Economies</p> <p>On 23 April 1998, Chinese Taipei advised members of the APEC EVSL Civil Aircraft Experts’ Group of its intention to nominate an ECOTECH proposal and subsequently filed a draft proposal on 8 May 1998. This draft was subsequently revised and expanded, and circulated in advance of SOM III, 1998 with discussion at SOM III 1998.</p> <p>Following this discussion, experts were invited to file detailed technical comments to aid in the preparation of a revised draft. In view of the highly technical nature of this proposal, sector experts took note that more detailed discussion of this proposal might also be referred to a technical APEC forum with more specific expertise. (Transportation Working Group [TWG]).</p> <p>At SOM I 1999, experts agreed to a further work program (see next column) to allow for the incorporation of capital-based expert comments before deciding on the merits of referring this initiative to another APEC forum (i.e., TWG) with comments due to Chinese Taipei by 2 April 1999.</p> <p>On 15 April 1999, Chinese Taipei informed sector experts that they</p> | This proposal is now in abeyance pending further notification by the ECOTECH sponsor, Chinese Taipei. |

| SECTOR | DETAILED ACTIONS | PROPOSED IMPLEMENTATION PLAN/ PROGRESS ACHIEVED |
|---------------|---|--|
| | <p>had received comments from Canada, New Zealand and the United States. In light of these comments, Chinese Taipei recommended that this proposal be placed in abeyance pending further work to be undertaken by Chinese Taipei. As of 21 June 1999 no further communication on this proposal has been received from Chinese Taipei.</p> | |

ANNEX 6

Report by Australia on Developing Stable, Safe and Efficient Capital Markets

Coordination Paper BY Australia on Developing Stable, Safe and Efficient Capital Markets

INTRODUCTION

Following a decision by APEC Senior Officials to review APEC's work on the six priority themes of the *Manila Framework for Strengthening Economic Cooperation and Development*, Australia was tasked by the APEC ECOTECH Sub-committee (ESC) to prepare a coordination paper on the theme of "Developing Stable, Safe and Efficient Capital Markets". This paper aims to review implementation of APEC work in this area. It is not intended to be a comprehensive evaluation of APEC's work in this area, but rather to serve as a guide to current activities and to make some general recommendations to improve coordination and effectiveness.

CURRENT ACTIVITIES

At their November 1998 meeting in Kuala Lumpur, Malaysia, Economic Leaders resolved to work together to support an early and sustained recovery in the region and agreed to pursue a cooperative growth strategy including the following elements:

- growth-oriented prudent macroeconomic policies, appropriate to the specific requirements of each economy;
- expanded financial assistance from the international community to generate employment and to build and strengthen social safety nets to protect the poor and vulnerable;
- a comprehensive program of support for efforts to strengthen financial systems, restore trade finance, and accelerate corporate sector restructuring;
- new approaches to catalyse the return of stable and sustainable private capital flows into the region;
- a renewed commitment to the Bogor goals of achieving free and open trade and investment within APEC; and
- urgent work within APEC and with other economies and institutions to develop and implement long-term measures to strengthen the international financial system.

A key element of Leaders' strategies to promote sustained recovery and cooperative growth strategies in the region has been the development and implementation of policies to promote stable, safe and efficient capital markets. Most of APEC's work in promoting capital market efficiency has been undertaken by APEC Finance Ministers. However, other APEC fora, including the Economic Committee (EC), the Committee on Trade and Investment (CTI), the APEC Energy Working Group (EWG) and the Policy Level Group on Small and Medium Enterprises (PLGSME), have also undertaken specific activities which have made an important contribution to the implementation of Leaders' directives.

APEC FINANCE MINISTERS' PROCESS

In response to the 1997-98 Asian financial crisis, over the past two years APEC Finance Ministers have pursued and endorsed a broad range of prudential reform and good governance work. Current activities, with one exception, promote capital market efficiency. These projects, as described below, range from promoting improved corporate governance to strengthening banking and securities market supervision.

a) Corporate governance

A number of APEC economies are members of a core group to identify the leading issues in Asian corporate governance in order to guide practical measures to strengthen

corporate governance in the region. APEC member economies are now being encouraged to undertake a dialogue on policy reform.

b) Strengthening banking supervision and training for banking supervisors and securities market regulators

APEC Finance Ministers have endorsed action plans to strengthen training programs of national financial regulatory agencies, develop model curricula to provide standardised training programs, and to strengthen collaboration of regional and international training programs for financial regulators. An APEC handbook of regional training practices will be compiled by the end of 2000 to help strengthen the management of national training programs for member economies.

c) Credit rating agencies

A survey covering public and private/business sector ratings being done by credit rating agencies operating in the region will be conducted this year with the aim of deepening understanding of the ratings processes and to improve transparency, fairness and accountability.

d) Voluntary action plan on freer and stable capital flows (VAP)

The VAP initiative, which centred on managing capital account liberalisation, was launched by APEC Finance Ministers meeting in Cebu, the Philippines, in 1997. Then, with the advent of the Asian crisis, New Zealand recast the project to place more emphasis on the policy reforms to assure stability in freer capital flows. This was done by identifying reforms that would most strengthen financial sectors and identify where and how to implement changes through self-assessment reports against international standards. The VAP offers the prospects of advancing regional surveillance, particularly in the area of structural reform.

The VAP consists of two parts. Part I discusses how to maximise the benefits and minimise the risks associated with cross-border capital flows among APEC economies and Part II is intended to complement and take forward the policy conclusions reached in Part I by encouraging informal policy dialogue.

e) The need to strengthen financial regulation and supervision: bank failure management

This proposal encourages exchange of experience in handling banking system failures. It does this without duplicating the extensive work on banking and supervisory standards and training already in place or the regional cooperation among many APEC central banks and supervisors in EMEAP (Executives' Meeting of East Asia-Pacific Central Banks).

f) Privatisation forum

Thailand proposed this initiative in November 1998 as part of its efforts to support the privatisation process and promote investment through institutional strengthening and shared experiences across the region. Nine draft principles on privatisation were developed at the inaugural meeting of the APEC Privatisation Forum in Bangkok in November 1999. Another forum, held in Bali, Indonesia, provided an opportunity to focus on privatisation issues related to the host member economy.

g) Public sector management

In 1999 APEC Leaders endorsed the need for strengthening regional markets and institutional capacity building. A workshop held in Singapore provided an opportunity to share member economies' experiences and best practices in public sector management reform and to develop ideas for further reform aimed at improving the

management performance of the public sector and its central role in improved broader economic performance.

h) Life insurance regulation

As a relatively new initiative under the Finance Ministers' process, the life insurance regulation proposal aims to develop a well-functioning life insurance industry that can play a significant role in deepening domestic capital markets, better marshalling domestic savings to meet national objectives, and better developing self-financing, private safety nets. Good prudential regulation of the life insurance industry would assist capital market stability and efficiency, while leaving the industry free to grow strongly. With the productive experience of an inaugural symposium of regional regulatory and industry specialists in Australia in November, 1999, and the first training course in March 2000, this three-year initiative has solid support from regional regulatory authorities, the private sector, and the Asian Development Bank (ADB).

i) Company Accounting and Financial Reporting Task Force

Australia proposed a Company Accounting and Financial Reporting Task Force in response to the APEC Finance Ministers' recommendation in 1999 to consider issues related to promoting high quality internationally acceptable standards of accounting and disclosure and auditing practices by business enterprises. The first Task Force meeting was held in Hong Kong, China, and the final report may be presented for Finance Ministers' and Leaders' endorsement in 2001. Further work is proposed on selection of countries for case studies, and confirmation of contributions from the World Bank (WB) and the ADB and private/business sector involvement will be encouraged.

j) Pension fund reform

In 1998, APEC Finance Ministers and Leaders supported the idea of having regional forums to facilitate discussion on policy issues surrounding the role of the private/business and public sectors in pension fund management and mobilising private savings, broadening the demand base for long-term debt instruments, implications for domestic savings and capital market development, and the prudential regulation of pension fund investments. A third regional forum in Bangkok, Thailand provided an opportunity for member economies to share information on pension fund reform in the region.

k) Fighting financial crime

At their 9-10 September 2000 meeting in Bandar Seri Begawan, Brunei, Finance Ministers welcomed the agreement to establish an APEC working group that would conduct a survey of the domestic legal and regulatory frameworks for fighting financial crime, building on work already completed by APEC members of the Asian/Pacific Group on Money Laundering. Ministers also encouraged the international financial institutions to work further with their members in developing sound financial and capital markets and good governance.

ECONOMIC COMMITTEE

The Economic Committee (EC) is responsible for research on economic trends, prospects, and issues in the APEC region, and serves as a forum for member economies to exchange information and views. The EC has been undertaking a two-year project titled "APEC Economies beyond the Asian Crisis" since early 1999. This "beyond-the-crisis project" looks into the long-term implications of the Asian crisis, identifies major challenges for building the future of APEC economies, and outlines likely scenarios for growth and trade over the next decade.

The progress report submitted to APEC Ministers in 1999 highlighted weaknesses in the financial sector such as ineffectual prudential regulation/supervision and over-reliance on bank finance as one of major structural problems the Asian financial crisis demonstrated. Another financial issue currently under study is the importance of access to equity finance for entrepreneurs, particularly the role of venture capitals and angels, as the project underscores the renewed importance of entrepreneurship in the new economy. Building on the analyses of the progress report and on-going research, the final report to be submitted to Ministers in November 2000 will lay out the factors shaping the future of APEC economies and suggest basic policy directions for APEC cooperation.

The preparation for the 2001 Economic Outlook, the EC's key annual output, is already under way. The 2001 Outlook, to be delivered to Ministers next year, will look into the relationship between long-term economic growth and financial sector development in the APEC region. The Asian crisis highlighted the importance of sound development of the financial sector in warding off financial crises and ensuring economic stability. The 2001 Outlook will also provide some perspectives on promoting future growth by building the finance-growth nexus. It will also explore the linkages between economic growth and saving behaviour, allocation of capital and efficiency in channelling of savings to investment.

COMMITTEE ON TRADE AND INVESTMENT

In pursuing APEC's trade and investment liberalisation and facilitation (TILF) agenda, CTI activities are aimed at providing a more open environment to facilitate and improve the flow of capital, as well as goods, services and technology within the region. As such, various CTI activities contribute to developing stable, safe and efficient capital markets in a broad sense.

a) Investment

The primary purpose of activities in the area of investment is to improve the investment environment in the APEC region. Fostering stable, safe and efficient capital markets constitutes one of the important elements of enhanced investment environment. The 5th Investment Symposium by the Investment Experts' Group (IEG), held in Shanghai, China, on 13-14 March focused on topics such as the investment environment in the Asia-Pacific region after the Asian financial crisis, structural issues and investment, favourable environment for start-up companies and venture capital, and sustainable investment flows and development.

b) Strengthening markets

One of the key messages arising from the 'Economic Legal Infrastructure Symposium', co-organised by Australia, Indonesia and Japan and held in Jakarta, Indonesia, on 20-21 July, was that strengthening economic legal infrastructure in the APEC region is important to minimise the risk of future financial crisis.

c) Financial services

In general, CTI activities are cross-cutting over various services sectors. For example, a seminar 'Arrangements on Financial Services, Basic Telecommunications and Information Technology on the WTO New Arrangements', held in May 1999 in Yianjin, China, covered the Arrangements on Financial Services, Basic Telecommunications and Information Technology. The Group on Services (GOS) currently has on its agenda a study on the liberalisation of the financial sector.

APEC ENERGY ministers

Energy Ministers have also endorsed a range of initiatives aimed at promoting safe and efficient capital markets.

a) Power sector initiative

In 1997 Energy Ministers endorsed an *APEC Manual of Best Practice Principles for Independent Power Producers (IPP)*. The objective of the principles is to cut costs and create the conditions necessary for the efficient allocation of capital to the power infrastructure sector. They cover institutional and regulatory structures; tender/bid processes and evaluation criteria; power purchase agreements and associated tariff structures; and financing and its implications. The principles were developed in cooperation with the private/business sector and, generally speaking, they reflect the critical success factors necessary to underpin a successful IPP outcome, namely: transparency, predictability, reduction of sovereign risk and encouragement of competition. Many of the principles are generic and are applicable to the efficient allocation of resources to all sectors of APEC economies.

The *Best Practice Principles for Financing* and its implications aim at assisting member economies to establish:

- **clear regulatory, taxation and foreign exchange regimes to facilitate private investment in the power sector;**
- **enforceable legal frameworks which create security over project assets and are applied fairly to all participants;**
- **improvement in the credit standing of power purchasers to underpin the bankability of the IPP project, i.e., the Power Purchase Agreement is the central contract under which the risks of the project are allocated; and**
- **implementation of policies to encourage the development of domestic capital markets and institutions and diversify the source of capital, e.g., pensions and insurance funds, available for equity investment.**

The principles have formed the basis for the development of a three-phase program designed to promote and implement a regional strategy for institutional strengthening and capacity building amongst member economies in the micro-economic reform of their energy utilities. The first stage of the project is currently under way.

b) Natural gas initiative

At their third meeting in Okinawa, Japan, in 1998, APEC Energy Ministers adopted a series of recommendations to establish a low risk environment to encourage private/business sector investment in natural gas supplies, infrastructure and trading systems in the region.

Ministers endorsed a series of recommendations aimed at:

- **promoting investment and financing of natural gas projects;**
- **promoting the development of natural gas supplies;**
- **facilitating the development of markets for natural gas and natural gas-related products and services;**
- **facilitating construction of natural gas infrastructure; and**
- **facilitating the development of domestic and cross-border trading networks for natural gas and natural gas-related products and services.**

Those recommendations aimed at promoting investment and financing of natural gas supplies and trading networks include:

- **removal of restrictions on capital transfers and repatriation of earnings;**

- the development of mechanisms to allow stable and economically robust natural gas projects access to long-term credit both within each APEC economy and internationally;
- permit the recovery of, and a return on, investment in natural gas infrastructure projects; and
- ensure that insurance required to facilitate financing can be met in a timely and cost-effective manner.

SMALL AND MEDIUM ENTERPRISES

In some APEC member economies, small and medium enterprises' (SMEs) access to capital is limited by factors such as market resources, insufficient collateral and guarantees, high costs of financing, and underdeveloped financial institutions. The lack of finance has remained a major constraint for SMEs in some member economies, mainly because SMEs lack managerial skills. In addition, several APEC workshops (most recently the Tokyo workshop on SMEs Financing and Business Management) have demonstrated that APEC member economies need to implement policies to enhance the managerial skills and capacity building of SMEs to enable them to gain better access to financial and capital markets.

Ministers responsible for SMEs have recognised that SMEs need access to information about sources of funds. For example, the *APEC Start-up Companies and Venture Capital Survey* conducted by Chinese Taipei indicated that there was interest in establishing an APEC database to disseminate and exchange information on start-up companies and venture capital. As a result Ministers have instructed the Policy Level Group on SMEs (PLGSME) to cooperate with the Investment Experts Group (IEG) in this area.

It is also recognised that venture capital is important for financing start-up companies and information and communication technology (ICT) industries, and that the private/business sector is the leading source of capital. Ministers acknowledge that venture capital funds complement the financial sector in providing initial capital to new businesses and recognise that governments have a role in creating a better environment for SMEs and start-up companies to access capital markets. In this respect, Ministers concur that SMEs that have growth potential should be assisted in accessing financial and capital markets.

Ministers also agreed to work with APEC Ministers of Finance and relevant APEC fora to promote the development of capital markets including venture capital, equity fund, and the Intellectual Property Office (IPO) for the development of SMEs within their economies.

STRENGTHS OF CURRENT ACTIVITIES

APEC's comparative advantage as an international forum is that it brings together Ministers and Leaders to discuss issues of regional interest. This in turn builds political commitment at the highest levels to the reform agenda. This regional 'political consciousness raising' in support of structural reform is not a trivial achievement, particularly if it is timely and builds on the domestic constituencies supporting reform, or creates a more receptive environment within member economies for the implementation of practical assistance available through the IMF, WB, ADB or the ODA programs of member and non-member economies.

The APEC Finance Ministers' process is best suited to pursuing regional work on financial sector and corporate restructuring, drawing on standards established in other fora, particularly the IMF and the WB. Moreover, the APEC process ensures high-level political support for structural reform, with Finance Ministers reporting to Leaders. Current activities in the Finance Ministers' process are focused on building sound domestic institutions in the region, with a strong emphasis on capital markets.

Recent events have highlighted an important role for APEC in nurturing the domestic economic governance reforms essential for recovery and growth in the region. Much of APEC Finance Ministers' useful post-Asian crisis work has been laying the political groundwork for structural reform, institutional building and capacity building. This

places economies in a stronger position to realise the economic benefits flowing from trade liberalisation. In the wake of the Asian financial crisis, Finance Ministers' main focus has been on prudential reform and good governance in the region. There are no identified gaps in the suite of capital market projects undertaken at this stage.

The EC has played a critical role in identifying issues which impact on the stability and efficiency of capital markets including: weaknesses in the financial sector; the linkages between growth and financial sector policies; the importance of access to finance for entrepreneurs, and the renewed importance of entrepreneurship in the new economy. In the context of pursuing the TILF agenda, various CTI activities related to investment, strengthening markets and financial services have contributed to developing stable, safe and efficient capital markets in a broad sense. At the sectoral level, APEC Energy Ministers have promoted regional economic recovery by implementing strategies to increase private/business sector participation in the energy sector and to ensure the efficient allocation of capital. Similarly, APEC work on SMEs has emphasised the importance of access to capital and the role of governments in developing appropriate policies to foster SMEs and the private/business sector as the major source of capital.

In dealing with the aftermath of the Asian financial crisis, APEC Finance Ministers have laid the political groundwork for structural reform, institution building and capacity building. With regards to capital market functioning, Ministers have ensured that macroeconomic surveillance and financial architecture issues feature prominently in their messages to Leaders.

Regional macroeconomic surveillance is already being done by the IMF and Manila Framework Group. These institutions are better suited for this work given their capacity to undertake comprehensive research in this area.

International financial architecture issues have been discussed in APEC, with members' views being reported to the Interim Committee of the IMF and G-20 process. Whilst feeding of APEC member's views into these processes is useful, 'architecture' issues are already discussed on a more substantive level among the G-20 and within the Financial Stability Forum (FSF).

I. Recommendations for Improving Coordination and Effectiveness

Many of the current initiatives in the APEC Finance Ministers' process and other fora are funded by international institutions and/or government organisations that play an intrinsic role. This funding has proved effective, and has generally enabled projects to get under way quickly. Governments may be more willing to provide assistance directly rather than through a central APEC fund as it gives them greater control and facilitates a quick response.

The Finance Ministers' process and other fora may benefit from increased APEC funding of appropriate technical assistance or from cooperative efforts with other international organisations. This would enable further detailed technical analysis of reforms, in addition to the substantial body of work already completed in the Finance Ministers' process.

To support economic growth in the region, there is also a strong need for on-going institutional capacity building. Beyond initial 'consciousness raising', there is a sense that APEC Finance Ministers and Leaders have made little progress in subsequent support for implementing reforms through the machinery of various types of Action Plans, or through ideas for peer review or more formal surveillance. On the other hand, there are some emerging opportunities to use APEC to initiate specialist fora in which there could be useful policy dialogue, peer support for reform and 'soft' peer review of progress with reform.

Given the core expertise of Finance Ministers and their leading role in this area, they should be consulted on proposals by other APEC fora for work relating to the development of stable, safe and efficient capital markets.

ANNEX 7

Report by Indonesia on Strengthening Economic Infrastructure

COORDINATION PAPER INDONESIA ON STRENGTHENING ECONOMIC INFRASTRUCTURE

Importance of Infrastructure Provision

APEC Leaders, Ministers, the ABAC, the SOM and fora have repeatedly emphasised the importance of the role infrastructure plays in our economies. They have emphasised the need to build up capacities in every aspect of infrastructure delivery from planning through investment and technologies. They have also called upon fora to address needs in relation to strengthening the framework and improving the environment for infrastructure investment; for promoting sustainable development; supporting the APEC food chain; fostering application of information technology, and strengthening energy and transportation networks. Infrastructure, particularly telecommunications, e-commerce, roads and transportation are also key elements of supporting the development of SMEs in developing economies and remote regions. Developing the framework and policies that will attract large scale, longer-term capital and channel savings towards infrastructure-related bonds is also an important potential support to the strengthening of capital markets, particularly for developing economy members.

Economies, public-private/business sector dialogues and APEC-focused presentations by the World Bank and ADB have highlighted the critical role infrastructure plays in economic growth, both generally and in preparing the way for developing economies (and less developed communities and under privileged groups in those economies) to share in the advantages of globalisation. The very temporary relief of the huge lags in basic infrastructure services (\$1.5-2.5 trillion in developing Asian member economies in 1995) due to the economic crisis has been rapidly eliminated in most sectors even in the more slowly recovering economies.

In the meantime the capability, confidence and momentum for private/business sector investment has been greatly reduced. The availability of public funding in the worst hit economies is also greatly reduced. It has become more important for developing economies, remote areas and SMEs in particular to gain access to efficient transport and achieve e-commerce readiness to remain, or become, competitive in domestic and world markets. This suggests an even greater need than that identified by Leaders in 1996 to develop more effective frameworks for infrastructure delivery and investment, to achieve creditworthiness to attract funding. It also increases the pressure on economies and benefits from cooperation to accelerate more efficient infrastructure provision to support economic revival and preparedness for globalisation, alongside developing the capacity and practices for sustainable development.

