

**APEC Senior Officials**

**1999 Report on  
Economic and Technical Cooperation  
to the Eleventh Ministerial Meeting**

**Asia-Pacific Economic**

**Auckland, New Zealand**



**Cooperation**

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# 1999

## SOM REPORT ON ECONOMIC AND TECHNICAL COOPERATION TO THE ELEVENTH MINISTERIAL MEETING

### EXECUTIVE SUMMARY

In 1998, Ministers welcomed the Senior Officials' Meeting (SOM) 1998 Report on Economic and Technical Cooperation (ECOTECH) activities and called for the report to be submitted annually. The focus of this year's report is on enhancing coordination of ECOTECH activities and improving the effectiveness of economic and technical cooperation activities.

The 1999 report is presented in 8 parts with 18 annexes. Part 1 is the Introduction. Part 2 highlights the evaluation of the ECOTECH projects/activities implemented in 1999. Part 3 discusses how to improve coordination of ECOTECH activities within the APEC fora and participating economies according to the six priority themes of the Manila Framework. Part 4 describes the projects/activities that flowed from initiatives endorsed by Leaders in Kuala Lumpur in 1999, especially the Kuala Lumpur Action Plans in Skills Development and the APEC Agenda for Science and Industrial Technology for the 21st Century. Part 5 reviews the implementation of the Guidance on Strengthening Management of APEC ECOTECH activities by APEC fora including the Secretariat. Part 6 discusses the new SOM Subcommittee on ECOTECH (ESC) initiatives of evaluation of ECOTECH projects for ESC/Budget and Management Committee's (BMC) consideration and enhances ECOTECH information flow. Part 7 illustrates on the Self-Review of Working Groups, Agriculture Technical Cooperation (ATC), and Policy Level Group on Small and Medium Enterprises (PLGSME) while the conclusion is in part 8.

The report highlights the following:

- The ESC with assistance from the APEC Secretariat, conducted an initial evaluation of 250 ECOTECH projects/activities underway or reaching completion in 1999. The raw material for the evaluation was the information on ECOTECH activities stored in the APEC Secretariat database, program directors' knowledge about projects and project progress reports. Among other results, the evaluation showed that most of the projects benefited the fora, lead and participant economies.
- The ESC monitored the implementation of the projects/activities that flowed from initiatives endorsed by the Leaders in Kuala Lumpur in 1999, especially the Kuala Lumpur Action Plans in Skills Development and the implementation of the APEC Agenda for Science and Industrial Technology for the 21st Century.
- The ESC established a system of focal points (coordinators) to review progress in the implementation of the six priority ECOTECH themes under the 1996 Manila Declaration. In 1999, the ESC focused on the themes of "developing human capital", "harnessing technologies for the future" and followed by the themes of "strengthening economic infrastructure" and "strengthening the dynamism of SMEs". Further coordination papers were prepared on "safeguarding the quality of life through environmentally sound growth" and "developing sound,

safe and efficient capital control”. The coordinating papers surveyed the work being done across APEC fora on those themes and made a series of recommendations to improve coordination, avoid duplication, fill gaps and increased public awareness of APEC activities.

- SOM I in Wellington reiterated the importance of the guidance on strengthening management of APEC ECOTECH activities and urge all APEC fora, including CTI, BMC and the Secretariat to take the guidance into consideration when developing and approving new ECOTECH projects. Rigorous implementation of the guidance will enhance the quality of APEC’s ECOTECH work and help to realize the objectives of 1996 Manila Declaration on Strengthening Economic Cooperation and Development. It is quite clear that most fora have operationalized the emphasis in the guidance on “focused action-oriented outcomes” and worked “together with business representatives to set priorities and develop collective work plans of the fora.” The ESC monitored the implementation of the guidance by APEC for a and collected information from the relevant fora on the progress made.
- The ESC developed a “weightings matrix” to assist the BMC in assessing ECOTECH projects proposals. Currently, most ECOTECH project proposals are submitted to the BMC through the APEC fora, which ranks its own project proposals in order of priority. The BMC then considers these separate sets of proposals along with those from the CTI, EC and others. It would be useful for working groups and fora to use the matrix to ensure that projects have merits and focussed outcomes. The ESC will monitor the operation of the system through considering a sample of weighted matrix.
- The ESC recognized the need to enhance information flows between the identification of ECOTECH “needs” and the capacity to provide appropriate expertise. The objective is to strengthen coordination and further improve the effectiveness of economic and technical cooperation activities, and to avoid duplication of ECOTECH activities in APEC. The ESC envisaged the establishment of a mechanism that would be dynamic and on-going, that would serve as a “Clearing House” for the matching of economy “needs” and “capacities” to respond to those needs. The concept of the “Clearing House” is responsive to Leaders and Ministers’ priorities of strengthening the coordination of ECOTECH agenda, and improving the effectiveness of economic and technical cooperation activities. The ESC agreed to request SOM 3 to agree that the establishment of the “Clearing House” should be included among recommendations submitted to Leaders and Ministers in September. Assuming that Leaders/Ministers endorse the establishment of the “clearing house”, the specific project proposal would be included among the urgent initiatives emerging from the Auckland Leaders and Ministers meeting. Approval for 2000 funding for these urgent initiatives would be sought inter-sessionally from the BMC (and subsequently the SOM) after September. Subject to approval by BMC/SOM, funding would be available for implementation of the project to commence on 1 January 2000.
- The ESC received a full compilation of self-reviews by the working groups, including the ATC and PLG SMEs with the view to providing policy comments to SOM. It is observed that all the self-review of the relevant fora are consistent with the common guidelines for self-review approved by APEC Ministers. Most of the APEC fora have complied with the objectives of Part 2 of the Osaka Action Agenda, which contains the essential elements of economic and technical cooperation. The Working Groups, ATC, SME PLG have also complied with the