Current Activities

The status of APEC's infrastructure-related discussions and activities as they were understood to stand in November 1999 were reviewed. Direct discussions were held with Indonesian contacts on infrastructure-related activities of Economic and Technical Cooperation (ECOTECH). The Indonesian paper on the *Future of Infrastructure Cooperation in APEC* was circulated to Lead Shepherds of related groups in third quarter of 1999. Requests for responses were re-sent to the Lead Shepherds and infrastructure contacts in the fourth quarter of 1999. In January the Secretariat obtained an informal input in the form of an academic document prepared by the Australian PECC after consultation with Australian ABAC. This useful contribution suggested that infrastructure cooperation coverage be extended to sectors such as water and sanitation. As requested by the ECOTECH Sub-committee (ESC) in its first meeting of 2000, infrastructure contacts were asked to canvass views on the future of infrastructure with a view to discussing them at the Infrastructure Workshop (IWS) on 29 May 2000.

According to the *Matrix of Projects and Activities Related to ECOTECH Cooperation*, prepared by the SOM Secretariat, dated August 1998, there were respectively 26 and 34 projects directly and indirectly addressing this theme. A database search of APEC projects conducted in the third quarter of 1999 indicated 84 projects.

The modalities were, or had been:

- exchange of best practices (technical, policy, private investment, environmental management, sustainable development);
- developing or supporting centres of excellence, joint studies, surveys and data compilation;
- preparing and sponsoring of guidelines for policy/sector/private/business sector reform (e-commerce, economic regulation);
- devising and sponsorship of collaborative/complimentary reform/investment programmes (transport/cross-border roads/telecoms); and
- direct counselling/advisory, facilitating and networking support to/with private/business sector and governments to plan, guide and promote sustainable urban/rural/regional development, including the related soft and hard infrastructure.

The breakdown below provides greater detail:

| <i>Project Category</i> | Infr. (current at Aug 98) | |
|--|---------------------------|---|
| | Direct & indirect | With some APEC funding |
| | <u>No.</u> | <u>No.</u> * ² (to 3 rd qtr 1999) |
| • Technical | 2 | 6 |
| • Planning | 11 | 11 |
| • Framework development | 16 | 4 |
| • Knowledge sharing /ext'n | 16 | 40 |
| <i>Capacity Development:</i> | | |
| • Human resources | 4 | 16 |
| • Funding | 3 | 12 |
| • Cost recovery | 2 | * |
| • Risk management | 4 | * |
| • Domestic recovery capacity | 2 | * |
| • Competition, balance and synchronisation | 2 | 12 |
| • Not included in any category | 0 | 12 |

In (Aug) 1998 they were being conducted by CTI (1+3)³, EWG (8+9), TEL WG (5+26), TWG (1+0), TPT WG (6+0), HRD (0+2), EC/IWS (5+1), SEOM (0+4), ISTWG (0+4), PLG SME (0+1), FMWG (0+2), and on a self-funding basis only by APEC Study Centres (1+na).

Of these many were attributed in the *ECOTECH Matrix* to other themes, but had direct or close relationships to infrastructure and related aspects of urban development planning:

| | | |
|------|--|----|
| I. | Developing Human Capital | 5 |
| II. | Developing Sound, Safe and Efficient Capital Markets | 3 |
| III. | Strengthening Economic Infrastructure | 26 |

² Categories with no returns here have been addressed in self-funded projects

³ (Directly related to infrastructure+ indirectly related to infrastructure)

| | | |
|-----|--|----|
| IV. | Harnessing Technologies for the Future | 5 |
| V. | Promoting Environmentally Sound Growth | 12 |
| VI. | Strengthening the Dynamism of SMEs | 1 |

Those with some APEC funding to 3rd quarter 1999, were/are conducted by CTI ⁴(11), EWG (11), TEL WG (39), TRANSPORT WG (20), HRD (12), and EC/IWS (1)⁵.

Infrastructure areas covered include Energy, Transportation, Telecommunications and E-commerce, Urban and Rural (as integrated systems of the above with road, sanitation, waste management). A large number of these are cross-cutting. Collectively they address some aspects of each of the APEC priority themes. They frequently relate to developing areas of concern or initiative including:

- globalisation
- good governance (particularly public sector planning and infrastructure service provision)
- decentralisation
- community outreach and empowerment

There is potential for member economies to extend activities in these areas in a more systematic manner.

Strengths, weaknesses and potential for improvement

1. The APEC activity program is rich in content, useful to economies and, in the period up to the economic crisis, the immense breadth of activities was appropriate to the needs, rate of progress and capacities to conduct cooperation and assimilate the results of cooperation.

There are several areas in which the activities could be better coordinated, made more relevant to the post-crisis situation, and improve the balance between short-term concrete impacts (on economic recovery and competitiveness), medium-term impacts from capacity building and framework development, and long-term impacts on poverty eradication, reductions in disparities in levels of economic development, quality of life and sustainable development.

2. The *ECOTECH Matrix* and the search of the project data-base indicate frequent occurrences of closely related, complementary and overlapping activities without a clear indication of joint efforts or close consultation with fora. Although in many cases the project designers may have taken care not to repeat work carried out by others, there does not seem to have been a clear framework or sequence of planning relating 'upstream' activities and 'downstream' activities, particularly those of other fora. It may be that 'exploring sector specific aspects' of a cross-cutting subject area and vice versa provides sufficient rationale for separate action by fora, but it is unfortunate if the benefits of experience, work done and capacities already developed in other fora are not shared more methodically between/across fora. It would seem to be preferable for this to be done by strengthening the information sharing and direct consultation processes between fora and activity proposers/leaders, rather than attempting indirect micro management of this by the Clearing House/the ESC or at a higher level. However any contribution by the Secretariat and the ECOTECH Clearing House process to highlighting upstream-downstream and parallel or crosscutting links between activities would be a valuable facilitating measure.

3. In some cases the activities may include or impact on a large proportion of the target population (of say central policy makers, standards setting organisations etc.). However, the target populations are usually large compared to the scale of the activities

⁴ Shown as (total including self-funded/part APEC funded)

⁵ This, the RISE project, is the only IWS activity part funded from APEC to-date, all others have been and are self-funded.

actually carried out. The way in which the larger target group is to be reached through activities of APEC or, planned and resourced or likely activities of others is not apparent for most activities. This deficiency needs to be addressed if the momentum and value built up in APEC is going to continue through to large-scale impacts.

There are also potential benefits to be gained through more active links between the cross-cutting and networking approaches adopted within the APEC ECOTECH and:

- members' capacity building activities to facilitate IAP implementation; and
- members' and multilateral activities that address:
 - infrastructure policy/planning capacity building
 - sectoral reform and governance
 - poverty reduction/eradication
 - regional development
 - infrastructure development, public-private/business sector partnerships, risk management and creditworthiness support.

4. Another area of concern is in the imbalance between developing economies' capability to resource participation in fora and in designing, guiding and supporting activities. This appears to be partly related to public sector resource constraints during the period of recovery from the Asian Economic Crisis and differences in perspective in relation to the priority of activities that address long-term sustainable development versus those addressing trade/investment liberalisation and market entry, along with other more immediate domestic concerns.

Although more could be done to promote awareness of the need for infrastructure-related activities (such as reform, capacity building, providing frameworks for rapidly adopting environmentally sound/emerging technologies etc.), it is likely that economies are and will make these adjustments in their priorities with full cognisance of the relative short- and medium-term priorities. APEC fora could examine how they could more clearly relate their immediate and future agenda to synchronise with the time scale of member economies' underlying changes in development and economic reform priorities, further emphasising the anticipation of need, rather than the continuance of past successful streams of activity. The on-going activities to share insights into the options and priorities for reform, good governance, sector reform (and developing policy and frameworks to support rapid SME growth) and the E-commerce Readiness Initiative are good illustrations of such timely response to needs.

Means for better coordination

To Member Economies

- Considering the critical role of infrastructure on the wider economy and as well as social aspects of globalisation and developments; it would be useful to transparently relate APEC's infrastructure-related activities with needs perceived by the private/business sector and a wider community of stakeholders. The use of public-private/business sector dialogues has become more common and could be extended. They could include a wider range of participants and reflect on longer term economic and sustainable development issues as well as more clearly identifying areas of immediate need where APEC cooperation can modify private opinion or have direct concrete benefits.
- It would be useful to ask member economies to relate their proposals and implementation of APEC activities more transparently with their activities as recipients or otherwise in any multilateral and bilateral cooperation or internal reform agenda. Focussing solely on 'contained' APEC activities with clear APEC inputs and outputs would be counterproductive to obtaining the most effective leveraging of APEC's very limited financial and personnel availability (but most

valuable ‘networking’ element) with the much higher levels of resources and personnel commitment. For developing economies, the multilateral and bilateral units it is/would be relatively easier to lend their personnel, technical assistances and other support directly to, or to complement, APEC activities where the intended impacts, objectives and activity links are more transparent. These need not in any way detract from the peer-to-peer nature of APEC activities, and could greatly improve the combined impact of APEC and the major domestic bilateral and multilateral/regional initiatives. In some cases this will also assist economies to readily assign financial and manpower resources to their APEC activities.

- It would be useful for the continuity and directness of dialogue between the public sector, private/business sector and academics/centres of excellence insights on needs and solutions if, in addition to invitations to the dialogues they were to consider more frequent inclusion of members drawn from such backgrounds in their delegations, or to arrange for their acceptance as guests of fora. Members could consider this on an *ad-hoc* basis or for a given period in which particular areas of interest/expertise are particularly relevant to fora planning/guidance work programmes.

To the EWG, TPTWG, TELWG and IWS

- Although the work of these fora is in general complementary, Lead Shepherds may consider how they could more explicitly work with each other to support activities in cross-cutting areas, such as regulatory structures, finance, sustainable development and in the capacity building for managing such initiatives and cross-sectoral planning. It would be useful for the Lead Shepherds to advise the ESC from time to time how this is being achieved and also to arrange for such cross-cutting activities to be highlighted as resources that each of these and other fora activities might draw from.

To the ESC

- The ESC may consider how to address and encourage this aspect of sharing and building on prior/on-going/planned activity resources/results more generally. This might be considered as a positive extension of the ECOTECH Clearing House approach to facilitate cross-linkages and leveraging rather than say screening out overlaps. This emphasises efficiency in delivering comprehensive inputs that relate to the real world complexity of policy, reform and capacity building rather than a narrowing of focus to discrete activities that have insufficient links to complementary APEC activities or economies' internal agendas.
- The strengthening of linkages and leveraging between economic/development cooperation activities is stressed in the above suggestions. Improving relevance to private sector and other non-government views on needs has also been emphasised. The ESC may also examine how, in its guidelines, resourcing, and assessing the results of the ECOTECH Clearing House facility, it can improve relevance to economy-specific needs. We are very conscious of the variation in perspective between what is considered to be of general benefit to the region, and what is important to individual economies. Too strong an emphasis on finite initiatives of common benefit, based on external perceptions of priorities or usefulness can detract from the real relevance, domestic integration and impact of activities. This would be particularly so in economies that are under-represented in the Clearing House and budgetary activities of APEC. The ESC might also include this directly, in terms of specific relevance to economies' needs when reviewing Clearing-House resourcing, guidelines, activity results and recommendations.

To the ESC and Infrastructure-related Fora

- **Another aspect of ‘relevance’ of APEC work is in achieving a balance between activities with short-term concrete impacts and those activities that will take many years to show strong connections to public or private/business sector activity and have social/environmental and economic impacts. It would be useful for the ESC and other fora to develop clear positions on their expectations and management of shorter- and longer-term impact initiatives. It would also be useful for the ESC and fora to consider and more actively pursue a program of outreach, so that both the APEC community of participants and the wider community are more aware of the distinction, value, immediate and long-term priorities, and methodical progress towards shorter- and longer-term benefits.**

To the ESC and the IWS

- **A range of ‘soft’ and ‘hard’ infrastructure is of necessity being addressed in considering and pursuing sustainable regional/urban/rural development in past and current IWS activities. The IWS may consider whether it is desirable to consider this solely as part of an ‘integrative’ approach or whether to address sector-specific needs outside of Energy, Telecommunication and Transport. In particular the ESC could call on the IWS to assess the usefulness of addressing sector specifics of technology harnessing, sharing best practice, capacity building and community empowerment in relation to water management and use, sanitation, waste management, and land usage. It would be important to consider carefully the value added by APEC extending activities into the sector specifics in this area, in relation to both the integrative approach and activities by others which address sector specifics.**

Recommendations

1. **The ESC may consider to what extent interactions between cooperation, development and commercial investment streams, as demonstrated by the IWS RISE project further APEC goals and can be adopted within APEC activities more generally.**
2. **Fora addressing economic infrastructure should continue on the cross-cutting areas set out under the *Vancouver Framework for Enhanced Public-Private Partnerships in Infrastructure Development, Sustainable Cities Program of Action*, rural infrastructure development and the APEC Food System.**

In implementing the above initiatives, priority should be attached to the application of the *Framework for the Integration of Women* in economic infrastructure fields. Fora should also give priority to capacity building in support of the implementation of the voluntary principles endorsed by the *Vancouver Framework*.

3. **The IWS in consultation with relevant fora, should develop specific coordination mechanisms for:**
 - **improving the framework and capacities for infrastructure provision and private participation;**
 - **infrastructure and sustainable development in support of the APEC Food System;**
and
 - **infrastructure support to promote sustainable urban development.**

Overview

There is a trade-off between activities in infrastructure being ‘focussed’ and addressing a more ‘integrative’/‘holistic’ approach to infrastructure and its interaction with wider economic, social, and environmental development. There is also a trade-off between building up the near-term capacity to achieve mutual benefits from globalisation and widening the gap between more advanced communities and the less privileged both

domestically and regionally. The ESC and the infrastructure-related fora are well placed to play a pivotal role in making that trade-off clearer and facilitating economies' choices and outreach to a very concerned global community in this area. This would go along way to ensuring relevance to local immediate concerns as well as contributing, as APEC and the multilateral organisations are well placed to do, towards a wider community consensus on the priorities in, and means to address, immediate and interest group specific needs of great social concern,. It would also progress work towards a broad and long-term improvement in the quality of life to which infrastructure and integrative development approaches can make a fundamental contribution.

ANNEX 8

Overview by APEC Secretariat of APEC Activities in Sustainable Development

OVERVIEW BY APEC SECRETARIAT OF APEC ACTIVITIES IN SUSTAINABLE DEVELOPMENT FOR 2000

Introduction

The Environment Ministers' Meeting in Toronto, Canada, in 1997 further defined the ECOTECH priority theme of sustainable development by identifying the priority activities in the three areas: 1) clean technology/clean production, 2) sustainable cities, and 3) the sustainability of the marine environment. It also highlighted the issue of "the Impact of Economic Growth and Expanding Population on Food, Energy, and Environment (FEEEP)".

In November 1998, in Kuala Lumpur, Malaysia, APEC Leaders reiterated their commitment to advance sustainable development across the entire spectrum of the APEC work plan. Ministers and Leaders outlined the priorities on sustainable development in the following five areas:

1. **Cleaner Production;**
2. **Protection of the Marine Environment;**
3. **Sustainable Cities;**
4. **Food, energy, and the environment in relation to economic and population growth (FEEEP), and**
5. *The APEC Framework for Capacity Building Initiatives on Emergency Preparedness.*

Under the direction of the APEC Ministers in 1996, the Senior Officials tasked the APEC Secretariat to compile a yearly overview of all sustainable development work undertaken across all APEC fora annually since 1997. This overview updates the stocktaking exercise on sustainable development for 2000. It focuses on activities undertaken across all APEC fora this year.

There are 58 projects/activities, including APEC-funded projects, relating to sustainable development in 2000 (some do not have this theme as their primary objective in the APEC Database). Twenty-three projects are funded by APEC, and the other 35 are self-funded projects. Out of these 58 projects, 11 are related to Cleaner Production Initiatives, 9 are related to Sustainability of Marine Environment Initiatives, 4 can be partly classified as a Sustainable Cities activity, 10 are related to FEEEP, and another 10 are related to the Capacity Building Initiatives on Emergency Preparedness. The other 14 projects/activities touch on sustainable development, but they don't concentrate on it. The ISTWG is the most active group with more than 20 projects related to sustainable development this year, followed by the EWG and the MRCWG.

Classifying projects by type shows: 24 Studies, Research, Reports, and Publications; 16 Workshops, Symposia, and Seminars; 9 Databases and Networks; 7 Training and Technology Exchange activities; and the Policy Reform and Standards Harmonization has only one project, continuing from last year.

Business participation is encouraging. However, whether due to the fact that the quality of activities is not high enough or that it fails to show in the files, 27 projects have shown wide participation from the private/business sector either by speakers and participants, or assisting with proposals from preparation to implementation. In addition, 15 non-governmental organisations (NGOs), mainly from various academic entities or regional international institutions, have taken part in 15 projects.

I. SPECIFIC INITIATIVES RELATED TO SUSTAINABLE DEVELOPMENT

BY APEC FORA

The SOM Sub-committee for Economic and Cooperation (ESC)

The SOM Sub-committee for ECOTECH was established in 1998 to assist the SOM in coordinating and managing APEC's ECOTECH agenda. As sustainable development is one of the six priority ECOTECH themes and is a cross-cutting activity, responsibility for overseeing its implementation across APEC fora rests with the ESC. This year the ESC has been preparing a separate report to Ministers, which will include recommendations on improving the coordination and implementation, and on increasing public awareness of APEC's sustainable development activities.

The Committee on Trade and Investment (CTI) is responsible for coordinating APEC's work on liberalising trade and investment as outlined in the *Osaka Action Agenda*. The CTI and its sub-fora, where appropriate, help to integrate relevant initiatives of sustainable development into APEC's Trade and Investment Liberalisation Fund (TILF) activities.

One example of their activities is the project 'APEC Experts-Trainers-Executives Workshop on International Quality Assurance System' (IQAS). This project involved 1,000 experts, trainers, SME CEOs and media from 20 APEC member economies to enhance SME's competitiveness through integration of quality and environment management systems in the workplace.

Under the Early Voluntary Sectoral Liberalisation (EVSL) initiative, the sectoral work programs on ECOTECH, facilitation and other non-tariff elements of the initiatives are being implemented by the CTI. The 15 sectoral initiatives selected by Leaders in Vancouver contain 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 liberalisation in the environmental goods and services area will expand global trade by enhancing market access and removing impediments, thereby assisting 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 the ECOTECH focus on sustainable development measures such as resource conservation and management and human resource development support.

The Economic Committee (EC) was 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 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 a FEEEP symposium, which was held in Saskatoon, Canada, in September 1997.

Following the completion of its work in 1998, the committee's Task Force was instructed by the SOM to undertake "a program of sharing or disseminating results of work on the costs and benefits of trade liberalisation and agricultural reform policy". Following this instruction, the committee's plenary meetings are being used as an information sharing mechanism on studies of agricultural trade liberalisation and reform policies, by means of a regular agenda item. The meeting in Brunei in February was the first occasion for that purpose.

The Senior Economic and Environmental Officials' Group

The Senior Economic and Environmental Officials (SEOs) is an *ad hoc* group which only convenes before the meetings of the Ministers of the Environment. There have been three environment/sustainable development ministerial meetings: in 1994, 1996, and 1997. Following its commitment at the APEC Environment Ministers' Meeting in 1997, Canada held a workshop on 'Creating Sustainable Cities Through Urban Environmental Management' in March, 2000, in Bangkok, Thailand, to highlight the high priority of solid waste management issues for urban municipalities across the Asia Pacific.

The Agricultural Technical Cooperation Experts' Group (ATCEG)

Sustainable agriculture is one of the seven key areas of cooperation for the ATCEG. In July 1998 the ATCEG set up a sub-group on sustainable agriculture which had its first seminar-workshop on 12-14 June 1999, in the Philippines. The ATCEG organised a symposium on rural issues in the APEC region, which was held in March 2000, in Japan. One of the main topics was environmental issues and the importance of sustainable agriculture in revitalizing rural communities was discussed.

The Energy Working Group (EWG)

The EWG continues to implement its work program to mitigate the environmental impacts of energy production, delivery and use. It does 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 technology assimilation by making members more able to assess, operate and maintain new and renewable energy technologies.

- I. **During the 4th APEC Energy Ministers Meeting held in May 2000, Energy Ministers issued a Joint Statement on Clean Energy and Sustainable Development, which will guide the EWG in its work in this area for the coming years.**

As instructed by Energy Ministers, the EWG is undertaking a work program designed to apply to the APEC electricity sector predictable, transparent and consistent environmental policy practices. 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 their use of cleaner energy and help to reduce harmful emissions into the atmosphere. Finally the EWG is promoting the uptake of environmentally sound and efficient measures in mineral and energy exploration and development. The EWG has also undertaken a number of activities aimed at developing energy infrastructure in an environmentally sound manner.

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

The Fisheries Working Group (FWG)

The FWG is continuing to put into effect collaborative regional projects to deal with environmental and sustainable development issues. The projects include a regional research and development network focusing on the culture of live reef fishes, and a common approach to aquaculture education and training. These projects will work to meet the challenges of a growing aquaculture industry whilst maintaining environmental integrity and the long-term sustainability of aquaculture operations.

At the same time the FWG is trying to deal with cyanide fishing and other destructive fishing practices and will be working with the Marine Resources Conservation Working

Group on a multi-year program (which includes holding inter-sessional discussions focussing on coral reef issues)to deal with the problem.

The Human Resources and Development Working Group (HRDWG)

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

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

The Industrial Science and Technology Working Group (ISTWG)

In 2000 sustainable development continues to be a major element of the ISTWG projects. The ISTWG has established an Initiative Coordination Group in order to make it as easy as possible to implement the major Leaders' and Ministers' initiatives including the Cleaner Production Strategy. The role of the group is to implement the Leaders' and Ministers' initiatives in a balanced way for all elements across relevant APEC groups.