Manila Framework Declaration for Strengthening Economic Cooperation and Development. The ESC has submitted its comments on policy aspects of the relevant fora's self reviews to the SOM.

The ESC will continue to assist the SOM in coordinating and managing APEC's ECOTECH agenda, as well as identifying value-added initiatives for cooperative action. The ESC will 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 that benefits all member economies. There has been criticism from time to time from some quarters over the quality of ECOTECH projects and the relative priority being accorded to the Trade and Investment Liberalization and Facilitation (TILF) in comparison with ECOTECH. The ESC believe that APEC is increasing its emphasis on ECOTECH as much as its focus on TILF. The 250 projects currently in progress represent a significant body of work. More efforts should be devoted to publicizing ECOTECH activities and achievements since much of this work is not well known beyond the relevant working groups.

**1999**  
**SOM REPORT ON ECONOMIC AND TECHNICAL**  
**COOPERATION**  
**TO THE ELEVENTH MINISTERIAL MEETING**

**4 INTRODUCTION**

APEC Economic Leaders, at their first meeting at Blake Island, envisioned a community built upon cooperation in the region. This vision was further articulated by the Leaders' call in Bogor to intensify development cooperation, stressing the importance of economic and technical cooperation in APEC for the attainment of sustainable growth, equitable development, reducing economic disparities among members, and improving the economic and social well-being of the people in the region. Built upon the essential elements enshrined in the Osaka Action Agenda, an APEC Framework to Strengthen Economic Cooperation and Development, which identified six priority areas of cooperation, was adopted in Subic to guide members in implementing the economic and technical cooperation (ECOTECH) agenda.

The adoption of the *Declaration on an Asia-Pacific Economic Cooperation Framework for Strengthening Economic Cooperation and Development* in 1996 enabled ECOTECH to gain equal prominence with trade and investment liberalization and facilitation (TILF) within APEC. The Manila Declaration of November 1996 enumerated the following as ECOTECH's goals:

- 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.

Its guiding principles are:

- Mutual respect and equality;
- Mutual benefit and assistance;
- Constructive and genuine partnership; and
- Consensus-building.

The Senior Officials' Meeting (SOM) Sub-Committee on Economic and Technical Cooperation (ESC) was established in 1998 to assist the SOM in coordinating and managing APEC's ECOTECH agenda, as well as identifying value-added initiatives for cooperative action. The ESC also serves as a forum to discuss, formulate and coordinate, in consultation with existing APEC fora and the business community, those action-oriented integrated strategies which are necessarily to implement the Manila Framework for Strengthening ECOTECH. The Terms of Reference of the ESC are given in **Annex 1**.

In 1998, Ministers welcomed the SOM 1998 Report on ECOTECH activities and called for the report to be submitted annually.

The ESC met on three occasions in 1999. The first was in Wellington on 5-6 February 1999 during which it approved its 1999-work program given here as **Annex 2**. The second meeting was held in Christchurch on 3-4 May 1999, while the third was held in Rotorua on 9-10 August 1999. The first and third meetings were presided over by the Chairman of the ESC, Ambassador Jorge Lozoya of Mexico while Dr David Walker of New Zealand, the ESC Vice Chair, chaired the second.

The ESC developed its relationship with other APEC fora in order to improve coordination of ECOTECH work and to ensure that ECOTECH activities add value and contribute to the achievement of APEC goals. The ESC continued to achieve a balance in all three pillars of APEC cooperation to ensure sustained economic growth and development. Economic and technical cooperation has acquired added urgency and further focus is given to strengthening coordination in ECOTECH activities and intensifying work in the priority areas.

Some 250 ECOTECH projects were underway or completed by APEC fora in 1999. Coordination is important to enhance the efficiency, effectiveness and streamlining of all these activities in line with the main thrust of the Leaders and Ministerial instructions. The ESC assisted the SOM in managing the ECOTECH activities systematically by identifying duplications and gaps, making recommendations on priorities, and addressing common issues facing the different fora.

Information on ECOTECH projects and activities undertaken by APEC fora in 1999 can be accessed through the Internet at <http://203.127.220.68/Apecp1.nsf?OpenDatabase>. A simple operation manual is given in **Annex 3** for easy reference. The Summary table of ECOTECH activities by APEC fora and priority themes is in **Annex 4** and the breakdown by type of ECOTECH activities by APEC fora as in **Annex 5**.

#### **4 EVALUATION OF THE ECOTECH PROJECTS AND ACTIVITIES IMPLEMENTED IN 1999**

The ESC, with assistance from the APEC Secretariat, conducted an initial evaluation of ECOTECH projects and activities underway or reaching completion in 1999. The raw material for the evaluation was the information on APEC ECOTECH projects and activities in the APEC Secretariat's database, program directors' knowledge about projects and, where available, project progress reports. In addition to some factual information, the ESC evaluated the activities broadly in terms of the following elements:

- Duplication
- Gaps
- Compliance to the six priorities and goals of the Manila declaration
- Whether the outcomes met the intended objectives
- Linkage to ongoing work programs of fora and member economies' action plans
- Extent of member economies' interest and participation
- Business relevance and participation

- Compliance to the Guidelines on strengthening management in ECOTECH
- Problems encountered

## 2.1 Key Findings

Currently, there is no mechanism within APEC for the assessment and collection of project evaluations made after sufficient time has elapsed for impacts to be apparent. Many projects are expected to take some time to have an impact and, at times, this will necessarily take several years. In the absence of such impact analysis, the initial evaluations identified various issues in terms of duplication of effort, coordination among fora involved in ECOTECH work, results orientation of the projects, and relevance to and participation by the business/private sector. Significant findings from the evaluation include the following:

- The breakdown of projects and activities by priority themes were as follows:

Developing human capital	82
Developing stable, safe and efficient capital markets	6
Strengthening economic infrastructure	25
Harnessing technologies for the future	51
Promoting environmentally sustainable development	53
Encouraging the growth of SMEs	21
Other activities	12
Total	250

- The breakdown by type of ECOTECH activity was as follows:

Training	37
Workshop/seminar	46
Study/research/report	64
Database/network development	50
Policy reform/standards setting/harmonization	10
Exchange program	2
E-Commerce	4
Centres	9
Mixed/other	28
Total	250

- Most of the projects mentioned above have been generally assessed as beneficial to the lead and participating economies. They covered a variety of technology areas and embodied the strong intention of member economies to strengthen their cooperation. Some of the projects were conducted by one lead economy, with participation and contribution from other economies or were jointly implemented by a number of economies. Member economies' interest and participation in relevant projects was very high and member economies can be seen collaborating in implementing projects in the various APEC fora.
- There have been occasional projects, which have not achieved all their objectives. This was due to a lack of information on the assessment of relevance and effectiveness of the projects. Nevertheless, many of these projects can point to a specific outcome: a workshop, a publication, a database, a curriculum for a training course, even certificates for graduates of training courses.

- There was a wide array of activities, run by various APEC fora but it would be difficult to describe these activities as a “coherent package”. They are a reflection of the interests and creativity of different working groups, but do not amount to a clear and consistent vision of what APEC is trying to achieve in line with the Manila Framework, nor do they contain clear measures of implementation, accountability and evaluation.
- There were several projects involving only a small number of economies. There was a risk that much energy was being dissipated with too little in the way of results.
- A lot of attention has gone into training courses of one kind or another, research into what different economies were doing in a variety of fields (such as vocational training, marketplace regulation and labor market policies), and workshops where mostly government officials exchange experiences with each other. But little effort has been focused on building a center for educational attainment, improving training capability and social supports in order to improve standards across the region.
- It was noted that a large number of the projects were cross-cutting, relating to some other priority areas, including developing human capital, strengthening economic infrastructure, promoting environmentally sound development and encouraging the growth of SMEs.
- There was little evidence of duplication in APEC’s fora activities. However, there could be value added if there was a higher degree of cooperation and coordination among the various fora. There is little scope for active coordination among the working groups at present, though there are mechanisms, which could be used to add to the current level of discussion among Lead Shepherds. Rare cases of project-overlap have occurred, such as some overlapping projects undertaken by various fora under the theme “Electronic Commerce and SMEs.” Another example is the Marine Resource Conservation Working Group (MRCWG) project on “Assessment of Environmental Safety of Aquaculture Farms using Biochemical Indicators of Distress” may be related to some of the Fisheries Working Group’s (FWG) work under the “Collaborative APEC Grouper Research and Development Network” project. Recent attempts by the MRCWG and FWG to promote greater collaboration, including joint sessions between the two working groups, should ensure that their activities do not overlap. Nevertheless, the potential for overlap suggests that the ESC should have a strong role in coordinating activities across working groups.
- The previous evaluation carried out in 1998 identified coordination of activities and priority setting as key issues. This continues to be the case. The broad range of activities related to sustainable development in various APEC fora calls for greater coordination in order to produce more focused outcomes. Since 1996 the SOM has been tasked to “undertake an annual review of, and dialogue on, sustainable development work in APEC.” However, the SOM does not always have the time or the resources to carry out this responsibility. This would suggest that the ESC should have a role in improving coordination in this priority theme.
- Private sector/business involvement in the ECOTECH projects and activities varies. Substantial involvement of business/private sectors was observed in many of the projects under the theme of “Harnessing Technologies for the Future” at different stages of the projects.