Through its 2000 Annual Action Plan, the ISTWG continues to focus on the objectives of the Cleaner Production Strategy. To this end, the ISTWG has extended the mandate of the Task Force on Cleaner Production until December 2000 and will review the Task Force mandate at its October meeting.

Infrastructure Workshop (IWS)

The IWS, which has been holding an annual Public-Private/Business Sector Dialogue since 1994, included the *Sustainable Cities Program of Action* as the subject of a special symposium of experts and policy makers on the fringes of the Dialogue in 1997.

In Kuala Lumpur, Malaysia, 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;
- creating an economically viable and environmentally sustainable energy infrastructure;
- creating infrastructure for Sustainable Cities; and
- developing 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 private/business sector with an important opportunity to address the role of infrastructure development in supporting economic recovery in the APEC region.

In 2000, as it did in 1999, the IWS is overseeing a major project, part funded from the APEC Central Funds, called 'Regional Integration for Sustainable Economies' (RISE) <http://www.riselink.net>. The project focuses attention on building rural commercial viability to create more efficient and productive agricultural trade. The APEC-funded component of the project has been completed and a report should be available by August 2000.

The Marine Resources Conservation Working Group (MRCWG)

The MRCWG is responsible for coordinating the implementation of the APEC Action Plan on Sustainability of the Marine Environment, which was approved by APEC Environment Ministers in June 1997.

During its 13th meeting held in Lima, Peru, in June 2000, the MRCWG discussed a suggested approach to ensure a more comprehensive implementation of the action plan. This included

- establishing a small group of voluntary member economies to undertake a review and analysis of the performance measures,
- developing concrete criteria that can be used to measure progress, and
- drafting a set of project outlines that cover the full range of activities needed to fully implement the action plan.

While the draft was endorsed by the meeting, it will be reviewed over the next year with the objective of completing the review of the action plan and preparation of project outlines before the next MRCWG meeting in 2001. One of the elements of the proposal is to further improve links and coordination with other APEC fora.

Since the last report, the MRCWG has organised a number of activities related to the sustainability of the marine environment, including 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; APEC Marine Environmental Training and Education Program and the Ocean Model and Information System for the APEC Region.

The MRCWG held two events during the reporting period to explore how to include the private/business sector in its process. Participants at these events discussed the following six aspects of developing a sustainable marine environment:

1. the role and function of the private/business sector;
2. marine resource conservation and community participation;
3. coastal recreation and marine ecotourism;
4. marine aquaculture;
5. coastal engineering and pollution control; and
6. ocean industries and network.

A set of recommendations was presented and endorsed by the 13th MRCWG meeting. Member economies were encouraged to consider taking responsibility for undertaking activities outlined in specific aspects.

During its 13th meeting, the MRCWG also considered a draft strategy for a Virtual MRC/FWG Task Force on Destructive Fishing Practices and agreed to continue to develop it out of session. The meeting also endorsed a joint MRC/FWG project on the Management of Marine Algal Toxins in APEC Seafood Products. It was confirmed that the next joint session of MRC/FWG would be held in 2001 to further improve coordination between the two groups.

The Ad Hoc Policy Level Group on Small and Medium Enterprises (PLGSME)

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

The Telecommunications Working Group (TELWG)

There are two activities of the Telecommunications Working Group in 2000, which relate to the Sustainable Cities Initiative. They are APII Test-bed Project and the Telework Manual. It is expected that through these particular projects, APEC economies will be better equipped to protect their telecommunications networks which are themselves critical resources for disaster recovery planning and practice.

The Transportation Working Group (TPTWG)

The TPTWG includes Steering Committees on more competitive transportation industry, safe and environment-friendly transportation systems, and human resources development. The Safety and Environment Steering Committee oversees specific projects and activities pursuing the overall safety and environment-related goals agreed upon by APEC Transport Ministers in 1995 and 1997. In 1999 and 2000, the main focus of the TPTWG's work on sustainable development has been the development of a "best practices" manual for addressing urban transportation problems (intended to be published in 2000), and work on dredging as an environmental consideration in port management. Previous TPTWG work produced an inventory of maritime oil spill preparedness arrangements in the region.

The Tourism Working Group (TWG)

The First APEC Tourism Ministerial Meeting was held in Seoul, Korea, on 4-7 July 2000. Ministers endorsed the *Seoul Declaration on an APEC Tourism Charter: A Ministerial Statement of Purposes and Intent*. Tourism ministers established four policy goals for economies to foster the development of tourism and enhance its contribution in the APEC Region. Policy goal number three is titled "Sustainably Managed Tourism Outcomes and Impacts." In particular, tourism ministers will seek to achieve this goal by pursuing policies that:

- demonstrate an appreciation and understanding of our natural environment and protect that environment;
- foster ecologically sustainable development opportunities across the tourism sector, (particularly for small and medium enterprises, employment) and provide for open and sustainable tourism markets;
- protect the social integrity of host communities with particular attention to gender implications in the management and development of tourism;
- recognise, respect and preserve local and indigenous cultures together with our natural and national cultural heritage; and,
- enhance capability building in the management and development of tourism.

Trade Promotion Working Group (TPWG)

The TPWG upholds sustainable development through its projects. In November 1998, in Kuala Lumpur, Malaysia, the third APEC International Trade Fair was held with the theme "Enhancing Global Competitiveness through Technology and Human Resource Development". 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 web site of the APEC TPWG, APECNet, enables businesses to search for business opportunities or post inquiries (which may also cover energy, chemicals and engineering/technological services).

The TPWG is planning or proposing seminars on Product Packaging and Product Design to be held in October 2000 and May 2001 respectively. One of the major focusses in

these seminars will be environmental protection considerations in packaging and design.

II. SUSTAINABLE DEVELOPMENT BY CATEGORIES

1. Study/Research/Report/Publication

- **“Regional Integration for Sustainable Economies” (RISE) – to bring together decision makers and experts from the public and private/business sectors, to identify promising new financing strategies for infrastructure development in rural areas. (IWS)**
- **“Environmentally Sound Energy Infrastructure – Phase II.” - to promote good practice in environmental policy to provide private/business-sector developers with predictable conditions to allow flexibility in meeting environmental requirements most cost effectively. (EWG)**
- **“Economy - Level Renewable Energy Roadmap” – to compile important information to identify and implement successful renewable energy projects. (EWG)**
- **“A study of CO₂ Reduction options in the APEC Region” – to survey the current status of the approaches taken by member APEC economies to reduce CO₂ emissions in the APEC region. The results of the survey will be basis of future studies that will examine individual economies and suggest solutions to further reduce CO₂ emissions. (EWG)**
- **“Colloquium on the technical issues of minimum energy performance standards” – to identify, assess, and record the major technical issues in designing a minimum energy performance standards program. (EWG)**
- **“Collaborative APEC Grouper Research and Development Network” – to develop a regional collaborative approach towards research into the culture of live reef fishes. (FWG)**
- **“Identify IST Needs and Sources for Enhancing Industries' 'Greener Business' Capability” - to help APEC economies to adhere to eco-trade restrictions and to create a win-win situation in terms of economic development and environmental protection. (ISTWG)**
- **“Development of Utilisation Technologies for Waste Water for Production of Valued Substances” – to assist APEC economies to develop profitable use of wastewater for production for commercially valuable substances. (ISTWG)**
- **“Emerging Infectious Diseases: Influenza Virus Surveillance Focused on the Rapid Identification of Newly Emerging Viruses” - to help APEC economies to respond to new influenza virus. (ISTWG)**
- **“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 technologies likely to yield the greatest economic and/or social benefits. (ISTWG)**
- **“Study on Production of Valuable Agro-Chemicals from Unused Biomass by Cascade Utilization” – to study 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 the effect of earthquakes. (ISTWG)**
- **“Development of Biodegradable Plastics” – to promote research on biodegradable plastics made from tropical farm products. (ISTWG)**

- **‘Health Assessment and Prevention Related to Forest Fires: Population Exposures and Associated Health Impacts’** – to conduct a comprehensive study of health effects in the population affected by the 1997 Asian fires. (ISTWG)
- **“Acid Rain Monitoring System”** – to promote comprehensive research and develop an on-site advanced acid rain monitoring system. (ISTWG)
- **“Adoption and Development of a Multilingual Environmental Thesaurus System”** – to develop a standardised reference language for environmental terminology. (ISTWG)
- **“Assessment of Environmental Safety of Aquaculture Farms using Biochemical Indicator of Distress”** – aimed at establishing an effective assessment technique for safety of finfish aquaculture sites, supporting the management of coastal zones, through new tools to monitor contaminant exposure. (MRCWG)
- **“Development and Validation of Phycotoxin Analytical Methods, Standards and Reference Materials for Seafood Product Certification and Safety (Year 1 of a 3 year project)”**-- to make it easier to trade seafood products between APEC economies and to protect public health. (MRCWG)
- **“Management of Red Tide and Harmful Algal Blooms in the APEC Region”** – to help each APEC economy develop the scientific and regulatory infrastructure to certify that its seafood is safe with respect to algal toxins, using procedures and standards that are acceptable to all economies in the region. (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 in order to implement telework successfully. (TELWG)
- **“The Role of Petroleum Based and Alternative 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. (EWG)
- **“APEC Joint Project for the Recovery and Utilisation 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. (EWG)
- **“Collaborative Aquaculture Education Program”** – to adequately train technicians and middle-level managers at farm and government level in aquaculture 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:
 - define and describe the role played by women and the opportunities available to women in aquaculture;
 - look for a method to develop education, training and extension strategies to raise the education levels of women to allow them to take opportunities in aquaculture as they arise; and
 - propose a strategy that will allow the APEC Fisheries Working Group to decide how best to promote and contribute to the participation of women in aquaculture. (FWG)
- **“Survey of Environmental Markets in APEC”** – to examine the environmental industry in APEC member economies. (CTI)

2. Workshop/Symposium/Forum

- **Symposium on ‘Rural Issues in the APEC Region’, Japan, March 2000** – one of the main topics discussed related to environment and the importance of sustainable agriculture in revitalizing rural communities (ATC)

- **“Green Buildings – investing in our future – a show case workshop” – to promote environmentally sound, private/business sector investment in the commercial buildings sector. (EWG)**
- **“Workshop on Energy-Efficiency Retrofitting of Commercial Buildings” - to provide a forum for government policy makers, energy service companies and firms in manufacturing energy-efficient components for buildings to share information related to retrofitting building-commercial and government, public and private. (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 these, and, where possible, to propose ways of eliminating them. (EWG)**
- **“The Role of Petroleum-based and Alternative Transport (coal and natural gas derived) Fuels in Reducing Emissions in the APEC Region” – to address the fuel efficiency of the current stock of vehicles and assess opportunities for increased fuel efficiency. (EWG)**
- **“Workshop on Setting Up and Running an Energy Performance Testing Laboratory” – the purpose of the workshop is for participants to understand the practicalities and problems of setting up and running an energy performance testing laboratory, to define and address technical issues relating to harmonisation. (EWG)**
- **“NGO Conference on Enhancing the Contribution of S, E & T to Sustainable Economic Growth” – to establish networks and partnerships at all levels to enhance innovation and to systematically engage NGOs and the private/business sector in S & T policy discussion. (ISTWG)**
- **“Enhanced Implementation of ISO 14001 Environmental Management System for APEC Economies” – to help small and medium enterprises to enhance the capabilities to implement ISO 14001. (ISTWG)**
- **“APEC Cooperation for Earthquake Simulation” – to develop a numerical simulation model for earthquake generation and earthquake cycles in the Asia-Pacific region. (ISTWG)**
- **“APEC Virtual Center for Environmental Technology Exchange” – to establish the APEC virtual center in each economy for environmental technology. (ISTWG)**
- **“APEC Environmental Technology Verification” – to develop key criteria and methods for comparative analysis of environmental technology in the APEC region. (ISTWG)**
- **“APEC Conference on Sustainability of the Marine Environment: What Can the Private/Business Sector Do?” – to identify how the MRCWG can involve the private/business sector in ocean industries, and how the activities can benefit the ocean industries to achieve the sustainability of the marine environment in the APEC region. (MRCWG)**
- **“APEC Experts-‘Trainers’-Executives’ Workshop on International Quality Assurance Systems (IQAS)” – to contribute to greater competitiveness of small and medium enterprises (SME) through capacity-building of human resources managers, business professionals, and trainers in integrating quality and environment management systems in the workplace. (CTI)**
- **“APEC Workshop on Animal Health Risk Analysis” – to enhance the knowledge of member economies of the process of developing health import risk analyses and to include R&D activities issues referred from FEEEP. (ATC)**
- **“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)**

- “Tourism and the Environment” – to establish a few, basic principles and practices required for sustainable tourism in APEC Economies. (TWG)

3. Database/Network

- “International Cooperative for Cleaner Production” – to search for all cleaner production (CP) databases in government, industry and NGO sectors, and make available to all users. (ISTWG)
- “Emerging Infectious Disease; Enhancing E-coli 0157 surveillance” – to assist APEC economies to address a key pathogen related to food safety. (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)
- “Short-term Climate Forecasts and their Application for Social and Economic Development” – on line database with local, regional, global mapping. (ISTWG)
- “Ocean Model and Information System for APEC Region (Year 4)” – 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)
- “APII Test-bed Project” – to build effective APII and enhance interconnectivity and interoperability between test-beds. (TELWG)
- “Sustainable Agriculture and Related Environmental Issues” – aims at establishing APEC information network to develop practices which will promote sustainable agriculture. (ATC)
- “Conservation of Plant and Animal Genetic Resources” – to identify APEC-wide needs for genetic resource management based on the genetic resource database of individual member economies; aiming at establishing an APEC information network for the exchange of genetic resource related information; and developing APEC networks and channels for exchange of genetic resource materials. (ATC)
- “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 Harmonisation

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

5. Training/Technology Exchange

- “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 for various environmental phenomena including setting up seismic network. (ISTWG)
- “Emerging Infectious Diseases (EID): Infectious Disease, Surveillance, Outbreak Response, Research and Training” –to assess the telecommunications needs of APEC economies necessary to support EID surveillance and response; to identify an organizational mechanism to effectively coordinate APEC’s EID activities in Asia; to foster enhancement of EID surveillance through coordination of protocols, standards and technical methods; to document and improve regional diagnostic lab capabilities; to document and improve regional capabilities for response; to improve

relevant regional telecommunications, information management and information dissemination capabilities; and to improve research and training. (ISTWG)

- **“EID: 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)**
- **“Training on Cleaner Production for the Textile Dyeing and Finishing Industry in APEC Member Economies” – to offer comprehensive training to the textile dyeing industry and finishing industry on various cleaner production technologies. (ISTWG)**
- **“Establishment of an APEC Marine Environment Training & Education Center (AMETEC)” – to support scientists and government staff by providing adequate training and technical resources to protect the marine environment through AMETEC. (MRCWG)**
- **“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)**

ANNEX 9

Report by Mexico on Promoting Environmentally Sustainable Growth

COORDINATION PAPER BY MEXICO ON PROMOTING ENVIRONMENTALLY SUSTAINABLE GROWTH

Summary

Since 1996, the importance of Economic and Technical Cooperation (ECOTECH) to achieve environmentally sustainable growth in the Asia-Pacific region has been recognised and been reflected with an increasing diversity of initiatives. Because of its cross-cutting nature, it needs to be addressed within the context of an integrated framework that attends the most critical factors and process of sustainability.

The purpose of this coordination paper is to propose analytical inputs to harmonise several points of view and concerns in order to coordinate cooperation to ensure the sustainability of the region's economic prosperity. The suggestions provided are related to expansion of principles and guidelines on, and relevant advances in the innovative integral approaches applied to relevant issues on sustainable development among the different APEC working groups, committees and member economies. This coordination will give continuity to activities related to sustainable cities and inter-linked actions on integrated coastal management, tourism, infrastructure, cleaner production, energy, and small and medium enterprises. This paper also looks forward to promoting demonstrative pilot cooperation projects that share integrated approaches to support local planning and management while recognising the different development conditions of cities and considering long-term agendas. Finally, sustainable development is a process that is perfectible through defined indicators that provide a basis for assessing future progress.

Sustainable Development

Since 1996, the importance of Economic and Technical Cooperation to achieve environmental sustainable growth in the Asia-Pacific region has been recognised as a priority issue. The evolution of this process in the last four years has been reflected in an increasing diversity of initiatives that attend environmental sustainability.

Nevertheless, in 1998 the overview of activities on sustainable development showed that the problem of integrating environmental concerns into ongoing APEC activities was related to a lack of focussed, consolidated and coordinated work on sustainable development. Gaps are difficult to identify under these conditions, given the diversity of priority areas and the varied nature of projects.

The 1999 overview reiterated that coordinated work at a more senior level was required to ensure results, address gaps and enhance further consolidated efforts in order to develop coordinated work and encourage further participation of the private/business sector.

This year, the overview shows that advances on each priority theme are different and that trends towards the dispersion of initiatives and the lack of continuity still exist. Because of its cross-cutting nature, the environmental issue needs to be addressed within the context of a more comprehensive and integrated framework so as to better coordinate individual actions towards the common objective of developing sustainable growth in the Asia-Pacific region. This is particularly relevant for those economies in which APEC fora represent a little-consolidated field as it will enable them to take advantage of the opportunities that ECOTECH offers to promote environmentally sustainable development in the Asia-Pacific region.

The purpose of this coordination paper is to share some ideas that could enhance cooperation in environmental issues to ensure the sustainability of the region's economic prosperity. Therefore it is appropriate to begin with a short analysis of the trends that guide APEC's activities on sustainable development.

The *Manila Declaration* stated three elements on Sustainable Development:

- To put the interrelated wide-ranging issues associated with the impact of expanding population and rapid economic growth on demand for food and energy and the pressures on the environment, on a long term agenda and to initiate joint actions ensuring the sustainability of the region's economic prosperity;
- The efforts to attain sustainable growth and development must recognise the diverse nature of APEC; and
- Free trade and investment, the expansion and acceleration of trade and investment facilitation programs and intensified development cooperation are essential to attain sustainable growth, equitable development and national stability.

The guidelines to promote Sustainable Development consider:

- The promotion of public-private/business sector partnerships;
- The ability to add value to ongoing activities and avoid duplications;
- The need to recognise the diverse stages of economic development of APEC economies;
- Supporting local empowerment;
- Sharing of innovative approaches such as reforms in economic wide policies, the adoption of market-based instruments and environment and natural resources accounting;
- Enhancing capacity through human resource development, information sharing and technology exchange; and
- The importance of outcome driven approaches and the benefits of incentives-based approaches.

The APEC framework for sustainable development on priority issues takes into account four basic considerations:

- To enhance mechanisms for sharing knowledge and innovative practices;
- To create more effective linkages and to transform sustainability concepts into meaningful practices;
- To integrate economic social and environmental agendas for sustainable development into all activities and decision making within APEC; and
- To implement global commitments in order to achieve pragmatic results.

In this context, the increasing environmental degradation of the region is conceived as a phenomenon in which air, water and soil pollution, the loss of agricultural and forestry productive lands and wildlife habitats, inefficient and exhaustion of natural resources, climate change or species extinction, are issues which do not seem to find solutions and which express themselves simultaneously with other problems such as social exclusion, inflation, unemployment, and the need for housing and transportation.

Sustainable growth starts from acknowledging the functions that the environment and natural resources perform as the basis of the economic process. Therefore it is imperative to develop environmentally healthy production and consumption processes following an appraisal of natural and cultural diversity in order to achieve a greater economic competitiveness built upon environmental excellence and an improvement in the quality of life. The promotion of environmentally sustainable growth has to be addressed in the wider context of sustainable development. It also has to be supported with the full understanding of the various linkages between economic activities and the social and physical environment, as well as with the institutional capacity to apply this knowledge effectively to improve society's well-being.

Sustainable development involves a revaluation of territories in which economic activities are taking place, in order to support the economic and social processes of development. From this perspective, the liberalisation of trade and investment represents a competitive advantage for some while others worry about growing inequity and its impact on the environment. The distinction between the concepts of sustainable growth and sustainable development in the APEC region and its member economies represent the main challenge that ECOTECH must face in the region. It is imperative to transform the impulses of economic growth into regional development projects while being respectful of the integrity of those natural and social processes which are indispensable in providing certainty to investment and trade within a regional coordination framework.

The reconsideration of the framework from a wider systemic approach could enlighten the complexity of interdependence between economic, social and environmental activities to identify the most critical factors and processes. This allows the possibility of identifying new cooperation opportunities among member economies and encouraging demonstrative projects.

Therefore, it is necessary to explore the linkages between sustainable cities, infrastructure, integrated coastal, management and tourism. The expansion of tourism activities has caused environmental problems related to inappropriate urban planning and the lack of infrastructure investments and this issue must be addressed because tourism's future depends on its capacity to maintain the quality of the environment and the social resource base. In order to increase competitiveness and environmental conservation of natural resources, as well as economic benefits, an integrated agenda in coastal cities is crucial.

The strengthening of micro and small rural enterprises for the sustainability of megacities and the diversification of the productive process is necessary to improve the profitability of natural protected areas and the involvement of landowners in economic activities encouraging conservation of rural areas. In this context, it is important to emphasise the privileged position that many member economies have in fields such as bio-diversity. The Framework of the Economic and Technical Cooperation of APEC presents the challenge of grasping the economic benefits derived from the use of those resources, as well as in scientific terms of knowledge and technological development, commercialisation and its intimate relation to cultural heritage. Also, the market of projects that contribute to mitigating or reducing the emissions of 'greenhouse gases' through improved energy efficiency and carbon sequestration, constitute another potential field of economic opportunities for Pacific Basin countries. Therefore, common strategies should be developed to offer competitive prices and efficient mechanisms to grasp the economic value of global environmental services. The commercialization of these projects could bring economic benefits increasing energy efficiency and the conservation and management of large forest areas as CO₂ sinks.

Recommendations:

In the last four years, efforts have been directed to effectively apply an analytical understanding of environmental economic issues and establish inter-linkages among them. These advances must be carried on and become more widespread to ensure future capacity to manage economic growth on a sustainable basis and build partnerships to generate support for sustainability.

The expansion of principles, guidelines and relevant advances on innovative integral approaches applied to principal issues of sustainable development, must be a priority for APEC working groups and committees and within each economy.

ECOTECH must harmonise points of view and concerns between committees, working groups, considering the heterogeneity of development in the Asia-Pacific region. The experiences of the Human Resources Development Working Group and the Senior Economic and Environmental Officials' (SOEs) *Ad Hoc* Group are crucial.

The sustainable cities strategy launched voluntarily by individual member economies, needs to be promoted in each economy and through inter-institutional local agreements between urban and environmental sectors. The aforementioned is necessary to give continuity to activities and to advance in inter-linked actions integrating issues related to coastal management, tourism, infrastructure, cleaner production, energy, and small and medium enterprises.

It is essential to promote demonstrative pilot cooperation projects that arise and share integrated approaches built on existing initiatives. This could mitigate several common barriers related to the effective use of knowledge and common indicators, as well as the assessment of different instruments, the integration of public and private/business sector agendas, and among different government levels or social participation. The Quest tool is an innovative initiative that responds to this approach, and has been applied in several cities in the Asia-Pacific region.

Finally, sustainable development is a process that is perfectible through defined indicators that provide a basis for assessing future progress.

ANNEX 10

Report by APEC fora on the implementation of Part II of the Osaka Action Agenda

**REVIEW OF PART II OF THE OSAKA ACTION AGENDA
JOINT ACTIVITIES/DIALOGUE SINCE 1996**

1. Human Resources Development (HRD)

| <i>Joint Activities/Dialogues (as stated in OAA)</i> | <i>Joint Activities/Dialogues Added Since 1996</i> | <i>Joint Activities/Dialogues Achieved/Completed</i> | <i>Assessment of their effectiveness in attaining sustainable growth and equitable development</i> | <i>Additional steps needed to implement the Joint Activities/Dialogues</i> |
|--|--|--|---|---|
| a. Implement the APEC Business Volunteer Program, a mechanism for facilitating the voluntary dispatch of business experts among business/private/business entities in the region in order to exchange and transfer managerial and technical skills. | | From 1998 to 2000, four out of ten applications had resulted in actual expert dispatches and three are pending. | After the working mechanism was completed, the BVP Coordinating Office began operations in 1998. Encountered difficulties in getting active involvement of other economies and in coordinating applications. Three requests were not fulfilled due to non-availability of experts and budgetary constraints of the applicant company. | Promotional programs have been conducted to muster support from economies. A structural review is being undertaken to increase members' participation and to improve coordination of the programme. |
| b. Implement the APEC Leaders' Education Initiative, a set of measures to enhance regional cooperation in higher education and to study key regional economic issues, including the establishment of an APEC Study Center in each APEC economy and the promotion of collaborative research on APEC-related issues. | To hold annual meetings of the APEC Study Centers (ASC) Consortium. Asia Pacific International Assessment Network (APIAN) to conduct regular independent assessments of key APEC activities in TILF /ECOTECH areas. To study, as an Interdisciplinary Network of Research Institutions, issues relating to food, energy, environment and population. Establishment and implementation of APEC Scholars Program. | ASC consortium meetings have been held annually. Assessment to be carried out by experts teams established primarily from within the ASC consortium. | ASCs have been established/designated in all economies. ASC consortium conference has become established as the principal international forum for research and analysis undertaken within the consortium. | APIAN's first set of assessments is targeted for release at Leaders' Meeting in Brunei Darussalam in November 2000. |
| c. Conduct studies on teacher development practices, on science education programs, and on uses of technology in education, in order to promote the provision of high quality instruction in basic education. | Collaborative research on lifelong learning education systems. Sharing of best practices on use of IT in education, sound management practices. | A conference was held in 1997 on Lifelong Learning and an inventory of a network of people, organisations and a collection of papers related to lifelong learning was published. | Resulting publication is available on the Internet at www.apec-hurdit.org . | |

| <i>Joint Activities/Dialogues (as stated in OAA)</i> | <i>Joint Added Since 1996 Activities/Dialogues</i> | <i>Joint Activities/Dialogues Achieved/Completed</i> | <i>Assessment of their effectiveness in attaining sustainable growth and equitable development</i> | <i>Additional steps needed to implement the Joint Activities/Dialogues</i> |
|---|--|--|---|--|
| d. Conduct training of executives, managers, engineers, officials and other workers to increase the supply and enhance the quality of these people. | Develop vocational and technical skills training, professional/executive development for management of change in response to challenges of the new workplace in the 21 st century. | More than 150 vocational training instructors have completed this course at Seoul Institute for Vocational training in Advanced Technology (1998-2000). Symposium on IT Enablement for Trainers in the New Millennium held in May 2000 in Brunei. | Good response from members, covering several trades such as computer-aided designs (CAD), industrial installation, electronics and automobile maintenance. Received good response with 700+ participants. Recommendations on adapting HRD to suit the pace of technical innovation were made. | |
| e. Accelerate cooperation relating to trade and investment liberalisation and facilitation by means such as holding training courses on standards and conformance and intellectual property rights in order to ensure the availability of the experts required to maintain effective systems in these fields. | Enhance supervision of financial markets, including through training of supervisors and regulators. | Completed workshops (jointly with SCSC) on International Quality Assurance Systems. | | Ongoing 1998 project to develop standards and related database Vocational Teacher Standards and the Formulating Method. Ongoing project to establish Register of APEC Engineers. |
| f. Facilitate the mobility of qualified persons in the region through bilateral agreements between interested APEC economies for the mutual recognition of professional qualifications. | Accelerate and expand mutual recognition of skills qualification, including for SMEs. | University Mobility in Asia and the Pacific (UMAP) is an association of regional government, non-government and/or university representatives from the higher education sector and aims to enhance cooperation, exchanges through increased mobility of students/staff. Pilot UMAP Credit Transfer Scheme (UCTS) is being implemented. | There is good response from members: currently contacts for pilot UCTS have been established in 12 economies. UMAP meetings will be held in Korea this year and in Australia for 2001 and 2002. | |
| g. Conduct regular dialogue on the HRD policies and HRD situation of each APEC economy, establishing performance indicators such as adult literacy levels and levels of enrollment in elementary and secondary education as a basis for conferral. | Facilitate and coordinate ongoing exchange of information on labour market systems and social safety net issues for dissemination to member economies. Enhance cooperation involving labour, business and civil society. Develop labour market information (LMI) database. | Social Safety Programs in Selected Southeast Asian Economies in 1997-2000 will review (with case studies) social safety net programs introduced in 1997-2000 in selected APEC economies so as to identify effective practices in poverty alleviation. Forum on labour-management-government cooperation held. LMI database maintained at http://apeclmi.anu.edu.au | Results of colloquium on Successful HRD Practices and compilation of case studies presented to HRD Ministers in 1999. Delegates found it useful to share experiences among government, business and labour participants and gave new insight to problems faced in different economies. LMI database has undergone some improvements such as new design, structure and functions. | Social Safety Program is ongoing. A follow-up forum will be held in 2001 (seeking 2001 APEC funding) to further seek productive collaborative practices. Review of LMI database's effectiveness and sustainability will be undertaken. |

2. Industrial Science and Technology (IS&T)

| <i>Joint Activities/Dialogues (as stated in OAA)</i> | <i>Joint Added Since 1996</i> <i>Activities/Dialogues</i> | <i>Joint Activities/Dialogues Achieved/Completed</i> | <i>Assessment of their effectiveness in attaining sustainable growth and equitable development</i> | <i>Additional steps needed to implement the Joint Activities/Dialogues</i> |
|---|--|--|--|---|
| <p>a. Establish APEC Joint Research Promotion Guidelines on pre-competitive industrial science and technology which set out common procedures for project identification, cost allocation, protection of intellectual property rights and other aspects, aiming to complete these by the end of 1996.</p> | | | | |
| <p>b. Launch joint research projects in and after 1996, starting with projects related to disaster prevention and the environment.</p> | <p>APEC Cooperation for Earthquake Simulation (ACES, IST 26/1999S) commenced in 1998 and involves the networking of earthquake research facilities in Australia, China, Japan and the US.</p> <p>APEC Virtual Center for Environmental Technology Exchange (IST 25/1999S) commenced in 1997 and involves the establishment of websites in participating economies and the running of workshops. Australia has been prominent in this project by assisting China with the establishment of its website.</p> | | <p>Work has been very much at the scientific level in ACES, with no specific benefits being realised yet. Nonetheless, any progress in the more accurate prediction and modelling of earthquakes must clearly contribute to economic and social wellbeing.</p> <p>Although Japan is the lead economy for the Virtual Centre project, as an active member and host of the 1999 Workshop, Australia notes that the project contributes to sustainable growth and wellbeing by improving the flow of information on environmental technologies and by providing training.</p> | <p>ACES is funded through a Core Fund to which the four founding economies (Australia, China, Japan and the US) have committed to contribute some US\$20k per annum. However, ACES has encountered some difficulties in obtaining these funds from each contributor due to both the availability of funds within each economy and the different domestic mechanisms through which the funds can be accessed. As a result, the ACES Executive Director, in the ACES progress report submitted to the 18th IST WG Meeting in March 2000, suggested a need for the establishment of a unified funding mechanism.</p> <p>The APEC Virtual Centre for Environmental Technology Exchange noted at its 1999 workshop that there is a need for a multilingual Environmental Technologies Thesaurus to ensure adequate information capture across languages (IST 31/1999S Adoption and Development of A Multilingual Environmental Thesaurus System refers)</p> |

| <i>Joint Activities/Dialogues (as stated in OAA)</i> | <i>Joint Activities/Dialogues Added Since 1996</i> | <i>Joint Activities/Dialogues Achieved/Completed</i> | <i>Assessment of their effectiveness in attaining sustainable growth and equitable development</i> | <i>Additional steps needed to implement the Joint Activities/Dialogues</i> |
|---|---|---|--|--|
| | <p>A project, <i>Preliminary action for the Establishment of APEC Climate Network (APCN)</i>, was proposed at the 3rd APEC Ministers' Conference on Regional Science and Technology Cooperation in 1998 in Mexico, and approved in 1999.</p> | <p>In progress</p> <p>Compose an ad-hoc APCN working group (August 2000)</p> <p>First APCN working group meeting (October 2000)</p> <p>Activity of the APCN working group (November 2000 - April 2001)</p> <p>Second APCN working group meeting (May 2001)</p> <p>International Scientific symposium (July 2001)</p> <p>APCN steering committee meeting (July 2001)</p> <p>Beginning to exchange climate information through the APCN network among the APEC member economies (from January 2002)</p> | <p>The results of the project will benefit both public and private/business meteorological and climatological institutions in APEC region ultimately by means of the exchange of real-time climate information via APCN with a view to increasing the APEC value by helping APEC member economies improve monitoring of the climate system to lessen the impact of natural disasters</p> | <p>N/A</p> |
| <p>c. Seek to expand and develop researcher exchange schemes and engineer training schemes.</p> | <p>Australia has participated in the Post-doctoral Fellowship Program component (for example, one Australian awardee in Y2000) and the R&D Management Training Program component (3 Australian lecturers in Y2000) of the APEC Science and Technology Network (ASTN, IST 06/1999S) project, which is led by Korea and was commenced in 1996 in response to a call from the 2nd S&T Ministers Conference.</p> | | | |

| <i>Joint Activities/Dialogues (as stated in OAA)</i> | <i>Joint Activities/Dialogues Added Since 1996</i> | <i>Joint Activities/Dialogues Achieved/Completed</i> | <i>Assessment of their effectiveness in attaining sustainable growth and equitable development</i> | <i>Additional steps needed to implement the Joint Activities/Dialogues</i> |
|--|--|---|---|--|
| | A project, <i>APEC Science and Technology Network (ASTN)</i> , was proposed and approved at the 2 nd APEC Ministers' Conference on Regional Science and Technology Cooperation in 1996 in Seoul. It is composed of two parts: APEC R&D Management Training and APEC Post-doctoral Fellowship Program. | In progress as an ongoing multi-year project The results of the 1999 project are as follows: Eighteen researchers and government officials from nine member economies participated in the APEC R&D Management Training Program. Eleven candidates from five member economies took part in the Post-doctoral Fellowship Program | ASTN is aiming at contributing to narrowing the development gap between APEC member economies through facilitating the exchange of information on and experiences in R&D management, and through the exchange of scientists and engineers in the Post-doctoral Fellowship Program. | N/A |
| d. Hold the APEC Technomart, a technology fair, to provide the private/business sector with better access to technological information and expertise. | | Technomart I, II, III were held in Korea, Chinese Taipei and Australia in 1995, 1997, 1999 respectively. These events attracted strong private/business sector participation with more than 1,000 from business, R&D institutes and universities. They also served as an excellent opportunity for the general public to gain an appreciation of APEC's S&T activities. | | |
| e. Implement projects to improve the flows of information on science and technology, including a study on information access mechanisms with emphasis on strengthening information networks at research laboratory level, to be completed by mid-1997. | Australia leads two projects and is a significant participant in two other projects that facilitate information flows: the APEC Materials Processing and Testing Network (IST 42/1999S) was commenced in 1999 and aims to build a database of such facilities. However, the project has not been underway long enough to allow for any meaningful assessment of its impact. the APEC Cooperation on Earthquake Simulation (see para b above). the Japanese-led APEC Virtual Centre for Environment Technology Exchange (see | Australia led the APEC Science and Technology Web site (ASTWeb, part of the 'Facilitating S&T Information Flows' project IST 02/1998) which was completed in March 2000. An application for the continued running of ASTWeb (http://www.apecst.org) in 2001 is before the July 2000 meeting of the BMC. | The ASTWeb project was of limited success in promoting sustainable development because it was not used to any great extent by its intended audience of researchers and the private/business sector in each economy. However, it has facilitated the flow of S&T information amongst member governments, both through its collection of links to key S&T websites in each economy, and as a database of IST WG projects and proposals. | ASTWeb is currently being trialled by the IST WG as a mechanism for the on-line processing of IST WG projects and proposals. This function incorporates an 'early proposal concept' feature which allows the IST WG to conveniently seek coordination comments from other APEC fora. As such, ASTWeb may inform the development of the APEC ECOTECH Clearing House |

| | para b above). | | | |
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| <i>Joint Activities/Dialogues (as stated in OAA)</i> | <i>Joint Activities/Dialogues Added Since 1996</i> | <i>Joint Activities/Dialogues Achieved/Completed</i> | <i>Assessment of their effectiveness in attaining sustainable growth and equitable development</i> | <i>Additional steps needed to implement the Joint Activities/Dialogues</i> |
| | <p>The Canadian-led APEC Technologies Index (IST 44/1999S), which was commenced in 1999. Australia commissioned a compilation of non-APEC S&T networks as part of the Index. However, the project has not been underway long enough to allow for any meaningful assessment of its impact.</p> <p>A project, <i>Facilitating Science and Technology Information Flow</i>, has been jointly conducted by Australia, Japan, and Korea from 1996.</p> <p>A project, <i>Hands-on Training as a Pilot Activity for the Establishment of an APEC Center for Materials Evaluation Technology (ACMET)</i>, was approved in 1999.</p> | <p>The Republic of Korea has built web-based Korean S&T directory Databases at http://www.kordic.re.kr/~apec/resources.html, which contains:</p> <p>Research reports bibliographic database (DB)</p> <p>S&T human resource DB</p> <p>S&T Master's and Ph.D. thesis bibliographic DB of major Korean universities</p> <p>Major S&T factual DB links in Korea and globally.</p> <p>In progress</p> <p>A Technical Advisory Group from ten member economies was created</p> <p>The tentative topic of the training was decided as the surface analysis technology of advanced materials</p> <p>Organisation of the training from 30 October -12 November 2000</p> | <p>It has contributed to improving the accessibility and user interface as well as the flows of S&T information by means of the Meta Search Agent, an improved web-related information access tool for virtual merging of S&T DBs of Japan's R&D and Korea's S&T directory DBs.</p> <p>The project will contribute to building-up/strengthening technological capabilities of APEC member economies in testing and evaluation of new materials, as well as facilitating related technology transfer among them via networking among member economies.</p> | <p>It was completed in May 2000.</p> <p>To accomplish the goals of the project, follow-up activities should be continued in such areas as survey of areas for Round Robin Tests of Materials Properties, the Implementation of RRT in Selected Areas, etc.</p> |

| <i>Joint Activities/Dialogues (as stated in OAA)</i> | <i>Joint Activities/Dialogues Added Since 1996</i> | <i>Joint Activities/Dialogues Achieved/Completed</i> | <i>Assessment of their effectiveness in attaining sustainable growth and equitable development</i> | <i>Additional steps needed to implement the Joint Activities/Dialogues</i> |
|--|---|--|--|--|
| | A project, <i>Determination of Priority Needs for Molecular Biology and Biotechnology</i> , was approved in 1997. | <p>In progress</p> <p>Organisational structures, including Membership Committee, Program Committee, Fundraising Committee, were set up in 1997</p> <p>A-IMBN Charter was adopted in the 1st APEC International Molecular Biology Network (A-IMBN) Conference in 1998. – The 2nd A-IMBN Conference in 1999 had prepared a draft report on in-depth assessments and analysis of the current state of SWOT in relation to molecular biology and biotechnology in APEC region.</p> <p>The 3rd A-IMBN Conference will take place in Sep. 2000 to review the final draft of 'Priority Needs for Molecular Biology and Biotechnology Development in APEC Economies.'</p> | This project has contributed substantially to enhancing the exchange of leading scientists and information related to Molecular Biology, and to strengthening the capacity and competency of scientists in the APEC region by means of establishing A-IMBN, which provides a forum for the consideration of issues and concerns relating to the promotion and development of R&D in the biotechnology-related arena. | N/A |
| f. Conduct dialog on the IS&T policies and IS&T situation of each APEC economy, establishing IS&T indicators such as the number of research institutes as a basis for conferral. | <p>The inaugural Policy Dialogue instigated by Australia was held during the Plenary of the 17th IST WG Meeting (Seattle, September 1999). The Policy Dialogue session will continue as part of the Plenary from the 19th IST WG Meeting.</p> <p>With regard to survey of indicators, Japan leads three projects including the <i>APEC Industrial Science and Technology Indicators</i> project (1996-97)</p> | Australia led the APEC-OECD Cooperative Arrangement on S&T Indicators project (IST 40/1999S) which commenced in 1998 and is now undergoing evaluation. | <p>The 18th IST WG Meeting provided a positive assessment of the Policy Dialogues's utility in promoting an understanding and awareness of each economy's S&T policy settings.</p> <p>The Indicators project was quite successful, with the result that China and Russia are expected to be the first non-OECD APEC economies to be added to the OECD's S&T databases.</p> | In regard to the Indicators project, it may be advantageous to develop a follow-up project to facilitate 'mentoring arrangements' in order to further capabilities in S&T indicator development. |
| g. Review the IS&T regulatory framework of each APEC economy in fields such as industrial standards and intellectual property rights, to ensure transparency. | | | | |