Similarly, more than half of the projects under the theme of “Encouraging the Growth of SMEs and Strengthening Economic Infrastructure” involved business/private-sector participation. Less than one third of the projects under the theme of “Developing Human Capital” involved the business/private sector.

- Various APEC fora have actively pursued the Guidelines on Strengthening Management of APEC ECOTECH Activities and they tried to comply with the guidelines even at the stage of project proposal. It should be noted that the ECOTECH projects still show a predominance of process-oriented activities.
- In terms of problems encountered, fora are still coming to terms with all the requirements for financial guidelines in implementing the APEC funded projects. However, various fora are aware of their responsibilities on this issue and progress has been made. The Budget and Management Committee (BMC), in trying to overcome this problem, decided to form seven small groups to consider and evaluate the fora’s evaluation reports. The ESC may at some point to consider establishing similar groups to evaluate progress on achieving the six ECOTECH themes.

The above projects and activities represent a significant ECOTECH achievement. The 250 projects currently in progress represent a significant body of work. More effort should be devoted to publicizing ECOTECH activities and achievements, since much of this work is not well known beyond the relevant working groups.

### **3. IMPROVING COORDINATION OF ECOTECH ACTIVITIES**

It is critical that APEC improves the coordination of its various action initiatives, especially those where ECOTECH aspects fully serve the priorities of the Manila Framework. Coordination and other issues related to the achievement of ECOTECH objectives might include duplication of effort by different fora, synergies among different fora, opportunities for results-oriented action, cooperation opportunities with the business/private sector that are not being seized, and the pursuit of other goals consistent with the Manila Framework. The Manila Framework served as the coordinators’ foundation for defining the goals, principles, character and priorities of APEC’s ECOTECH work. The SOM’s June 1998 Guidance on Strengthening Management of ECOTECH Activities was another valuable benchmark.

The ESC envisioned the coordinators playing a role vital to the goal of improving effectiveness of ECOTECH. They serve as the ESC focal point for the ECOTECH aspects of their “theme”, working closely with the implementing fora, the business/private sector, requesting information as necessary from the implementers, and bringing coordination and management issues to the ESC. Coordinators are expected to advise the ESC whether their initiatives are achieving the objectives of the Manila Framework and follow-up steps.

The coordinators might advise the various implementers involved in a crosscutting initiative that it would be useful to refine objectives and plan results-oriented collective actions. The main thrust of the coordinator’s report is to urge even greater cooperation and joint planning among the Lead

Shepherds, so that APEC's work plan in the area could be based on the fullest possible discussion among the various working groups.

The ESC is convinced that if APEC is to achieve greater success in its economic and technical co-operation agenda it needs to derive the maximum possible benefit from the expertise and commitment of all the working groups, and that the key to enhancing our collective efforts will be leadership from the Lead Shepherds. Coordination reports for the ESC will hopefully contribute to this aim.

Canada prepared a paper on improving coordination of ECOTECH activities on the theme of "Developing Human Capital". China prepared a paper on improving coordination on the theme of "Harnessing Technologies for the Future". The paper highlighted the current status of ECOTECH projects, overall appraisal, and areas for improvements and suggestions for better coordination. Indonesia prepared a paper on improving coordination on the theme of "strengthening economic infrastructure" and Korea on improving coordination on the theme of "Strengthening the Dynamism of the Small and Medium Enterprise".

### **3.1 Developing Human Capital**

An analysis of APEC's human resource development activities reveals in APEC fora an impressive array of projects dealing with subjects ranging from education reform to labor market information to training for highly skilled workers. Nearly all APEC fora include a focus on human resource development in their work plans, and succeeding APEC host economies have highlighted this theme in their annual objectives.