3. Small and Medium Enterprises (SMEs)

| <i>Joint Activities/Dialogues (as stated in OAA)</i> | <i>Joint Activities/Dialogues Added Since 1996</i> | <i>Joint Activities/Dialogues Achieved/Completed</i> | <i>Assessment of their effectiveness in attaining sustainable growth and equitable development</i> | <i>Additional steps needed to implement the Joint Activities/Dialogues</i> |
|---|---|--|--|--|
| <p>a. Convene training programs, seminars and workshops, including the APEC SME Leaders Workshop on SME policies.</p> | <p>1997 Framework for APEC activities. The overarching goal of the Framework is to enhance the relevance of APEC work to SMEs and ensure that activities across the APEC for a provided measurable benefits to SMEs.</p> <p>Integrated Plan of Action for SME Development (SPAN) provides the long term objectives and direction for the implementation of the Framework, as the SME related activities have proliferated across various APEC fora.</p> | <p>APEC SME Leaders Workshop. <u>Completed</u></p> <p>Some other activities on this issue have also been held. They are:</p> <p>Workshop for APEC SMEs Financing and Business Management. <u>Completed</u>. Activities involved were workshop, follow-up of diagnosis and guidance skills in home economies, and dispatched Japanese experts to some economies.</p> <p>APEC Human Resources Management Symposium on SMEs. <u>Completed</u>. The project was conducted in seven steps: Organising the working group; Call for Papers; Review of Submitted papers; mailed invitation; edited proceedings; held the conference; and published the final report.</p> | <p>Increased understanding of not only policy makers but also private/business sector leaders of member economies in regard to the respective SME-related experiences of each economies</p> <p>SME officials and diagnosis and guidance staffs were given opportunities to cross-learn and review their respective policies for actual diagnosis and guidance.</p> <p>The project achieved the significant sharing of SMEs and Human Resources Management (HRM) knowledge to create appropriate Human Resources Policies for SMEs.</p> | <p>N/A</p> <p>Long-term improvement of human resources through skill enhancement of SME officials and diagnosis and guidance staff of SME support organisations of each economy needs to be maintained.</p> <p>N/A</p> |

| <i>Joint Activities/Dialogues (as stated in OAA)</i> | <i>Joint Activities/Dialogues Added Since 1996</i> | <i>Joint Activities/Dialogues Achieved/Completed</i> | <i>Assessment of their effectiveness in attaining sustainable growth and equitable development</i> | <i>Additional steps needed to implement the Joint Activities/Dialogues</i> |
|--|--|---|---|--|
| | | APEC SME and New Business Support Workshops. <u>On-Going</u> | Expected Output: The Workshop is designed to help APEC economies break free of protracted economic recession and move back on to a growth path by capacity building and deepening of information exchange across the entire APEC region in regard to SME assistance policies, bringing SME and private/business sector support under the same umbrella. | N/A |
| b. Undertake an Industrial Outlook Study, consisting of comprehensive/sectoral studies on intra-regional industrial interdependence, to enable SME policy makers and SMEs to come to a better understanding of the economic environment. | 1997 Framework for APEC activities. The overarching goal of the Framework is to enhance the relevance of APEC work to SMEs and ensure that activities across the APEC fora provided measurable benefits to SMEs. <i>Integrated Plan of Action for SME Development (SPAN)</i> provides the long term objectives and direction for the implementation of the Framework, as the SME-related activities have proliferated across various APEC fora. | APEC SME Profile 2000. <u>On-going</u> . The project is to provide a profile of APEC SMEs | The Point of the project is to give leaders and SOM officials a clearer view of the state of SMEs in APEC and thus of the progress that APEC is making in addressing SME issues and the impact of APEC on SMEs. | N/A |
| c. Survey each economy's SME policies and compile APEC best practices in this area in order to enhance mutual understanding of APEC economies' policy practices. | 1997 Framework for APEC activities. The overarching goal of the Framework is to enhance the relevance of APEC work to SMEs and ensure that activities across the APEC for a provided measurable benefits to SMEs. | Study of Best Practices in the Management of Technological extension Programs Oriented towards SMEs. <u>Completed</u> The project consisted of four stages: bibliographical research; design standardised questionnaire; basic analysis of results; comparative analysis based on the outcomes of the research. | The Ministries and Governmental Agencies in charge of SME Technology benefited by obtaining information that can assist them in improving the quality and efficiency of their programs. | N/A |

| <i>Joint Activities/Dialogues (as stated in OAA)</i> | <i>Joint Activities/Dialogues Added Since 1996</i> | <i>Joint Activities/Dialogues Achieved/Completed</i> | <i>Assessment of their effectiveness in attaining sustainable growth and equitable development</i> | <i>Additional steps needed to implement the Joint Activities/Dialogues</i> |
|---|--|--|--|--|
| | <p><i>Integrated Plan of Action for SME Development (SPAN)</i> provides the long term objectives and direction for the implementation of the Framework, as the SME-related activities have proliferated across various APEC fora.</p> | <p>A Study on Women Entrepreneurs in SMEs in the APEC Region. <u>Completed</u>. The study consisted of research and survey of SMEs owned by women in several APEC member economies.</p> <p>Strategy for Internationalisation of SMEs in the Asia-Pacific Region. <u>Completed</u> The project was carried out by collecting materials on the internationalisation of SMEs, paying visits to companies and related organisations, and conducting surveys on SMEs</p> <p>Voluntary Reporting of Economies during PLGSME Meeting. <u>On-Going</u> In fulfillment of SPAN, PLGSME initiated in their March 2000 meeting, the reporting by economies, on a voluntary basis, their respective policies/best practices on SME development</p> | <p>The findings have implications for policy intervention in creating support mechanism for women entrepreneurs in APEC member economies.</p> <p>As SMEs are regarded as the engine of economic growth, the internationalisation of SMEs should proceed to enhance national competitiveness in the global market. This contributed to improving economic and social well being of people</p> | <p>Need to design projects that are results oriented and to follow-up recommendations; otherwise, it is difficult to maintain the momentum for policy changes to be undertaken.</p> <p>N/A</p> <p>In Relation to SPAN, the SME Ministers have instructed the PGLSME to further strengthen its work by focussing on 'activities that contribute to the development of policies' and action oriented programs.</p> |
| <p>d. Design a plan of activities for the APEC Center for Technology Exchange and Training for SMEs as a resource centre for handling information networking, developing training opportunities and organising SME-targeted activities.</p> | <p>1997 Framework for APEC activities. The overarching goal of the Framework is to enhance the relevance of APEC work to SMEs and ensure that activities across the APEC fora provide measurable benefits to SMEs.</p> <p><i>Integrated Plan of Action for SME Development (SPAN)</i> provides the long term objectives and direction for the implementation of the Framework, as the SME-related activities have proliferated</p> | <p>There have been some programs on this issue. Some of them are:</p> <p>Enterprise Development Program. <u>Completed</u>. The program was designed for trainers dealing with small and medium sized enterprises at different stages of operations and development</p> <p>APEC SME Networks of Networks. <u>Completed</u>. The project brings together data/information furnished by the various focal points and through tapping existing web sites.</p> | <p>N/A</p> <p>N/A</p> | <p>N/A</p> <p>N/A</p> |

across various APEC fora.

| <i>Joint Activities/Dialogues (as stated in OAA)</i> | <i>Joint Activities/Dialogues Added Since 1996</i> | <i>Joint Activities/Dialogues Achieved/Completed</i> | <i>Assessment of their effectiveness in attaining sustainable growth and equitable development</i> | <i>Additional steps needed to implement the Joint Activities/Dialogues</i> |
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| <p>e. Survey the financial markets for SMEs and hold a Venture Capital Workshop to explore ways to promote SME access to venture capital.</p> | <p>1997 Framework for APEC activities. The overarching goal of the Framework is to enhance the relevance of APEC work to SMEs and ensure that activities across the APEC fora provide measurable benefits to SMEs.</p> <p><i>Integrated Plan of Action for SME Development (SPAN)</i> provides the long term objectives and direction for the implementation of the Framework, as the SME-related activities have proliferated across various APEC fora.</p> | <p>A Study on the Efficiency of Financial Markets for SMEs. The Study was done in the form of survey in APEC economies. <u>Completed</u></p> <p>Seminar on 'Securing Initial Capital Funding for Start-up Companies - the Birth and Growth of Start-ups & SMEs in a Knowledge-based Economy'. <u>Completed</u></p> | <p>N/A</p> <p>Venture capital funds will complement the financial sector in providing initial capital to new businesses and recognised that governments had a role in creating a better environment for SMEs and start-up companies to access capital markets. In this respect, it was concurred that SMEs that have growth potential could be assisted in accessing financial and capital markets.</p> | <p>N/A</p> <p>The PLGSME has been instructed by the SME Ministers to make a cooperative effort in establishing an APEC database to disseminate and exchange information on start-up companies and venture capital.</p> |
| <p>f. Compile in 1996 a directory of agencies, which provide support for SMEs.</p> | <p>1997 Framework for APEC activities. The overarching goal of the Framework is to enhance the relevance of APEC work to SMEs and ensure that activities across the APEC fora provide measurable benefits to SMEs.</p> <p><i>Integrated Plan of Action for SME Development (SPAN)</i> provides the long term objectives and direction for the implementation of the Framework, as the SME-related activities have proliferated across various APEC fora.</p> | <p>In response to this, a Guide for Small and Medium Enterprises in the APEC Region was published in 1997, and was updated twice in 1998 and in 2000. <u>Completed</u></p> | <p>The guide is a valuable source of information for the SMEs in APEC Region. It consists of information on basic statistic on the contribution of the SMEs in each member economies; new opportunities for SMEs; rules and policies for SMEs; and Economies' agencies in charge of and providing support for SMEs.</p> | <p>The Ministers have instructed the PLGSME to update the guide annually. Member economies are expected to assist in the updating by providing the updated lists of agencies.</p> |

4. Economic Infrastructure

| <i>Joint Activities/Dialogues (as stated in OAA)</i> | <i>Joint Added Since 1996 Activities/Dialogues</i> | <i>Joint Activities/Dialogues Achieved/Completed</i> | <i>Assessment of their effectiveness in attaining sustainable growth and equitable development</i> | <i>Additional steps needed to implement the Joint Activities/Dialogues</i> |
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| <p>a. Conduct analytical work on issues relating to the overall infrastructure environment.</p> | | <p>Joint reviews with the World Bank of regional infrastructure development needs, the gap in provision and challenges to public and private/business investment.</p> <p>Detailed assessments of impediments to private/business sector investment extended in 1995-1997</p> <p>Impact of factors effecting creditworthiness and potential role of Export Credit Agencies (ECAs) and International Financial Institutions (IFIs) assessed 1997</p> <p>Impact of IT and IT-based development on urban development and infrastructure service needs was assessed</p> | <p>The reviews provided an overview of the challenges faced to which IWS and economies could relate priorities for action.</p> <p>The overview was useful to economies in assessing priorities for cooperation and internal action</p> <p>Contributed a clear understanding of the potential complementary role of ECAs, other risk coverage agencies, project structuring and improvement of the regulatory environment</p> <p>These exploratory reviews highlighted areas of major emerging changes in the interaction between technologies, infrastructure and urban development in the 21st century</p> | <p>The environment for infrastructure development within economies and in linked or complementary infrastructure developments is changing markedly with the impacts of economic turbulence, and changing practices and capabilities in international and emerging local capital and risk markets. Additional assessments of the overall needs, and means to address them are needed to assist in identifying priority directions for action.</p> <p>The potential for APEC contributing to further analytical work and formulation /sharing of good practice in this area needs to be re-assessed.</p> |
| <p>b. Explore ways to enhance the effectiveness of infrastructure improvement such as</p> <ul style="list-style-type: none"> - compiling best practices for use as benchmarks in the examination of the respective roles of the public and private/business sectors; - developing guidelines on infrastructure investment to ensure a more transparent and coherent environment for the private/business sector. | <p>Review of principles for infrastructure support to sustainable cities development added as an activity in 1997</p> | <p>Identification of priority areas to be addressed and best practice principles to establish a supportive environment for private/business sector investment 1995,</p> <p>More specific identification of good practice in risk management 1996, 1997</p> <p>Cooperation between ECA in this area mobilised 1997</p> | <p>Provide a comprehensive reference for economies and development agency supporting actions, as well as for assessment of public-private/business sectors and project schemes</p> <p>Contributed to Ministerial Meeting, multi-stakeholder discussions (hosted by World Bank and Indonesia) which reinforced the impetus for reform in participating economies, ahead of the Asian economic crisis.</p> <p>The initial cooperation introduced proposals for a more proactive role by ECAs in the area improving project structure, cooperative /matching efforts in due diligence and peer cooperative support was introduced. This area of cooperation was transferred to Finance Ministers' Process by Leaders in 1997</p> | <p>An assessment of progress in enhancing the policy and regulatory environment against changed needs will be conducted along with the December 2000 Public-Private/Business Sector Dialogue to examine to further enhance the regulatory framework aspect of infrastructure improvement</p> <p>Further needs would be identified by that review.</p> |

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| | <p>Support the development of rural infrastructure in support of APEC Food System development was added 1998</p> <p>A project to share good practices in Regional Infrastructure for Best Practice Sustainable Economies was approved in 1999 as joint activity with PECC.</p> | <p>APEC Infrastructure Resource Integration Centers (AIRIC) and other initiatives to launch cooperative networks for best practice sharing and application (launched 1998)</p> <p>Web site to support decision makers for sustainable cities 1998/99</p> <p>Overview of availability of best practice models at May 1999 conference.</p> <p>Review of Regional Growth Centre (RGC) proposals October 1999.</p> <p>RISE process mobilised in two pilot RGCs (Jiangmen China and Manado-Bitung, Indonesia) and on-going.</p> | <p>The early progress became less relevant to immediate needs of the private/business sector in relation to economies affected by the Asian economic crisis and this initiative slowed due to lack of resources. The concept of network and also the multi-stakeholder forums to support sharing of good practices and capacity building for policy and regulatory change continued and has become extensively applied in some economies.</p> <p>Review concluded that amore pro-active process that would support the learning and sharing of good practice through practical application was needed to develop capacities in an holistic approach to infrastructure development, and broad economic development</p> <p>The initiative is on going and is demonstrating rapid impacts in re-orienting and mobilising public sector, private/business sector, research and academic institution, as well as development agency (WB, ADB and others) activity in an integrative and complimentary manner. Plans being mobilised indicate major leveraging and more effective application of resources from multiple partners to achieve major impacts in: infrastructure provision, productive sector developments, growth of trade, developing local capacities, food production and markets, technology transfer and application of biotechnology, promoting the participation of women in development, wider rural training/education, poverty reduction, environmental management, and sustainable development of non-metropolitan urban areas.</p> | <p>Lessons learned need to be reviewed and good practices shared on a much wider scale based on the success of the pilot phase.</p> <p>The sustainable capacity building and demonstrated economic impact that serves to mobilise initiative and additional resources need to be fostered by replicating the RISE support process in multiple RGCs as a self-sustaining and replicating status is achieved.</p> |

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| c. Conduct public-private/business sector dialogue and consider the possibility of establishing a forum on infrastructure. | | Public-Private sector – international agency – academic institution dialogues held on the current work areas (above) in: <ul style="list-style-type: none"> • Jakarta, Indonesia, 1995 • Seattle, USA, 1996 • Los Cabos, Mexico, 1997 • Taipei, Chinese Taipei, 1998 • Terengganu, Malaysia, 1999 and under preparation: <ul style="list-style-type: none"> • Melbourne, Australia, 2000 | The Dialogues have played a key role in: <ul style="list-style-type: none"> • defining economies' needs and priorities (from all stakeholder viewpoints); • sharing information between the public and private/business sectors on an international basis; • providing information on priorities for consideration by the SOM, Ministers and Leaders; • mobilising cooperative partnerships and broadening participation in achieving APEC goals; • providing outreach between APEC activities and the wider community in APEC economies and outside of the APEC region. | Continued Dialogue is a key aspect of planning, executing and winning support for effective APEC work program in this area. |

5. Energy

| <i>Joint Activities/Dialogues (as stated in OAA)</i> | <i>Joint Activities/Dialogues Added Since 1996</i> | <i>Joint Activities/Dialogues Achieved/Completed</i> | <i>Assessment of their effectiveness in attaining sustainable growth and equitable development</i> | <i>Additional steps needed to implement the Joint Activities/Dialogues</i> |
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| a. Begin preliminary work on the Asia Pacific Energy Research Center (APERC) immediately, establish the APERC in mid-1996, and initiate joint work on the APEC regional energy outlook to be completed by 1997. | The APERC was established in mid-1996 and work was initiated on the APEC regional energy outlook in 1997. | APERC has developed the <i>APEC Regional Energy Outlook</i> , which was published in September 1998. | The APEC Regional Energy Outlook provides information that assists economies in the attainment of sustainable growth and equitable development in the Asia/Pacific Region, while reducing economic disparities among APEC economies and improving economic and social well being. | An APEC EWG 'Future Directions' paper is currently being prepared. This paper will identify potential areas for increased cooperation with APERC in order to build on achievements realised to date through the APEC Regional Energy Outlook and other APERC activities. |
| b. Consolidate the APEC energy database and disseminate the data contained therein regularly. | The APEC energy database is operated on an ongoing basis and the data contained therein is disseminated regularly. | APERC is responsible for the development of the APEC energy database and disseminates the data contained therein regularly: <ul style="list-style-type: none"> • APEC Energy Statistics (published 1996, 1997, 1998 and 1999). | The APEC energy database assists APEC member economies towards achieving the development of an APEC database of core statistical information, using a consistent framework for energy data reporting and processing. This information assists economies in the attainment of sustainable growth and equitable development in the Asia-Pacific Region. | Ongoing operation of the APEC energy database and continued publication of APEC Energy Statistics. |
| c. Develop by the end of 1996, in partnership with the private/business sector, a guidance framework to facilitate investment in electricity infrastructure by removing institutional, regulatory and procedural impediments. | The EWG has developed a guidance framework to facilitate investment in electricity infrastructure by removing institutional, regulatory and procedural impediments. In addition, the second Energy Ministers Meeting endorsed the <i>Manual of Best Practice for Independent Power Producers</i> . APEC's EWG has a new initiative - 'Implementation Facilitation Assistance Team' (IFAT) visits - that is aimed at capacity building and encouraging infrastructure development and investment. The IFAT works with a host economy and provides expert advice on specific energy sectors. Visits draw on the expertise of the Energy Business Network (EBN is a recent initiative that provides business input into the EWG's work), ERF and other relevant experts. | Investment in electricity infrastructure has been facilitated through the conduct of the following projects: <ul style="list-style-type: none"> • Comparative Study and Workshop on Transparent and Streamlined Procurement Processes for Power Infrastructure in APEC Member Economies • Development of a Framework to Facilitate Investment in Power Infrastructure in APEC Member Economies A pilot IFAT visit was conducted in Thailand in 1999 that was very well received by all participants and a second IFAT visit was conducted in 2000. IFAT visits are also being planned for Peru and the Philippines. | An <i>Ad Hoc</i> Forum on Regional Cooperation for Power Infrastructure and an Electricity Regulators' Forum were established to assist the EWG to undertake work that facilitates the investment in power infrastructure in APEC member economies. The IFAT visits conducted in Thailand have been very well received by all participants. It was concluded that the adoption of the visit's recommendations should lead to Thailand's energy sector becoming a more attractive investment opportunity for foreign and local investors; and will facilitate sustainable growth and equitable development. | In order to further the achievements already realised, in 2001 the following projects will be undertaken: <ul style="list-style-type: none"> • <i>Workshop on Distributed Generation, Distribution and Efficiency</i> (EE&C and N&RET); • <i>Measuring the Impacts of Regulatory reform in the APEC Energy Sector</i> (SF Australia); and • <i>Comprehensive Linked Database on Mining and Energy related Opportunities and Regional Legal framework within APEC Member Economies - Extension of Phase 3</i> (GEMEED). Further IFAT visits will be held on a bilateral basis at the invitation of APEC economies. |

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| <p>d. Consider issues associated with addressing the risks and impact of potential imbalances between energy supply and demand.</p> | <p>The EWG has undertaken considerable work through the projects of its expert groups that are associated with the risks and potential imbalances between energy supply and demand.</p> | <p>Projects completed to date include:</p> <ul style="list-style-type: none"> • Coal Flow Seminar Series (1996, 1997, 1999); • Planning Workshop on Energy Efficient Gas Technologies; • A DSM Manual for the APEC Economies; • APEC Energy Demand and Supply Outlook (published March 1998); • Supplement to APEC Energy Demand and Supply Outlook (published June 1998); and • Consultancy Workshop on Promoting Energy Security through Improved Access to International Fuel Markets. | <p>The projects undertaken to date have resulted in responses from members that the information provided in final reports was most useful. The projects provided a means of facilitating the exchange of information between economies and leading technical experts.</p> | <p>The EWG will continue to monitor the need for information on issues associated with addressing the risks and impact of potential imbalances between energy supply and demand and will conduct research into this area as required.</p> <p>For instance, in 2001, a Study for Establishing the 'Oil Market Information Sharing System' will be undertaken by the CFE.</p> |
| <p>e. Improve environmental performance through expanded programs in the fields of clean coal technology, renewable energy sources and end-use energy conservation measures, leading to exploration of cooperative multilateral programs to reduce climate change concerns such as demonstration projects which lead to joint implementation.</p> | <p>Since 1996, a significant number of projects have been undertaken that contribute to improved environmental performance.</p> | <p>Projects completed to date include:</p> <ul style="list-style-type: none"> •APEC Clean Fossil Fuels Technology (CFFT) Technical Seminar (Fourth Seminar in Beijing; Fifth Seminar in Reno, US; Sixth Seminar in Kinawa, Japan); •Study on Atmospheric Emissions Regulations in APEC Economies and their Compliance at Coal Fired Plants; •APEC Joint Multilateral Demonstration Project for Recovery and Utilisation of Coal Mine Gas - Phase 2; •APEC Coal Trade and Investment Liberalisation and Facilitation Workshop Series; •APEC Joint Multilateral Demonstration Project for Recovery and Utilisation of Coal Mine Gas - Phase 1; •Planning Workshop for an APEC Sustainable Cities Program; •Analysis of Energy Use Benchmark Data in Member Economies; •Energy Benchmark System Development and Implementation; | <p>A comprehensive range of projects have been undertaken by the various EWG expert groups, including seminars, workshops and studies involving technical research.</p> <p>Members have reported that the dissemination of information from these projects has been effective in progressing the attainment of sustainable growth and equitable development in the Asia/Pacific Region, while reducing economic disparities and improving economic and social well being.</p> | <p>An APEC EWG 'Future Directions' paper is currently being prepared. This paper will focus on building on the achievements realised to date.</p> <p>For instance, consideration will be given to the further exploration of cooperative multilateral programs to reduce climate change concerns (these may include demonstration projects which lead to joint implementation).</p> |

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| | | <ul style="list-style-type: none"> •Regional Harmonisation of Appliance Energy Efficiency Standards; •Workshop on Emerging Energy-Efficient Industrial Technologies; •Institutionalisation of a Benchmarking System for Data on the Energy Use of Commercial and Industrial Buildings; •Workshop on Renewable Energy Resource Assessment Techniques; •APEC Energy R&D and Technology Transfer Seminar 1995-1996, 1996-1997, 1998-1999, 1999-2000); •Workshop on Renewable Energy as it Relates to Sustainable Development; •Asia Pacific Renewable Energy and Efficiency Business Development Conference; •Renewable Energy Tour 1996; •Assessment and Development of Technology Cooperation Need, Skills and Capabilities for Sustaining Area-based New and Renewable Energy Project; •Analysis of Renewable Energy Retrofit Options to Existing Diesel Mini-Grids; •Survey and Assess Analytic Methodologies to Incorporate renewable Energy in National Energy and Economic Planning; •APEC Guidebook for Financing New and Renewable Energy; •Review of the Quality and Completeness of Resource Assessment Data and Resource Studies for the APEC Region; •Environmental Cooperation Workshop for Sustainable Mine Development (Japan, October 1997); and •Overview of Trade Flows of Energy-using Products between APEC Member Economies. | | |

| <i>Joint Activities/Dialogues (as stated in OAA)</i> | <i>Joint Activities/Dialogues Added Since 1996</i> | <i>Joint Activities/Dialogues Achieved/Completed</i> | <i>Assessment of their effectiveness in attaining sustainable growth and equitable development</i> | <i>Additional steps needed to implement the Joint Activities/Dialogues</i> |
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| f. Reach agreement on the multilateral recognition of testing protocols and the accreditation of laboratories, as well as the acceptance of test results, by the end of 1999. | The EWG has undertaken projects that progress reaching agreement of the recognition of testing protocols and the accreditation of laboratories. The Steering Group on Energy Standards, which has been wound up, contributed to this work. | <p>EWG has undertaken the following activities:</p> <ul style="list-style-type: none"> • Review of Energy Efficiency Test Standards and Regulations in APEC Member Economies • Workshop on Setting Up and Running an Energy performance Testing Laboratory • Colloquium of the Technical Issues of Minimum Energy performance Standards • Energy Efficiency Performance Testing and Conformity Assessment in APEC Economies: Survey and Recommendations | Projects completed to date have provided economies with a good basis from which further progress can be achieved. The Steering Group on Energy Standard's final report identified areas for further work. | <p>In 2001, this work will be further developed and the areas for further work identified by the Steering Group on Energy Standards will be progressed.</p> <p>The EE&C will undertake a project on Energy Standards Information Development and Coordination.</p> |
| g. Undertake mutual examination of energy policies in line with common policy concepts. | <p>The EWG is currently conducting an APEC wide project examining policies relating to micro-economic reform and market development.</p> <p>At the Fourth Energy Ministers Meeting it was agreed that a system of voluntary, annual self reports on implementation by member economies would be forwarded to Economic Leaders through the EWG and the APEC system.</p> | <p>Projects that have made a contribution to date include:</p> <ul style="list-style-type: none"> • Coal and Natural Gas Competition in APEC Economies; and • High Value End-use Application Analysis. | Work undertaken to date through the EWG has been well received by members. | <p>In 2000-2001, Australia is undertaking a self-funded project on Strengthening Operational Aspects of APEC Energy Micro-Economic Reform.</p> <p>The format of voluntary annual self reports will be considered at EWG 20 in relation to examination of energy policies.</p> |

6. Transportation (TPT)

| <i>Joint Activities/Dialogues (as stated in OAA)</i> | <i>Joint Added Since 1996</i> <i>Activities/Dialogues</i> | <i>Joint Activities/Dialogues Achieved/Completed</i> | <i>Assessment of their effectiveness in attaining sustainable growth and equitable development</i> | <i>Additional steps needed to implement the Joint Activities/Dialogues</i> |
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| a. Complete by 1996 Phase Two of the Transportation Congestion Points Study, analysing the major bottlenecks at land, sea and airports, and complete by 1996 Phase Three, providing a best practices manual of how economies can address their respective bottlenecks. | N/A | Completed. The final recommendations of the Congestion Points study were adopted at the 11 th meeting of the TPTWG in April 1997. A 'best practices' manual was distributed to economies in February 1997. | Economies have guidance material in the form of the 'best practices' manual as a resource for eliminating transport bottlenecks. Implementation is a matter for individual economies. | The TPTWG has formed an Intermodal Task Force to continue work towards facilitating the flow of passengers and goods in the region. |
| b. Start considering at an appropriate time how to enter into strategic consultation in development of well-integrated regional transportation infrastructure. | N/A | Deleted from TPTWG Action Programme (now Operational Plan) following development of a <i>strategic direction</i> at meetings in November 1999 and March 2000. | N/A | At the 17 th meeting in March 2000, the TPTWG approved a <i>strategic direction</i> for the group. All of its future activities should be related to this strategy. |
| c. Establish in 1996 the APEC Urban Transport Forum (UTF) to develop transportation systems that help reduce congestion and are energy efficient and environmentally friendly. | N/A | Ongoing. The first UTF meeting was held in Seoul, Korea, in November 1996, and the second in Chinese Taipei in September 1997. A final report on the outcomes of those fora was considered at the 17 th meeting of the TPTWG in March 2000. | A 'best practices' manual to help identify the best methods to address urban transport problems has been drafted. | The 'best practices' manual is to be reviewed at the 18 th meeting of the TPTWG in October 2000. Consideration will then be given to the holding of a third UTF meeting in future. |
| d. Establish in 1996 a group of experts to identify aviation safety problems. | N/A | Completed. The 'Group of Experts on Aviation Safety and Assistance' (GEASA) was formed in 1996 and reported to Transportation Ministers in 1997. | Economies have the report to Ministers to act as guidance on priority issues, and may take its recommendations into account. | Transportation Ministers endorsed the GEASA report in June 1997 and directed that mechanisms be developed for implementation. It is intended that a further report be presented to the 3 rd Transportation Ministerial in June 2001. |
| e. Complete by 1997 a survey/analysis of aviation safety and security problems and develop a plan of action based on experience with a pilot project on satellite navigation and communication systems. | N/A | Completed. The GEASA has identified and analysed safety problems in the region, leading to recommendations to Ministers on five significant issues. | | Transportation Ministers endorsed the GEASA report in June 1997 and directed that mechanisms be developed for implementation. It is intended that a further report be presented to the 3 rd Transportation Ministerial in June 2001. |
| f. Consider by 1997 establishing a group of marine safety experts and a security experts group, based on experience with the aviation safety experts group. | N/A | Completed. Transportation Ministers established an Experts Group on Maritime Safety (EGMS) in 1997. | | The EGMS has identified safety issues in the region and is addressing these. |

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| g. Commence in 1996 the evaluation of seafarers training needs. | N/A | Completed. The first phase of a project to identify seafarer training needs was commenced in 1996/7. The second phase, to analyse maritime training institutions in 16 economies was commenced in 1997, and completed in 2000. | | A decision on a third phase is awaiting developments in the International Maritime Organisation, and will be considered by the TPTWG in April 2001. |

7. Telecommunications (TEL) and Information

| <i>Joint Activities/Dialogues (as stated in OAA)</i> | <i>Joint Added Since 1996 Activities/Dialogues</i> | <i>Joint Activities/Dialogues Achieved/Completed</i> | <i>Assessment of their effectiveness in attaining sustainable growth and equitable development</i> | <i>Additional steps needed to implement the Joint Activities/Dialogues</i> |
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| a. Conform, where appropriate, to Guidelines on Trade and International Value-added Network Services (IVANS) by 1998 and generally conform, where appropriate, to Guidelines on the Regional Harmonisation of Equipment Certification Procedures. | | Under the guidance of the Liberalisation Steering group, the Guidelines on IVANS were adopted by member economies in 1997. | | |
| b. Continue to work to harmonise administrative procedures governing certification of customer telecommunications equipment. | | The work is carried out in conjunction with the MRA. Please see below. | | |
| c. Develop and begin to implement on an elective basis a model Mutual Recognition Arrangement (MRA) on Conformity Assessment for telecommunications equipment by the end of 1997. | | At TELMIN3, Ministers endorsed the text of the MRA and an Indicative Schedule for Voluntary Participation in the MRA. As of April 2000, nine economies (Australia, Canada, Hong Kong, Japan, Korea, Chinese Taipei, Peru, Singapore and the US) are participating in the implementation of Phase 1 procedures. | The implementation of the MRA will encourage trade in telecommunications equipment among APEC member economies with all the ensuing benefits. | Support projects are in place to encourage implementation of the MRA. Cooperation with other regions in the implementation of the MRA. |
| d. Publish regular reports on the state of the telecommunications regulatory environment and infrastructure development in each APEC economy in order to improve private/business sector access to related policies, regulations and other information. | | Data Project Guide to Regulatory Environments in APEC Member Economies. The guide details the policy, regulatory and legislative environment for telecommunications in all APEC member economies. It is updated regularly. Spectrum Policy and Management Database. A database has been developed that links economies spectrum management sites. It includes spectrum policy regulatory environments and national tables of frequency allocation. | The database would allow private/business sector individuals to easily access national regulations, legislation and policy thus indirectly facilitating investment. The database will allow easy access to spectrum policy and regulations similarly assisting in facilitating investment. | Projects involving regulatory considerations are continually in progress (eg. Convergence roundtable project). The publication and dissemination of the accompanying reports would be valuable to the private/business sector. |

| <i>Joint Activities/Dialogues (as stated in OAA)</i> | <i>Joint Activities/Dialogues Added Since 1996</i> | <i>Joint Activities/Dialogues Achieved/Completed</i> | <i>Assessment of their effectiveness in attaining sustainable growth and equitable development</i> | <i>Additional steps needed to implement the Joint Activities/Dialogues</i> |
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| | | <p>Development and Financial Resources Catalogue. This is a regularly updated catalogue of Asia-Pacific Information infrastructure development and financial resources with links to international and regional organisations, foundations and other institutes.</p> <p>Carrier Liability. A TEL task group has been looking into the impact of carrier liability for content in areas of intellectual property and others (eg. Pornography, gambling, etc) in terms of risk management as a key issue for carriers.</p> | <p>The catalogue would encourage awareness among interested private/business sector donors/investors interested in forming partnerships with existing financial and development agencies.</p> <p>The study encourages an investment climate by clearly setting out the risks involved in establishing and operating a carrier business.</p> | |
| <p>e. Promote electronic commerce through seminars, studies on electronic data interchange application development, and experiments on the interoperability and suitability for electronic commerce of various networks.</p> | | <p>Electronic Commerce Survey Projects. A survey of 3000 SMEs were taken to assess the take-up of e-commerce. The survey includes recommendations to assist small business in e-commerce.</p> <p><i>Cybernet/INGECEP (Integrated Next Generation Electronic Commerce Environment Project). The project concentrates on providing coherent services to clients both on broadband (IP over ATM) and narrow band (Internet) networks, with a view to filling the gap between large-size enterprises and small/medium size enterprises, and between developed and developing economies. This business project has now included a component concentrating on building consumer confidence finding that, for consumers, it is important to have a single point of contact</i></p> | <p>The survey and its resulting recommendations will foster the uptake of e-commerce among SMEs, the principle mode of enterprise in developing economies.</p> <p>This project aims to help the extension of the global market through the development of new multimedia applications and security systems for electronic commerce.</p> | <p>Further work is being done to reconcile local requirements and global standards as far as possible, for example, in the area of consumer protection, privacy protection, local currency, national language and import/export restrictions and duties. They reported that the interconnection experiments between cyber malls reveal issues including methods of payment, transportation and tracking of products.</p> |

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| <i>Joint Activities/Dialogues (as stated in OAA)</i> | <i>Joint Activities/Dialogues Added Since 1996</i> | <i>Joint Activities/Dialogues Achieved/Completed</i> | <i>Assessment of their effectiveness in attaining sustainable growth and equitable development</i> | <i>Additional steps needed to implement the Joint Activities/Dialogues</i> |
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| | | <p>User convenience calls for a directory service, common interfaces for order placement and payments, and the use of local language, local currency and associated tax and payment systems. An interconnection agreement has been concluded between Japan and Singapore, and extended participation has been invited.</p> <p>Electronic Commerce Seminars. Over 10 years, Asia Oceania Electronic Messaging Association (AOEMA), has conducted fifteen seminars to raise awareness of the benefits of and requirements for electronic</p> | <p>The seminars promote the benefits of e commerce, the uptake of which would benefit SMEs in developing countries.</p> | |

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| | | <p>commerce. These seminars are funded by Japan MPT, and are designed to help SMEs understand the benefits of doing business electronically. AOEMA has continued these seminars in 2000.</p> <p>Internet-Electronic Data Interchange (EDI) Pilot Project. This project aims to promote the growth of commercial (business-business) electronic commerce transactions by evaluating readily available hardware and software to make Internet-EDI easy to implement even for SMEs. The report, <i>APEC EDI Pilot on Electronic Commerce, 1995</i>, is available from the APEC Secretariat (APEC #95-tc-01.1 ISBN 9810067364).</p> | <p>The seminars promote the benefits of e-commerce, the uptake of which would benefit SMEs in developing countries.</p> | |
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| <i>Joint Activities/Dialogues (as stated in OAA)</i> | <i>Joint Activities/Dialogues Added Since 1996</i> | <i>Joint Activities/Dialogues Achieved/Completed</i> | <i>Assessment of their effectiveness in attaining sustainable growth and equitable development</i> | <i>Additional steps needed to implement the Joint Activities/Dialogues</i> |
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| | | <p>Electronic Authentication Task Group. Australia leads a Task Group to review and assemble information about international trends in public administrations regarding electronic authentication. A series of workshops and papers have been produced to assist members and the information is updated on the APEC TELWG web site at http://www.apii.or.kr/telwg/eaTG/eaTG-cont.html.</p> | <p>Research into electronic authentication will aid in the uptake of e-commerce across the economies.</p> | |
| f. Increase cooperation in infrastructure activities between APEC and other | | <p>APBioNet-Asia-Pacific Advanced Network Project (APAN), Singapore. A collaborative project involving 22 participating institutions</p> | <p>Work on the project will increase network infrastructure among the APEC economies which will be vital in narrowing the digital</p> | <p>The project is ongoing.</p> |

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| <p>international institutions and fora.</p> | | <p>from nine member economies. Work will continue to develop high bandwidth connectivity, foster technical co-operation, collaborative work among member economies and collaboration with the private/business sector.</p> | <p>divide.</p> | |
| <p>g. Implement the APII Test-Bed Projects, including the demonstration projects for interoperability and interconnectability, in cooperation with G7 countries.</p> | | <p><i>APII Technology Centre, Japan.</i> Opened in February 1997 at Kansai Advanced Research Centre in Kobe. The major focuses of the Technology Centre are to provide the means for experiments on network interconnectivity and interoperability, applications development and applications experiments; engineer training; and to interconnect testbeds and networks.</p> <p>Collaborative APII-TPII experiments between Japan and Singapore, such as in telemedicine, and between Japan and Korea began in 1998. Of special note are the concentration on multimedia training and an International Symposium on multimedia virtual laboratories.</p> | <p>The development of test-beds is an integral part in facilitating the creation of an Asia Pacific Information Infrastructure (APII) which will enable APEC member economies to benefit from the information economy.</p> | <p>Work on the project is ongoing.</p> |

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| | | <p>APII Test Bed Project for Interconnectivity and Interoperability. The international network has been constructed by international submarine cable between Japan and Korea with 8 Mbps and between Japan and Singapore with 2Mbps. The capacity of network will be expanded permanently.</p> <p>Advanced Satellite Test Bed Project. The aim of the project is to conduct a preliminary study on the role and contribution of satellite communications in constructing high-data-rate communications networks and is in progress.</p> <p>APII Co-operation Centre. The centre opened in October 1996, and is intended to develop co-operative projects focussed on development and support of applications over the APII, R&D activities, and advancement of the Internet as a seamless co-operative platform.</p> <p>APII Symposia developed further suggestions for the role for the APII CC, including serving as the centre of HRD co-operation, expanding private/business sector involvement in APII activities, developing effective management through 'virtual meetings,' to act as an information clearing house, advancing co-operative projects dealing with the Internet, and studying issues which will arise when electronic commerce is implemented internationally.</p> | <p>The development of test-beds is an integral part in facilitating the creation of an Asia Pacific Information Infrastructure (APII) which will enable APEC member economies to benefit from the information economy.</p> <p>Research into satellite technologies facilitates the development of the APII, especially with regards to rural and underserved areas.</p> <p>The facilitation of cooperative projects into the APII has benefited the APEC region as a whole.</p> | <p>The project will be expanded in stages.</p> <p>The project is ongoing.</p> <p>The project is ongoing.</p> <p>Professional exchange program established. Plans underway to train regional telecom and information sector staff.</p> |

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| <p>h. Promote human resources development by means such as holding training courses on privatization and competition in telecommunications and information industries, and working towards a distance learning pilot project for experts in this area.</p> | | <p>Distance Learning Pilot Project. The project is aimed at enhancing the effectiveness of training and education in APEC economies; provide APEC with practical experience on the distance learning activities and explore the feasibility of developing a 'virtual' APEC distance learning network with a permanent Network Administration Centre.</p> <p>Distance Learning Project on Basic Telecommunications Technology. To provide member economies with a chance to participate in a regional technology pool where they can share the necessary knowledge and information on basic telecommunications technology and provide experience in distance learning.</p> <p>Report of Research and Development of Distance Learning System of Human Resources Development in Asia and Pacific Area. This self-financed project involved several technical experiments, which included using caching mechanism to avoid communication congestion problems and long response times, which occur when students try to download teaching materials from the network. This four-year project was completed successfully.</p> <p>HRD/Personnel Exchange Program: Korea provided training courses for 158 persons from various economies under this program.</p> | <p>The project will aid in the provision of education and training to normally inaccessible or unfeasible locations. It will also allow for a greater audience and participation.</p> <p>The project promotes technology sharing and helps in the development of telecommunications.</p> <p>It is aimed at improving the distance learning medium.</p> <p>This is an example of direct HRD training aid delivered to developing countries to foster their HRD development.</p> | <p>The Distance Learning Pilot Project III began in May 2000</p> <p>This project is underway, after an initial survey of demand to determine the requirements.</p> |

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| | | <p>Training Program on Broadband Technologies and Multimedia Applications. This project was completed successfully. Six courses were developed. 37 participants from 10 economies took part in the program. Feedback showed that the course was comprehensive and gave a good overview of the subject matter.</p> <p>Skills Standards Project. The project on skills standards for external plant functions (cabling and connection) was completed. Model framework for the skills standards would be similar to the original design. Participants suggested the project should be linked to other similar projects such as MRA where the skill standards are needed. At the same time, funding needs to be sought to support this project.</p> <p>Symposium on Collaborative Strategies for Multimedia Web Skill Development. This project was designed to share the expertise in multimedia skills development as a first step to mapping out a vision and an action plan for multimedia skills development in APEC member economies. The symposium was held in April 2000 with the report to be circulated.</p> <p>Telecommunication Training Program: APEC Study Centre. This program commenced with a course covering regulation, licensing, universal services and customer education held in Melbourne, Australia, 7-15 February 2000.</p> | <p>It was aimed to address the skill development gap within APEC in the broadband multimedia network and its application issues.</p> <p>This program is aimed to reduce gap in technology and exchange views and experiences.</p> <p>The project promotes multimedia skills development among APEC member economies.</p> <p>The course provided basic telecommunications training, essential to the development of a robust telecommunications industry.</p> | |

8. Tourism

| <i>Joint Activities/Dialogues (as stated in OAA)</i> | <i>Joint Added Since 1996</i> <i>Activities/Dialogues</i> | <i>Joint Activities/Dialogues Achieved/Completed</i> | <i>Assessment of their effectiveness in attaining sustainable growth and equitable development</i> | <i>Additional steps needed to implement the Joint Activities/Dialogues</i> |
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| a. Protect and conserve cultural heritage and natural sites. | <p>The Seoul Declaration on an APEC Tourism Charter, adopted by APEC Tourism Ministers during their First Meeting held in Korea 4-7 July 2000, serves as a statement of Ministerial purposes and intent to further develop the significant contribution tourism makes as a key vehicle for achieving positive cultural outcomes in the APEC Region and for the APEC member economies.</p> <p>APEC Tourism Ministers recognised and valued fostering cross-cultural understanding and well-being within APEC member economies; promoting the development and understanding of local and indigenous cultures, arts and heritage, as well as highlighting the need to preserve the social and cultural fabric and integrity of host communities.</p> | <p>Four Policy Goals were established in the Seoul Declaration on an APEC Tourism Charter. Goal No. 3 is titled 'Sustainably managed tourism outcomes and impacts', and seeks to protect the social integrity of host communities with particular attention to the development of tourism and recognize, respect and preserve local and indigenous cultures together with our natural and national cultural heritage.</p> <p>The APEC TWG completed in 1999 a Project titled 'Community Based Tourism in the Asia-Pacific'. Preservation of the cultural heritage was described as one of the most important facets of community-based tourism development in the APEC Region.</p> <p>Also in 1999, the APEC TWG completed a Project titled 'Best Cases on Tourism and Cultural Festivals in APEC Member Economies'. Best Case Studies were identified and planning, management and promotional methods were shared.</p> | The implementation of the Policy Goals set forth in the Seoul Declaration on an APEC Tourism Charter will assist APEC member economies towards the protection and conservation of their cultural heritage and natural sites. | Individual and Collective Action Plans will be developed by APEC member economies through the APEC TWG and will reference three key delivery dates, as relevant to the respective economy – namely 2005, 2010 and 2020. |
| b. Promote best practice models for environmental and social sustainability in tourism development. | The Seoul Declaration on an APEC Tourism Charter, adopted by APEC Tourism Ministers during their First Meeting held in Korea from 4-7 July 2000, serves as a statement of Ministerial purposes and intent to further develop the significant contribution tourism makes as a key vehicle for achieving positive and sustainable environmental outcomes in the APEC Region. | Four Policy Goals were established in the Seoul Declaration on an APEC Tourism Charter. Goal No. 3 is titled 'Sustainably managed tourism outcomes and impacts', and seeks to demonstrate an appreciation and understanding of our natural environment and seeks to protect it, as well as to foster ecologically sustainable development opportunities across the tourism sector. | The implementation of the Policy Goals set forth in the Seoul Declaration on an APEC Tourism Charter will assist APEC member economies towards the promotion of best practice models for environmental and social sustainability in tourism development. | Individual and Collective Action Plans will be developed by APEC member economies through the APEC TWG and will reference three key delivery dates, as relevant to the respective economy – namely 2005, 2010 and 2020. |