Canada prepared a coordination paper on Developing Human Capital given in **Annex 6** which briefly described the current activities in the field of human resources development (HRD) that are being carried out in the various APEC fora, and commented on the strengths of the current range of activities, as well as gaps and areas for improvement in the existing HRD strategy. The paper also raised suggestions for ESC's consideration on possible ways in which there can be more effective leadership, focused outcomes and greater coordination under the theme of developing human capital.

Despite commitments to the theme of human capital development, greater coordination and planning are required if the considerable investment already being made to this topic is to be fully realized. It is particularly important to place greater emphasis on the involvement of the business/private sector (including workplace participants such as workers and consumers) both in the development of projects and in their evaluation.

Sharing information and exploring policy options are two of the most valuable opportunities, which APEC offers to its member economies. While considerable experience has already been gained by APEC in strengthening human resource development programs, APEC member economies now need to focus more on results and on achieving real impact in their respective marketplaces.

The following are recommendations for further improving coordination and effectiveness under the theme of "Developing Human Capital".



- To invite the Lead Shepherd of the Working Group on Human Resources Development, in full consultation with the other Lead Shepherds, to develop a 3-year work plan and priorities for APEC's HRDWG activities, for submission to ESC during the next year. Once established, this HRDWG work plan should be regularly reviewed and reported annually to the ESC by the HRD Lead Shepherd.
- To request Brunei's incoming SOM Chair to make provision for a full opportunity at the 2000 Joint Fora meeting for the Lead Shepherds to discuss their common interests in HRD and to plan their coordinated approach.
- To recommend to the HRDWG Lead Shepherd and the other Lead Shepherds that they make use of electronic means such as the (APEC Science and Technology) ASTWeb to work together on HRD matters between their annual Joint Fora meetings.
- To recommend to the APEC Secretariat to revise, in full cooperation with the Lead Shepherds, the matrix document on ECOTECH activities, including for each project more information on project proposals, budgets, evaluation measures, business/private sector participation, and gender analysis.
- To recommend to all Lead Shepherds, and the BMC, to include in all project proposals clear indication of how the business/private sector is to be involved, how the project is to be evaluated, how gender analysis will be carried out, and how project results will be disseminated.
- To explore with the newly created APEC International Assessment Network (APIAN) the possibility of carrying out an assessment of APEC's human resource development activities of the past few years, for presentation at a future ESC meeting.
- To ask the Director of Public Affairs in the APEC Secretariat to provide advice to the Lead Shepherds on how to disseminate more effectively the results of HRD projects both within and outside APEC.
- To recommend to Lead Shepherds that they place greater emphasis on the participation of as many economies as possible in their HRD-related projects seeking central funding, to ensure both widespread impact and greater benefit for the investment of APEC funds.

### **3.2 Developing Sound, Safe and Efficient Capital Markets**

At their November 1998 meeting in Kuala Lumpur, 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

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\* Reference should be made to the actual text of the K.L. Leaders Declaration, which is summarized here.

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 catalyze 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.

Leaders called for specific actions in a number of areas pursuant to this strategy. They also held a dialogue with the APEC Business Advisory Council (ABAC), which presented a number of new recommendations for restoring regional stability and growth. Leaders welcomed the ABAC proposals and instructed Ministers to study them.

### **3.2.1 APEC Finance Ministers Process**

At their 15-16 May meeting in Langkawi, Malaysia, the Finance Ministers welcomed the progress the cooperative growth strategy has made in stabilizing financial markets and the improved economic outlook but stressed that continued **financial and corporate restructuring** was needed in the crisis-affected economies. The Finance Ministers also:

- Stressed that sound financial systems, corporate governance and improved accounting, transparency and disclosure standards are central to restoring investor confidence and a return of capital flows;
- Expressed concern about the social impact of the crisis and welcomed assistance from the development banks to promote sound design of social safety nets;
- Reaffirmed their commitment to cooperate in APEC and other international fora to strengthen the international financial architecture and called for the establishment of an ongoing mechanism for dialogue among industrial and emerging market economies to build consensus on future economic and financial policy issues; and
- Tasked their Deputies to work with business/private 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.

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.