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| | <p>APEC Tourism Ministers recognised and valued tourism development as an important contributor to the APEC member economies' governments' environmental goals. Furthermore, they recognised and valued improving the ability to appreciate and to provide an incentive and vehicle for sustainable management of the natural environment.</p> | <p>Amongst the recent APEC TWG Projects that are related closely to this issue is the 'Exemplary Models in Socially Responsible Tourism Development'; 'Environmentally Sustainable Accommodation for Tourism' and 'Tourism and the Environment Best Practices in APEC Member Economies'.</p> | | |
| <p>c. Expand tools for human resources development.</p> | <p>The Seoul Declaration on an APEC Tourism Charter, adopted by APEC Tourism Ministers during their First Meeting held in Korea 4-7 July 2000, serves as a statement of Ministerial purposes and intent to further develop the significant contribution tourism makes as a key vehicle for achieving positive and sustainable economic outcomes in the APEC Region.</p> <p>Furthermore, APEC Ministers recognised and valued tourism as a major employer of both men and women at all economic levels and a generator of sustainable employment opportunities as well as an important generator of business opportunities for SME's</p> | <p>Four Policy Goals were established in the Seoul Declaration on an APEC Tourism Charter. Goal No. 1 is titled 'Remove impediments to tourism business and investment'. In particular, APEC member economies will seek to achieve this goal by promoting and facilitating the mobility of skills, training and labor.</p> <p>Two APEC TWG Projects have been developed recently in order to achieve the expansion of the tools required for human resources development in Tourism. These are the 'Seminar on the Impediments to Tourism Growth to the APEC Region and Strategies to Overcome Them' and the 'Tourism Occupational Skill Standards Development in the APEC Region: Bridging Project'.</p> <p>In 1996 a Report on <i>Impediments to Tourism Growth in the APEC Region</i> was published and included labor and employment issues. The APEC TWG with the support of the World Travel & Tourism Council have published <i>The Economic Impact of Travel and Tourism Development in the APEC Region</i>.</p> | <p>The implementation of the Policy Goals set forth in the Seoul Declaration on an APEC Tourism Charter will assist APEC member economies towards achieving the expansion of the necessary tools for human resources development in the Region.</p> | <p>Individual and Collective Action Plans will be developed by APEC member economies through the APEC TWG and will reference three key delivery dates, as relevant to the respective economy – namely 2005, 2010 and 2020</p> |

| <i>Joint Activities/Dialogues (as stated in OAA)</i> | <i>Joint Activities/Dialogues Added Since 1996</i> | <i>Joint Activities/Dialogues Achieved/Completed</i> | <i>Assessment of their effectiveness in attaining sustainable growth and equitable development</i> | <i>Additional steps needed to implement the Joint Activities/Dialogues</i> |
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| d. Develop a database of core statistical information and improve the system for exchanging tourism information on a regular basis. | <p>The Seoul Declaration on an APEC Tourism Charter, adopted by APEC Tourism Ministers during their First Meeting held in Korea 4-7 July 2000, serves as a statement of Ministerial purposes and intent to further develop the significant contribution tourism makes as a key vehicle for achieving economic development in the APEC Region.</p> <p>The APEC TWG has been working closely with the World Travel & Tourism Council; Pacific Asia Travel Association and the World Tourism Organization in the exchange of information and travel statistics.</p> | <p>Four Policy Goals were established in the Seoul Declaration on an APEC Tourism Charter. Policy Goal No. 4 is titled 'Enhance recognition and understanding of tourism as a vehicle for economic and social development'. In particular, APEC member economies will seek to achieve this goal by harmonising methodologies for key tourism statistical collections consistent with activities of other international tourism organisations; facilitating the exchange of information on tourism between economies, and expanding the collective knowledge base on tourism issues in order to identify emerging issues.</p> | <p>The implementation of the Policy Goals set forth in the Seoul Declaration on an APEC Tourism Charter will assist APEC member economies towards achieving the development of an APEC database of core statistical information.</p> | <p>Individual and Collective Action Plans will be developed by APEC member economies through the APEC TWG and will reference three key delivery dates, as relevant to the respective economy – namely 2005, 2010 and 2020</p> |
| e. Undertake environmental projects in the tourism area. | <p>The Seoul Declaration on an APEC Tourism Charter, adopted by APEC Tourism Ministers during their First Meeting held in Korea 4-7 July 2000, serves as a statement of Ministerial purposes and intent to further develop the significant contribution tourism makes as a key vehicle for achieving positive and sustainable environmental outcomes in the APEC Region.</p> <p>Furthermore, Ministers recognised and valued the contribution of tourism in particular as an important contributor to the achievement of governments' environmental goals as well as improving our abilities to appreciate and to provide an incentive and a vehicle for sustainable management of our natural environment.</p> | <p>Four Policy Goals were established in the Seoul Declaration on an APEC Tourism Charter. Policy Goal No. 3 is titled 'Sustainably managed tourism outcomes and impacts'. In particular, Tourism Ministers seek to achieve this goal by demonstrating an appreciation and understanding of our natural environment and seek to protect that environment; foster ecologically sustainable development opportunities across the tourism sector, particularly for SME's, and recognize, preserve and protect their natural heritage.</p> <p>Amongst the recent APEC TWG Projects that are related closely to this issue are: 'Exemplary Models is Socially Responsible Tourism Development'; 'Environmentally Sustainable Accommodation for Tourism' and 'Tourism and the Environment: Best Practices in APEC Member Economies'.</p> | <p>The implementation of the Policy Goals set forth in the Seoul Declaration on an APEC Tourism Charter will assist APEC member economies in achieving the development of more environmental projects in the tourism area, with close private/business sector support from the Pacific Asia Travel Association and the World Travel and Tourism Council.</p> | <p>Individual and Collective Action Plans will be developed by APEC member economies through the APEC TWG and will reference three key delivery dates, as relevant to the respective economy – namely 2005, 2010 and 2020</p> |

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| <p>f. Identify impediments to tourism growth and formulate strategies for the improvement of tourism movements and investment in the region.</p> | <p>The Seoul Declaration on an APEC Tourism Charter, adopted by APEC Tourism Ministers during their First Meeting held in Korea 4-7 July 2000, serves as a statement of Ministerial purposes and intent to further develop the significant contribution tourism makes as a key vehicle for achieving positive and sustainable economic outcomes in the APEC Region.</p> <p>Furthermore, Ministers recognised and valued the contribution of tourism as an effective vehicle for dispersing economic benefits within and between economies and a key source of economic demand and growth in demand.</p> | <p>Four Policy Goals were established in the Seoul Declaration on an APEC Tourism Charter. Goal No. 1 is titled 'Remove Impediments to Tourism Business and Investment'. In particular, APEC member economies will seek to achieve this goal by promoting and facilitating the mobility of skills, training and labor; promoting and facilitating productive investment in tourism and associated sectors; removing regulatory impediments to tourism business and investment and encouraging liberalisation of services trade related to tourism under GATS.</p> <p>Goal No. 2 is titled 'Increase Mobility of Visitors and Demand for Tourism Goods and Services in the APEC Region'. In particular, APEC Member Economies will seek to achieve this goal by facilitating seamless travel for visitors; enhancing visitor experiences; promoting inter and intra regional marketing opportunities and cooperation; facilitating and promoting e-commerce for tourism business; enhancing safety and security of visitors and fostering non-discriminatory approach to the provision of visitor facilities and services.</p> <p>Two APEC TWG Projects have been developed recently in order to achieve the expansion of the tools required for human resources development in Tourism. These are the 'Seminar on the Impediments to Tourism Growth to the APEC Region and Strategies to Overcome Them' and the</p> | <p>The implementation of the Policy Goals set forth in the Seoul Declaration on an APEC Tourism Charter will assist APEC member economies towards achieving the identification of impediments to tourism growth and the formulation of strategies for improvements of tourism movements and investment in the region.</p> | <p>Individual and Collective Action Plans will be developed by APEC member economies through the APEC TWG and will reference three key delivery dates, as relevant to the respective economy – namely 2005, 2010 and 2020</p> |

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| | | 'Tourism Occupational Skill Standards Development in the APEC Region: Bridging Project'. | | |
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| | | In 1996 a Report on <i>Impediments to Tourism Growth in the APEC Region</i> was published and included labour and employment issues. The APEC TWG with the support of the World Travel & Tourism Council have published 'The Economic Impact of Travel and Tourism Development in the APEC Region'. | | |
| g. Conduct a dialogue among APEC economies to facilitate and enlarge the roles of the private/business/business sector in tourism development. | The Seoul Declaration on an APEC Tourism Charter, adopted by APEC Tourism Ministers during their First Meeting held in Korea 4-7 July 2000, serves as a statement of Ministerial purposes and intent to further develop the significant contribution tourism makes as a key vehicle for economic and social development. Furthermore, Ministers acknowledged that tourism is a key source of economic demand and growth in demand; a major employer of both men and women at all economic levels and an important generator of business opportunities for SME's, as well as a significant earner of foreign exchange. | <p>The First APEC Tourism Forum was held in Hong Kong, China on 29 April 2000. A Second APEC Tourism Forum will be held during the first semester of 2001 in Kuala Lumpur, Malaysia.</p> <p>Representatives from the Pacific Asia Travel Association (PATA) and the World Travel & Tourism Council (WTTC) have participated in the entire APEC Tourism Charter drafting process and attended the First APEC Tourism Ministerial Meeting to participate in the Informal Discussion Session with Ministers.</p> <p>The WTTC has published Reports that have assisted the APEC TWG in their information gathering process.</p> | | Individual and Collective Action Plans will be developed by APEC member economies through the APEC TWG and will reference three key delivery dates, as relevant to the respective economy – namely 2005, 2010 and 2020. Private/business sector input will be sought to enable the process to have their firm support. |

9. Trade and Investment Data

| <i>Joint Activities/Dialogues (as stated in OAA)</i> | <i>Joint Added Since 1996</i> <i>Activities/Dialogues</i> | <i>Joint Activities/Dialogues Achieved/Completed</i> | <i>Assessment of their effectiveness in attaining sustainable growth and equitable development</i> | <i>Additional steps needed to implement the Joint Activities/Dialogues</i> |
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| a. Develop a Trade and Investment Database (TIDDB), which will include data on international merchandise trade, services trade and investment. | NA | The development of the TIDDB began in 1994 and it was officially released to the public in November 1998. The TIDDB contained data on international merchandise trade, services trade and investment. The Trade and Investment Data Review Working Group (TIDWG) was dissolved in 1998 and the TIDDB was terminated in 1999. | The TIDWG developed the TIDDB. This database had the unique feature of 'standardised' data, which had been adjusted from 'published' data according to several agreed criteria. However, it was difficult to complete the database. The database for merchandise trade was virtually complete in 1998, but less than half of the member economies could supply the standardised data for foreign direct investment and services flow. | NA |
| b. Work towards improving the consistency of data by adopting the latest international standards for compilation of data on international services trade and investment. | NA | The TIDWG sought statistical advice from the IMF, UN Statistical Division, ESCAP and the Foreign Investment Advisory Service. These organisations gave a number of presentations at TIDWG meetings and workshops between 1991 and 1996. | Based on the advice from these international organisations, the TIDWG developed the database which contained 'standardised' data. | NA |
| c. Provide training in the use of the TIDDB system and in the collection, compilation and estimation of data on international services trade and investment. | NA | The TIDWG undertook various work programs to raise awareness of member economies on the international statistical standards, including the presentations by the above-mentioned international organisations at the TIDWG meetings and workshops. | Many member economies' existing data source did not support the various international statistical standards, and in some cases member economies were using alternative data source which were not compatible with the standards. By 1998, most member economies had provided standardised data for merchandise trade. | NA |

10. Trade Promotion

| <i>Joint Activities/Dialogues (as stated in OAA)</i> | <i>Joint Added Since 1996</i> <i>Activities/Dialogues</i> | <i>Joint Activities/Dialogues Achieved/Completed</i> | <i>Assessment of their effectiveness in attaining sustainable growth and equitable development</i> | <i>Additional steps needed to implement the Joint Activities/Dialogues</i> |
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| a. Hold APEC Trade Fairs on a regular basis. | | 1 st APEC International Trade Fair 2 nd : 6-10 June 1997 3 rd : 13-16 November 1998 | <p>The theme of the 2nd Asian-Pacific International Trade Fair was 'Friendship, Cooperation, Development and Prosperity.' It aimed to promote investment and ECOTECH cooperation among APEC members.</p> <p>The 3rd fair focussed on how new technology and skilled manpower contribute to economic development of APEC economies. The theme was 'Enhancing Global Competitiveness Through Technology and Human Resource Development'.</p> <p>Generated immediate business results and provided networking opportunities among the business communities of APEC economies.</p> <p>Each fair was well attended by approximately 17,000 –20,000 visitors.</p> | |
| b. Establish a network among trade promotion organisations in order to enhance linkages and cooperation among them. | | Exchange of Trade Promotion Experts on Development of Local Industries, Trade, and Investment 17-20 February 1998 | <p>Focussing on regional development and the promotion of trade and investment.</p> <p>Designed to introduce APEC economies to the experiences of Japan, to enable them to compare and study different methods, discuss common problems, and learn how to improve their own relevant programs.</p> <p>Attended by 15 participants from 11 APEC economies.</p> | |

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| | Business networking and matching services | <p>Core Characteristics Surveys of APEC Trade Promotion Organisation (An on going project, 1998)</p> <p>APECNet (An On-Going Project, June 1998-now)</p> | <p>APEC Information Center for Trade Promotion website: July 1998</p> <p>Provides all member economies with a clearer understanding of the roles, functions and activities of other trade agencies in APEC.</p> <p>Enhances the ability of member economies to make more informed decisions on necessary changes in improving trade services.</p> <p>Provides business matching services and access to the homepages of 12 member economies' TPOs and international trade-related organisations.</p> | <p>Currently lists 50 trade-promotion measures from eight APEC economies.</p> <p>Access to such information assists businesses and trade promotion organisations (TPOs) in developing trade in the region.</p> |
| c. Improve and convene training courses for the furtherance of trade promotion-related skills, and develop a mechanism for the exchange of trade promotion experts. | | <p>The Seminar on Credit Guarantee System-Trade Financing 17-19 September 1996</p> | <p>Focussed on how to utilise credit guarantee systems to promote development of SMEs and international trade.</p> <p>Provided useful information for those economies which are to establish their own systems.</p> | |

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| | Trade information and business networking | <p><i>Case study on Trade Promotion and Poverty Alleviation</i></p> <p>1 January-31 December 1997</p> <p>The SMEs Market Development Seminar 20-21 August 1997</p> <p>Facilitation of Strategic Alliances Among Enterprises in APEC Region</p> <p>April 1997-1998</p> <p>(The Strategic Alliance and Technology Transfer Conference, October and November 1997)</p> <p>Trade and Investment Insurance Training Program-1997</p> <p>Program I: 3-13 June</p> <p>Program II: 1-10 September</p> <p>Program III: 21-30 October</p> <p>Program IV: 3-15 November</p> <p>Program V: 11-19 December</p> | <p>The study of the relationship between trade development and poverty alleviation in Yunnan Province, China, confirms the significant role of trade in raising productivity in rural areas and developing market-oriented economy.</p> <p>Provided valuable findings and suggestions to APEC members regarding alleviation of poverty through various measures, such as human resources development, improving information services and international cooperation.</p> <p>Provided the participants with insight into the trade and investment issues faced by SMEs in external trade and investment.</p> <p>Strengthened the exchange of information on raw materials, production know-how, and marketing strategies among enterprises within the Asia-Pacific region.</p> <p>Fostered business links and networks within member economies.</p> <p>A joint network project under the APEC HRD WG.</p> <p>Developed human resource skills in trade and investment insurance.</p> <p>Attended by 160 participants from 12 APEC member economies that work with export credit agencies.</p> | |

| <i>Joint Activities/Dialogues (as stated in OAA)</i> | <i>Joint Activities/Dialogues Added Since 1996</i> | <i>Joint Activities/Dialogues Achieved/Completed</i> | <i>Assessment of their effectiveness in attaining sustainable growth and equitable development</i> | <i>Additional steps needed to implement the Joint Activities/Dialogues</i> |
|--|--|--|---|--|
| | | <p>APEC International Trade Promotion Skills Training Program 27-29 July 1998</p> <p>Logistics Management Seminar 27-29 April 2000</p> <p>Training for Building Marketing Strategy Skill 19-23 June 2000</p> | <p>Enhanced trade promotion capabilities and skills.</p> <p>Attended by a total of 64 representatives from 13 member economies.</p> <p>Illustrated the key roles and elements of logistics in global competition with the advent of e-commerce.</p> <p>Provided up-to-date information on logistics management skills and technology which helps future policy-making for public sectors</p> <p>Explored the potential opportunities for regional cooperation</p> <p>Enhanced marketing skills and expertise to enable participants to adapt to the fast changing global trading environment.</p> <p>Attended by over 100 participants from public and private/business sectors of member economies</p> | |

11. Marine Resource Conservation (MRC)

| <i>Joint Activities/Dialogues (as stated in OAA)</i> | <i>Joint Activities/Dialogues Added Since 1996</i> | <i>Joint Activities/Dialogues Achieved/Completed</i> | <i>Assessment of their effectiveness in attaining sustainable growth and equitable development</i> | <i>Additional steps needed to implement the Joint Activities/Dialogues</i> |
|---|--|--|---|--|
| <p>a. Make recommendations on related policies, standards, certification, regulatory requirements, conformance assurance and other areas.</p> | <p>Draft strategy for a Virtual Task Force on Destructive Fishing Practice</p> <p>Management of Red Tide and Harmful Algal Blooms in the APEC region.</p> <p>Assessment of the Environmental Safety of Aquaculture Farms using Biochemical Indicators of Distress</p> <p>Conference on Sustainability of the Marine Environment: What can the private/business sector do? and Round Table 'Action Strategies and Work Programs for Public-Private/Business Sector Partnership on Sustainability of the Marine Environment'</p> <p>Workshop on the development of APEC Mechanisms for Integrated coastal Management</p> <p>Development and Validation of Analytical methods, Standards and Reference Materials for Seafood Product Safety and Certification</p> <p>Workshop on assessing and Maintaining the Integrity of Existing offshore oil and gas infrastructure.</p> | <p>A draft outline of an APEC strategy on Destructive Fishing Practice was developed, jointly through the FWG and MRCWG.</p> <p>Assessment of the Environmental Safety of Aquaculture Farms using Biochemical Indicators of Distress</p> <p>Conference on 'Sustainability of the Marine Environment: What Can the Private/Business Sector Do? and Round Table 'Action Strategies and Work Programs for Public-Private/Business Sector Partnership on Sustainability of the Marine Environment'</p> <p>Workshop on the Development of APEC Mechanisms for Integrated coastal Management</p> | <p>Recommends legislative and regulatory mechanism to control destructive fishing practice</p> <p>Establishes the scientific and regulatory infrastructure sufficient to certify seafood products are safe with respect to algal toxins, using procedures and standards that are acceptable to all economies in the region</p> <p>Supports agencies dealing with fishery management, coastal environment and coastal zone management.</p> <p>Makes recommendations on:</p> <ul style="list-style-type: none"> • Facilitating the involvement of private/business sector in marine resource conservation • Networking the Ocean industries and NGOs within the APEC • Domestic policies and mechanism for developing ocean industries <p>Develops a new mechanisms that can coordinate the international activities relevant to integrated coastal Management</p> <p>Facilitates trade of seafood products among APEC economies and protect public health</p> <p>Enhances the ability of the APEC economies to address the safety and environmental issues related to aging or damaged offshore oil and gas structure</p> | |

| <i>Joint Activities/Dialogues (as stated in OAA)</i> | <i>Joint Activities/Dialogues Added Since 1996</i> | <i>Joint Activities/Dialogues Achieved/Completed</i> | <i>Assessment of their effectiveness in attaining sustainable growth and equitable development</i> | <i>Additional steps needed to implement the Joint Activities/Dialogues</i> |
|--|--|--|---|--|
| b. Improve the flow of information on marine resource management and conservation. | Ocean model and information system for the APEC region Ocean research network for the Pacific Workshop on the Development of APEC Mechanisms for Integrated coastal Management | | Develops and apply ocean information systems to policy making for marine resources conservation Builds a network of centres of excellence in ocean and coastal research and related technology Shares information and knowledge of integrated coastal management among APEC economies | |
| c. Provide guidance on management of critical areas of their coastal zones, and also on development of effective communication, information exchange and planning mechanisms by 1998. | Workshop on the Development of APEC Mechanisms for Integrated Coastal Management | | Establishes an appropriate mechanism to coordinate APEC integrated coastal management efforts | |
| d. Assess structural barriers to the conservation and sustainable development of marine resources, set priorities for action and develop an action framework by 1999. | Workshop on the Development of APEC Mechanisms for Integrated Coastal Management | | Reviews and assesses integrated coastal management policies and programs currently in place in member economies at international and regional level. Discusses and develop strategies for integrated coastal management | |
| e. Conduct policy dialogue to share scientific and technical information to identify and assess environmental issues, and to develop practical, action-oriented approaches to maintaining the quality of the marine environment. | Workshop on the Development of APEC Mechanisms for Integrated Coastal Management | Workshop on the development of APEC Mechanisms for Integrated Coastal Management | Reviews and assess integrated coastal management policies and programs currently in place in member economies at international and regional level. Discusses and develops strategies for integrated coastal management | |

| <i>Joint Activities/Dialogues (as stated in OAA)</i> | <i>Joint Activities/Dialogues Added Since 1996</i> | <i>Joint Activities/Dialogues Achieved/Completed</i> | <i>Assessment of their effectiveness in attaining sustainable growth and equitable development</i> | <i>Additional steps needed to implement the Joint Activities/Dialogues</i> |
|--|---|--|---|--|
| | Workshop on Decommissioning Offshore Oil and Gas Platforms. | | Exchanges information on the decommissioning of existing offshore oil and gas platforms. Identifies a series of actions that individual APEC economies could undertake to address this issue | |

12. Fisheries

| <i>Joint Activities/Dialogues (as stated in OAA)</i> | <i>Joint Activities/Dialogues Added Since 1996</i> | <i>Joint Activities/Dialogues Achieved/Completed</i> | <i>Assessment of their effectiveness in attaining sustainable growth and equitable development</i> | <i>Additional steps needed to implement the Joint Activities/Dialogues</i> |
|---|---|---|--|--|
| a. Hold a conference on the quality and safety of fisheries products. Technical Conference on Quality and Safety of Fishery Products FWG04/96 | The objective of the conference was to develop fish processing and quality control measures carried out by members and exchange new development technology for further upgrading of the fisheries industry in the region. | The 'Technical Conference on Quality and Safety of Fishery Products' was held in Bangkok, Thailand, on 28-31 October 1997. Proceedings of the conference have been published. | The conference was a success and resulted in the implementation of a program of HACCP workshops held in a number of member countries. (See below) | Activity Completed |
| b. Compile a profile of agencies involved in fisheries in APEC. Inventory of Fisheries Administrations and Organisations FWG01/96 | The objective was to provide basic information on fisheries administrations and organisations in APEC member economies. | The inventory was published in November 1997 and has been distributed to member economies. | The project met objectives and resulted in the dissemination of national and international fisheries agency information to member countries. | Activity Completed |
| c. Improve seafood inspection regimes. Moving Towards Improved Seafood Inspection Regimes (phase I) FWG02/96 | Project aimed to establish a program of regional training in Hazard Analysis and Critical Control Points (HACCP) for member economies. | Six workshops were held in 1997 in Indonesia, Papua New Guinea, Thailand, Mexico, Chile and China under Phase I of the project. | The six workshops were effective in raising awareness of HACCP issues and led to the development of a further implementation phase of the project to be undertaken in 1997. (See below) | Activity Completed |
| d. Gather and analyse information on supply and demand trends relating to fisheries trade. Discussion paper on Supply/Demand projections for fish products | This paper was partly developed as a means of providing input to the Economic Committee's Taskforce on Food, who were preparing a report on future projections on demand for food within Asia-Pacific region. | Discussion paper was circulated at FWG8 and preliminary comments sought from member economies. Paper was tabled at FWG9. The FWG did not provide comment on this discussion paper. | FWG had limited input into this project. | Activity Completed. |
| e. Encourage the use of HACCP (Hazard Analysis and Critical Control Points). Moving Towards Improved Seafood Inspection Regimes (phase II) (FWG01/97) | US proposed second phase of project provided on-site in-plant training in HACCP procedures. | The trainers US, Canada and Australia completed HACCP sessions in Indonesia, PNG, China, Korea, Mexico and Chile. A report was presented to the FWG9 meeting. Completed in 1998. | The project was successful in providing practical application of HACCP procedures in-country, on-site across six countries. It adopted the 'train the trainer' process and placed emphasis upon practical implementation and monitoring of HACCP plans in production facilities. | Activity Completed. |

| <i>Joint Activities/Dialogues (as stated in OAA)</i> | <i>Joint Activities/Dialogues Added Since 1996</i> | <i>Joint Activities/Dialogues Achieved/Completed</i> | <i>Assessment of their effectiveness in attaining sustainable growth and equitable development</i> | <i>Additional steps needed to implement the Joint Activities/Dialogues</i> |
|--|---|--|---|---|
| <p>f. Promote cooperation in resolving resource management issues.</p> <p>Collaborative APEC Grouper Research and Development Network (FWG 01/99)</p> | <p>This project aims to develop a regional collaborative approach towards research into the culture of live reef fishes, focussing on the development of a research network for grouper aquaculture, development of regional research priorities for species research and food safety and quality issues relevant to the use of destructive fishing practices in live reef fisheries.</p> | <p>Progress reports have been submitted by the contractor and found to be satisfactory. The Fry/Fingerling Survey which is part of the project is currently being conducted and due to finish in August. The contractor has sought information on FWG activities in respect of current activities regarding sustainable use of fry/fingerlings of groupers in SE Asia.</p> | <p>The project has led to the development of a regional research network including the development of linkages between APEC and the NACA, the pre-eminent aquaculture forum in the region. It is anticipated that the project's remaining objectives will be realised during the second phase, which was endorsed by BMC during their July meeting.</p> | <p>This project is progressing as planned and an evaluation of this phase was submitted to FWG 11 in July.</p> <p>The second phase of the project will commence in the latter half of 2000.</p> |
| <p>g. Promote harmonised standards for fisheries products.</p> <p>Fish Inspection Systems of ANZEC (FWG 03/96)</p> | <p>The project provided up-to-date information and training on regulations and standards of fish products. It also provided opportunities to clarify and discuss how to meet standards and regulations.</p> | <p>The workshop was held in Bangkok, Thailand on 3-7 November 1997 and was attended by 51 participants from nine economies.</p> | <p>The workshop focussed on providing details on import and export regulations, standards for fish and fishery products and new initiatives by Australia and New Zealand in import inspection systems and procedures for recognition of equivalency of inspection systems of trading partners. The workshops findings were published in 1998.</p> | <p>Activity Completed.</p> |
| <p>h. Consider applying economic instruments to address environmental and resource management challenges.</p> <p>Trade and Investment Liberalisation in Fisheries</p> | <p>This project consists a self-funded multi-year fisheries sector trade studies program. It is seeking to gather and analyse up-to-date and accurate information in relation to tariff and trade data, non-tariff measures (NTMs), investment and subsidies.</p> | <p>The tariffs element was completed in 1999 and tariff rates for all economies were circulated for information. (See project below)</p> <p>The NTMs element is partly completed, it was agreed that the project coordinator would consult with individual economies that had not yet responded.</p> <p>The subsidies element is likely to be reviewed in light of the outcomes of the EVSL-initiated subsidies project.</p> | <p>The completed reports are of benefit to fishing industries, government policy makers and academic institutions. They are also of use to other international organisations and fora including the FAO, OECD and WTO.</p> | <p>This Project is self-funded and ongoing.</p> |

| <i>Joint Activities/Dialogues (as stated in OAA)</i> | <i>Joint Added Since 1996</i> <i>Activities/Dialogues</i> | <i>Joint Activities/Dialogues Achieved/Completed</i> | <i>Assessment of their effectiveness in attaining sustainable growth and equitable development</i> | <i>Additional steps needed to implement the Joint Activities/Dialogues</i> |
|--|---|---|--|--|
| <p>i. Collect and analyse information on sector specific barriers to trade including tariff and non-tariff measures and administrative barriers.</p> <p>Free Trade and Investment in the Fisheries Sector of the Asia-Pacific Region: Economic Analysis of Tariffs (FWG 02/98T).</p> | <p>The objective of the study was to prepare a report which fairly assesses the qualitative and quantitative economic impacts of tariff removal in the fisheries sector in the Asia-Pacific region. It also informed APEC members of the net economic benefits associated with trade liberalisation in this sector.</p> | <p>The study facilitated the preparation of a report which assessed the qualitative and quantitative economic impacts of tariff removal in the fisheries sector in the Asia-Pacific region. It was completed during 1999, however concerns were expressed that member economies comments were not incorporated into the final text. This discrepancy is yet to be resolved.</p> | <p>The resultant report will be of benefit to fishing industries, government policy makers and academic institutions. It will also provide a useful document for related work in other international organisations and fora including the FAO, OECD and WTO.</p> | <p>Report will be finalised during the second half of 2000.</p> |

13. Agricultural Technology

| <i>Joint Activities/Dialogues (as stated in OAA)</i> | <i>Joint Activities/Dialogues Added Since 1996</i> | <i>Joint Activities/Dialogues Achieved/Completed</i> | <i>Assessment of their effectiveness in attaining sustainable growth and equitable development</i> | <i>Additional steps needed to implement the Joint Activities/Dialogues</i> |
|--|---|---|--|---|
| a. Promote the exchange of plant and animal germplasm by, for instance, establishing a network of germplasm-related information by 1997. | Collaborate on the collection of information on plant and animal genetic resources Develop genetic resource databases Exchange and safe storage of the genetic resource materials. | A workshop on conservation and utilisation of plant and animal genetic resources was held in Chinese Taipei in March 1997. A workshop on conservation and utilisation of farm animals and aquatic genetic resources was held in Chinese Taipei in November 1998. | Cooperation for the conservation and utilisation of genetic resources is worth continuing. These two workshops potentially helped to promote the exchange of plant and animal germplasm. | A workshop on genetic resources will be held towards the end of October 2000. A workshop on genetic information management system will be held in October 2001. An APEC booklet on indigenous animals and their implication for local agricultural practices will be published. |
| b. Enhance biotechnology research and development by, for instance, establishing a database on expertise by 1997. | Exchange of information in areas of agricultural biotechnology research, technology transfer, biosafety systems, the interface between public and commercial aspects and public perceptions, Intensifying science based approaches to the introduction and use of biotechnology products. | A workshop was held in Australia in March 1997. A biotechnology risk assessment workshop was held in USA in March 1998. A workshop on capacity building, risk communication and public acceptance was held in Malaysia in November 1998. BioNet, an information network covering biotechnology, has been placed on the ATCEG homepage. | Cooperation activities in the area of biotechnology are worth continuing and need to implement the ATCEG Biotechnology Report. These three workshops and the database(BioNet) helped promote the exchange of information in the area of agricultural biotechnology. | An outcome-oriented workshop on agricultural biotechnology, will be held in October 2000 and some time in 2001. |
| c. Promote marketing and processing of agricultural products by, for instance, collecting and exchanging information on technical cooperation capacities and requirements by 1996. | Promote development of supermarket/cold-chains and related distribution systems Promote improvement of post-harvest and food processing technologies Promote harmonisation of grade standards, requirements and regulations | A cold-chain conference was held in Hong Kong, China in 1996. The US surveyed member economies' interest in workshops and training activities. | Cooperation in marketing and processing of agricultural products is worth continuing. Ways to cooperate in this area need to be identified. | A workshop will be held by the end of March 2001 on the exchange of information on agricultural production and any factors that can affect it, food consumption, trade stock level, related policies, and the effect of economic development on the agricultural sector, including exchange of information on adverse climatic events and/or general climatic trends. |

| <i>Joint Activities/Dialogues (as stated in OAA)</i> | <i>Joint Activities/Dialogues Added Since 1996</i> | <i>Joint Activities/Dialogues Achieved/Completed</i> | <i>Assessment of their effectiveness in attaining sustainable growth and equitable development</i> | <i>Additional steps needed to implement the Joint Activities/Dialogues</i> |
|--|---|---|--|---|
| | Exchange information on agricultural production and any factors that can affect it, food consumption, trade stock level, related policies, and the effect of economic development on the agricultural sector, including exchange of information on adverse climatic events and/or general climatic trends. | | | |
| d. Strengthen regional cooperation in plant and animal quarantine and pest management through, for instance, the establishment of an information network. | <p>Establish an information network system for the exchange of quarantine and pest management information</p> <p>Conduct a joint survey of diseases and pests likely to cross common boundaries within the region</p> <p>Identify technical expertise in key areas and transfer of technology and information.</p> | <p>A Plant Pest Risk Assessment workshop was held in March 1998 by USA.</p> <p>A workshop on phytosanitary risk analysis was held in Australia in June 1999.</p> <p>A workshop focussing on animal health related risk assessment was held in Australia in April 2000.</p> <p>A workshop on alternative quarantine treatments and post-harvest handling methods was held in USA in May 2000.</p> | <p>Cooperation in plant and animal quarantine and pest management is worth continuing.</p> <p>These workshops helped strengthen regional cooperation in plant and animal quarantine and pest management.</p> | |
| e. Promote cooperation in the development of agricultural finance systems through, for instance, the exchange of information and experts among APEC economies by 1997. | <p>Update the information on agricultural finance systems that is available on the internet</p> <p>Organise a training course</p> <p>Initiate study missions to member economies that sustain sound farm credit systems</p> <p>Send an Ad-hoc advisory group to selected economies to assist in undertaking major institutional improvements in their farm credit systems</p> | <p>A seminar on agricultural finance system was held by Japan and Chinese Taipei in March 1997.</p> <p>A workshop of risk assessment on agricultural finance system was held in Japan in March 1998.</p> <p>A database of the coordinators, consultants and experts of the member economies was installed on the ATCEG homepage.</p> <p>A database of training opportunities in agriculture finance has been established.</p> | <p>Cooperation in the development of agricultural finance systems is worth continuing.</p> <p>These activities helped promote cooperation in the development of agricultural finance systems.</p> | A three-year training course on agricultural finance will begin in Japan in September 2000. |

| <i>Joint Activities/Dialogues (as stated in OAA)</i> | <i>Joint Activities/Dialogues Added Since 1996</i> | <i>Joint Activities/Dialogues Achieved/Completed</i> | <i>Assessment of their effectiveness in attaining sustainable growth and equitable development</i> | <i>Additional steps needed to implement the Joint Activities/Dialogues</i> |
|--|--|---|--|--|
| <p>f. Promote technology transfer by, for instance, identifying areas of common interest by 1996.</p> <p>g. Promote agricultural technical training by, for instance, establishing training programs and information assistance for electronic dissemination by 1998.</p> <p>Note</p> <p>f and g treated as one item by ATCEG</p> | <p>Exchange of information on agricultural technology transfer and training among member economies.</p> <p>Establish a network to improve information sharing</p> <p>Implement technology transfer and training activities</p> <p>Identify common interests and priority subjects</p> <p>Develop a joint research and training program</p> | <p>A workshop on agricultural technology transfer and training was held in Indonesia in January 2000.</p> | <p>Cooperation in technology transfer and technical training is worth continuing.</p> <p>Ways to cooperate in this area need to be identified.</p> | <p>A workshop or seminar will be planned towards the end of 2000 or in early part of 2001.</p> |

ANNEX 11

Agenda for S&T Industry Cooperation – Definitions

APEC AGENDA FOR SCIENCE AND TECHNOLOGY INDUSTRY COOPERATION INTO THE 21ST CENTURY

DEFINITIONS

These definitions relate to the elements of the *APEC Agenda for Science and Technology Industry Cooperation into the 21st Century* analysed in Chapter 5 of this report:

- **Private/business sector involvement:** ECOTECH project records include an indication of whether the private/business sector is involved in the project.
- **Gender and S&T:** projects which are targeted clearly at enhancing the involvement of women in S&T.
- *Mechanism 1: Improved availability of, and access to, information*
 - **Systems to facilitate information access and communication among APEC fora and all sectors of APEC member economies, including SMEs and relevant private/business sector organisations and NGOs**
 - **Member economies commit to collecting, standardising and disseminating the statistics and information necessary for policy makers and the private/business sector**
 - **Interoperability of information exchanged through networks**
 - **S&T databases and information on technology management practices**
- *Mechanism 2: Improved human resource development*
 - **Creative scientific and technical men and women**
 - **Develop the full spectrum of human resources relevant to industrial science, engineering and technology including management, research and development and users**
 - **Facilitate regular exchange of scientists engineers and technologists among APEC economies, including strengthening efforts on mutual recognition of professional qualifications**
 - **Role of the private/business sector in enhancing the human resources of SME**
- *Mechanism 3: Improved business climate:*
 - **Open business climate, a consistent, transparent and timely legal framework**
 - **Including but not limited to: IP rights, standards and metrology, safety assurance, investment and financing including development of venture capital markets, joint venture operations, environmental protection and researcher mobility**
 - **The promotion of entrepreneurship**
- *Mechanism 4: Enhanced policy dialogue and review*
 - **Share information on efficiency and effectiveness of alternative policy and programme approaches, including use of foresight methodologies**
 - **Dialogues among ministers and among APEC officials and private/business sector entities concerned with strengthening science and technology industry cooperation**

- *Mechanism 5: Facilitate networks and partnerships*
 - **Review initiatives and processes and establish new ones as needed to catalyse the creation of S&T networks and partnerships and to encourage cooperative R&D projects**
 - **Encourage synergistic and complementary flows of technology among partnerships and networks of private companies, non-governmental entities and the public sector**
 - **Develop new initiatives including common use of large scale facilities**

ANNEX 12

Revised ECOTECH Weightings Matrix

ECOTECH Weightings Matrix [enter project number and title]

| <i>Criteria</i> | Supporting Information <i>(indicate paragraph number if details are in project proposal)</i> | Linkage 1 point for each |
|---|--|---|
| Responds to a <u>specific</u> instruction from Leaders/Ministers ¹ | | |
| Meets a core ECOTECH theme under the <i>Manila Declaration</i> ¹ | | |
| Responds to the Common Policy Concepts, Activities and Dialogues identified in Part II of the <i>Osaka Action Agenda</i> ¹ | | |
| Responds to a <u>specific</u> ECOTECH Initiative ² | | |
| Improves skills, including in new technologies | | |
| Builds capacity and strengthens institutions | | |
| <u>Measurably</u> improves economic efficiency/performance ³ | | |
| Is of <u>practical</u> benefit to the private/business sector; has private/business sector <u>participation</u>; and/or <u>funding</u> ⁴ | | |
| Assists economies attain sustainable growth and equitable development, while reducing economic disparities among APEC economies and improving economic and social well-being | | |
| Supports a TILF objective, as laid down in Part I of the <i>Osaka Action Agenda</i> ¹ | | |
| Disseminates information including through seminars/websites/databases | | XXXXXXXXXXXXXXXX |
| Outline the <u>outcome</u> and how members will benefit | | XXXXXXXXXXXXXXXX |
| | II. Net Score | |

Footnote

- ¹ Identify which instruction/ECOTECH theme/OAA element.
² See <http://www.apcsec.org.sg/ecotech/index.html>
³ Policy outcomes that include development of energy efficiency guidelines, food safety standards etc
⁴ One point for each element up to a maximum of 3 points.

Remarks (Please indicate if not applicable e.g., for TILF projects. Additional information in support of projects which do not score highly may also be provided here by the Lead Shepherd/Chair).

ANNEX 13

Glossary

GLOSSARY

| | |
|----------------|---|
| ADB | Asian Development Bank |
| APERC | Asia Pacific Energy Research Center |
| APIAN | Asia Pacific International Assessment Network |
| APII | Asia Pacific Information Infrastructure |
| ASC | APEC Study Centers |
| AST | APEC Science and Technology |
| ATCEG | Agriculture Technical Cooperation Experts Group |
| BMC | Budget and Management Committee |
| CAP | Collective Action Plan |
| CTI | Committee on Trade and Investment |
| EBN | EWG Business Network |
| EC | Economic Committee |
| ECOTECH | Economic and Technical Cooperation |
| EDI | Electronic Data Interchange |
| EMEAP | Executives' Meeting of East Asia-Pacific Central Banks |
| ESC | ECOTECH Sub-committee |
| EVSL | Early Voluntary Sectoral Liberalisation |
| EWG | Energy Working Group |
| FEEEP | Impact of Expanding Population and Economic Growth on Food, Energy and the Environment |
| FWG | Fisheries Working Group |
| GEASA | Group of Experts on Aviation Safety and Assistance |
| GOS | Group on Services |
| HRD | Human Resource Development |
| HRDWG | Human Resource Development Working Group |
| IAP | Individual Action Plan |
| ICT | Information and Communication Technology |
| IEG | Investment Experts' Group |
| IEGBP | Informal Experts' Group on the Mobility of Business People |
| IPO | Intellectual Property Office |
| ISTWG | Industrial Science and Technology Working Group |
| IVANS | International Value-added Network Services |
| IWS | Infrastructure Workshop |
| KBE | Knowledge-based Economies |
| LMI | Labour Market Information |
| MRA | Mutual Recognition Arrangement |
| MRCWG | Marine Resources Conservation Working Group |
| NTM | Non-Tariff Measure |
| OAA | Osaka Action Agenda |
| OECD | Organization for Economic Cooperation and Development |
| PATA | Pacific Asia Travel Association |
| PECC | Pacific Economic Cooperation Council |
| PLGSME | Policy Level Group on Small and Medium Enterprises |
| RGC | Regional Growth Centre |
| RISE | Regional Integration for Sustainable Economies |
| RTA | Regional Trading Agreement |
| SCCP | Sub-committee on Customs Procedure |
| SCSC | Sub-committee on Standards and Conformance |
| SEO | Senior Economic and Environmental Official |
| SME | Small and Medium Enterprises |
| SOM | Senior Officials' Meeting |
| SPAN | Integrated Plan of Action for SME Development |
| TELWG | Telecommunications Working Group |
| TIDDB | Trade and Investment Database |
| TIDWG | Trade and Investment Data Review Working Group |

| | |
|--------------|---|
| TILF | Trade and Investment Liberalization Fund |
| TPM | Total Productive Maintenance |
| TPOs | Trade Promotion Organizations |
| TPTWG | Transportation Working Group |
| TWG | Tourism Working Group |
| VAP | Voluntary Action Plan |
| WGTP | Trade Promotion Working Group |
| WTO | World Trade Organisation |
| WTTC | World Travel and Tourism Council |