- **Strengthening financial market supervision.** Action plans will be implemented over two years to improve domestic training of banking supervisors and securities regulators and enhance international cooperation in such training programs. The Asian Development Bank (ADB) has day-to-day responsibility for implementing the plans.
- **Assessing banking supervisory regimes.** A survey has been conducted to assess the adequacy of banking supervisory regimes in key APEC economies in order to identify any gaps or shortcomings. Findings showed a high degree of compliance with the Basle Core Principles on banking supervision but also the need for closer contacts among APEC banking supervisors.
- **Pension reform.** Given the important role of pension systems in capital market development and social protection, regional forums on pension reform were held in Mexico in February 1998 and in Chile in April 1999. The latter focused on policy issues and the roles of the public and private sectors in pension fund administration. A follow-up seminar on pension fund reform will be held in Thailand in March 2000.
- **Improving credit rating agencies and disclosure.** Workshops on credit rating agencies (CRAs) were held in Manila in March 1998 and February 1999 with the aim of developing best practices for domestic rating agencies. Work will continue in the context of international credit architecture discussions, particularly in the area of strengthening transparency and disclosure standards by market participants. APEC will survey codes of conduct used by CRAs, seek to promote a credit culture, and participate in international initiatives to harmonize accounting and disclosure standards.
- **Developing domestic bond markets.** This initiative aims to promote development of deep, liquid and mature domestic bond markets. An initial survey of the current state of economies' bond markets identified various impediments to their development. A December 1998 workshop in Hong Kong, China recommended preparation of a compendium of sound practices and a website to serve as a resource center and facilitate information exchange. Another workshop in 1999 will follow up on these plans.
- **Strengthening corporate governance.** The Finance Ministers in Langkawi endorsed the recommendations in the report "Strengthening Corporate Governance in the APEC Region" and urged economies to implement them promptly. The report reviews the state of corporate governance in selected APEC economies and suggests measures governments, judiciaries, regulators, and the business/private sector could take to raise corporate standards and encourage greater accountability and transparency in corporate structures. It also draws on a symposium Australia hosted in November 1998 where business people, regulators and other officials, stock exchange officials and legal and academic experts identified priorities for reform.

- **Free and stable capital flows.** APEC is continuing work to design a Voluntary Action Plan (VAP) for Supporting Freer and more Stable Capital Flows. Initial efforts in this plan, which promotes capital account liberalization consistent with macroeconomic and financial stability, are focused on information gathering and analysis. Two studies have been commissioned that will help develop a pragmatic VAP incorporating the lessons of the financial crisis and formulate good practice guidelines for monitoring capital flows, including short-term flows. Finance Ministers will further consider the shape and content of a VAP at their September 2000 meeting.
- **Privatization forum.** The Finance Ministers endorsed holding the inaugural meeting of the APEC Privatization Forum in November 1999 in Bangkok. The initiative aims to support the privatization process through institutional strengthening and investment promotion. Initial topics for discussion will be “Market Reform, Liberalization and Competition” and “Regulatory Frameworks and Reform.”

### 3.2.2 Action by APEC Ministers and Sectoral Ministers

- **APEC Ministers** (Foreign and Trade) reviewed developments in the world economy at their November 1998 meeting in Kuala Lumpur. They welcomed the efforts of affected economies to overcome the crisis, stressed the critical role of open markets in underpinning economic recovery, and tasked Senior Officials to intensify APEC’s efforts to address the social impacts of the crisis as a high priority.
- **SME Ministers**, at their April 1999 meeting in Christchurch, New Zealand, cited the profound effect of the regional crisis on smaller firms. They agreed that returning SMEs to growth was vital to economic recovery and that to achieve recovery APEC needs to focus on strengthening regional markets. Along with participants in a Business Forum, the Ministers stressed four ways to promote SME growth:
  - Enhancing management performance through education;
  - Reducing barriers to trade and regulatory compliance costs;
  - Improving capital markets and SMEs’ access to them; and
  - Strengthening linkages to assist regional business (e.g., electronic commerce).
- **Energy Ministers** met in October 1998 in Okinawa and stressed the important role of the energy sector in stimulating economic recovery, especially through open and efficient energy markets and development of efficient energy infrastructure. They endorsed a Natural Gas Initiative aimed at accelerating investment in that sub-sector. Minister also discussed the implications for the energy sector of the economic situation and the future energy supply and demand outlook. The Energy Investment Workshop was held 19-20 April 1999 in the United States and stressed, *inter alia*, the need for transparency, predictability and non-discrimination in energy policy and regulatory regimes.
- **Women’s Affairs Ministers**, meeting in October 1998 in Manila, highlighted the disproportionate impact of the financial crisis on female businesses and workers and the need to consider women’s economic interests when devising recovery strategies.

- **APEC HRD Ministers** met in Washington, DC in July 1999 and considered an action plan on the economic crisis incorporating policies and programs on the functioning of labor markets, social safety nets and enhancing productivity through better workplace practices.

### 3.2.3 Other APEC Initiatives

Various APEC fora have undertaken programs to assess the impact of the crisis and to help alleviate adverse effects on economies arising from the current situation. Examples of such initiatives include:

- Strengthening markets, a central theme of New Zealand's 1999 APEC chairmanship, is directly related to efforts to prevent a recurrence of the financial crisis. A key element is the effort by economies to develop a set of non-binding **principles on competition** and regulatory reform. A public/private sector symposium on regulatory management was held in September 1998 in Malaysia to solicit business input to this effort.
- The *1999 Economic Outlook* will analyze the far-reaching, disruptive effects of the Asian crisis on regional trade and investment and their implications for the recovery period. This analysis will serve as the analytical basis for advancing the TILF agenda. The 1999 *Outlook* including updated economic developments will also provide timely and relevant information for discussions by the Leaders and Ministers in September 1999.
- The **Human Resource Development (HRD) Working Group** is undertaking projects on social safety nets, corporate and non-profit governance, and labor market adjustment. It organized a seminar in May 1999 on human resource management strategies to minimize the effects of job retrenchments. 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.
- An **APEC Forum on Human Resources Development** was held in July 1999 in Japan. It will focus on the short-term vocational training needs of workers affected by the crisis, as well as longer-term policies on vocational training to cope with globalization.
- Japan and Thailand co-hosted an **APEC Symposium on the Asian Economy** in July 1999 in Tokyo. Government, business and academic experts discussed short, medium and long-term measures to respond to the crisis and prevent any recurrence.
- Australia has made available to other economies the results of a survey it commissioned of **economic governance capacity building** needs, programs underway to meet those needs, and gaps that could be filled by APEC economies and international agencies. The initiative, welcomed by APEC Economic Leaders and Ministers, suggests ECOTECH activities to build capacity in economic governance that individual economies could undertake.
- Australia has also established the Asia Recovery Information Center (ARIC), a resource housed at the ADB that facilitates access to information on and analysis of the social and

economic impacts of the crisis. APEC plans to develop, under the auspices of ARIC, a mechanism to exchange information on **social safety net issues** for crisis-affected economies, drawing on APEC and other initiatives in this area.

- The **Economic Committee's** work program for 1999-2000 has a strong analytical component dealing with the crisis, including a two-year research project "APEC Economies beyond the Asian Crisis." The study will examine vital issues arising from the crisis from long-term perspectives, in particular:
  - To assess the impact of the crisis on the region's growth potential, trade and investment, infrastructure development, small and medium-sized enterprises, human resources and other social aspects; and
  - To suggest broad directions of policies to achieve sustainable growth and equitable development, with a view to linkages between APEC agendas and the region's future developments.

A report summarizing preliminary results will be tabled at the Ministers Meeting in New Zealand in September 1999. A symposium was held in Tokyo in late 1999 to discuss interim outputs, and the final report will be prepared in time for the Ministerial and Leaders' Meetings in Brunei in 2000.

- The Economic Committee's **Infrastructure Workshop** will consider new proposals in relation to infrastructure responses to the economic crisis and changed requirements for infrastructure policy project structures and support mechanisms that are sustainable under current market conditions and that facilitate the rural infrastructure and sustainable urban development initiatives.

### **3.3 Strengthening Economic Infrastructure**

The ESC considered a paper prepared by Indonesia on "strengthening economic infrastructure". The paper included a qualitative assessment of the extent to which APEC activities addresses this issue and suggested the direction in which these could be extended. Given the complexities and importance of the issues involved, the ESC decided to consider the paper further in capitals and to pass views to Indonesia by October with a revised paper being passed to the first meeting of the infrastructure workshop in February 2000 for the group's sanction and input. The paper will then be submitted to the first ESC meeting in Brunei in February 2000 for consideration.

### **3.4 Harnessing Technologies for the Future**

APEC leaders identified "Harnessing technologies for the future" in 1996 as one of the six ECOTECH priority areas. Projects devoted to harnessing technologies for the future cover a wide spectrum of technology areas. While this reflects the diverse interests of member economies in line with the diversity in the APEC region, there is reason to believe that these projects if they were based on common interests could have greater coherence and could achieve more focused outcomes. There is also potential for member economies to propose new initiatives for areas like information technology and other new and emerging 'future' technologies. China's report on

improving coordination on the theme of “Harnessing Technologies for the Future” given in **Annex 7** suggested the following:

- **To member economies** – It will be useful to ask member economies to target specific Ecotech themes when developing new project proposals, bearing in mind the priorities set forth in the related major APEC documents.
- **To APEC Secretariat** – The Ecotech matrix could be further revised so as to get a full assessment of the extent to which projects are contributing to the theme. It is also suggested that the budget and time span of projects be added to the matrix to make it more comprehensive.
- The APEC Secretariat’s Ecotech Project database could be improved to include relatively well-developed ideas for new project proposals. This will allow the Lead Shepherds across all fora to comment on the ideas before the proposals are put to the relevant working group for approval.
- **To IST WG and other WGs** – WGs should provide necessary and timely information on prioritization, development and implementation of ECOTECH activities to ESC for its review in line with its coordination functions. In view of the heavy task that IST WG bears in harnessing technologies for the future and its responsibility in implementing the APEC Agenda for S&T Industry Cooperation into the 21st Century, the Mexico Declaration on Partnerships and Networks and the Cleaner Production Initiative, it should formulate a detailed mid-term work plan. Implementation of the work plan could be reviewed and reported to the relevant APEC fora on a regular basis.
- **To ESC** – The ESC could play a useful role in ensuring better coordination and focused efforts, and these could be achieved without creating yet another fora under SOM. In line with its coordination functions, the ESC could help pull the threads together by proposing broad guidelines at the beginning of each year on prioritization in accordance with the Leaders priority. In addition, it could make recommendations to SOM on steps needed to avoid duplication and fill in gaps if there are any.
- Taking advantage of the APEC Science and Technology Website set up by the IST WG, the ESC could establish on the site a “Lead Shepherds Forum” to allow more frequent contacts among the Lead Shepherds. This will facilitate greater coordination among working groups, which, combined with access to well-developed ideas for project proposals as described above, would constitute a powerful mechanism to maximize synergy and minimize duplication among the APEC fora.
- **For the other efforts** – In addition to coordination, evaluation of WG projects addressing this theme was also suggested. Efforts in formulating criteria for assessing project proposals and their impacts should be encouraged.

### **3.5 Safeguarding the Quality of Life through Environmentally Sound Growth**

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

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

### **3.5.1 Specific Initiatives Related to Sustainable Development being conducted by APEC Fora are as follows:**

**The Committee on Trade and Investment (CTI)** is responsible for coordinating APEC's work in pursuit of trade and investment liberalization facilitation (TILF) as outlined in the Osaka Action Agenda. The CTI and its sub-fora assist, where appropriate, in integrating relevant environmental concerns into APEC's TILF activities. One example of their activities is the project "APEC Experts-Trainers-Executives Workshop on International Quality Assurance System (IQAS). It aims to contribute to greater competitiveness of SMEs through capacity building of human resources managers, business professionals, and trainers in integrating quality and environment management systems in the workplace.

**The Economic Committee (EC)** has been responsible for coordinating APEC's response to the Leaders' request to study "The Impact of Economic Growth and Expanding Population on Food, Energy and the Environment" (FEEEP). In 1998, the committee has developed a final report on FEEEP; the Leader has endorsed setting out possible joint actions to address emerging issues in this area for discussion by Leaders, and the report. To complement the discussion on the FEEEP, the committee published the proceedings of FEEEP symposium, which was held in Saskatoon, Canada, in September 1997.

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

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



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

In 1999 sustainable development continues to be a major element of ISTWG projects. The **Industrial Science and Technology Working Group (ISTWG)** has established an “Initiative Coordination Group” in order to optimize implementation of the major Leaders’ and Ministers’ initiatives including the Cleaner Production Strategy. The role of the group is to facilitate a comprehensive approach to implementing the Leaders’ and Ministers’ initiatives in a balanced way, for all elements, across relevant APEC groups. Through its 1999 Action Plan, 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.

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

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

As instructed by Energy Ministers the EWG is undertaking a work program designed to provide impetus to the application to the APEC electricity sector of environmental policy practices that are predictable, transparent and consistent. The EWG is also pursuing a work program aimed at establishing a low risk environment to encourage investment in natural gas supplies, infrastructure and trading systems. This will help members increase their use of cleaner energy and assist in reducing harmful emissions into the atmosphere. Finally the EWG is promoting the uptake of environmentally sound and efficient measures in the area of minerals and energy exploration and development. The EWG is also promoting the adoption of common test standards for laboratories that measure the efficiency of energy-using equipment, and the mutual acceptance of test results throughout the region. This will help encourage sales of energy efficient equipment and promote the uptake of more energy efficient technologies.

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

- Implementing a Framework of Standards for Intelligent Transportation Systems;
- The preparation of a best practice manual to address urban transport problems;
- Work by the Maritime Safety Expert Group, including the recent presentation of a summary of maritime safety issues and problems in the region and a set of recommendations for improvements; and the initiation of a project to reduce or eliminate substandard shipping in the

APEC region which will contribute to decreasing the threat of major environmental incidents and to ensuring the sustainability of the marine environment;

- Maintaining an Inventory of Regional Cooperation on Oil Spill Preparedness and Response Arrangements, a summary of which is available on the APEC website;
- The promotion of high quality instruction for seafarers consistent with the requirements of the revised provisions of the IMO Convention on the Standards of Training, Certification and Watchkeeping (STCW) which will contribute to greater safety in maritime transport as well as safeguards to the marine environment
- Ongoing work on the Road Transport Safety Project; and
- The examination of environmental considerations as part of the Ports Experts Group's efforts to identify common issues and recommendations for improved capacity and efficiency of APEC ports.

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

The **Tourism Working Group (TWG)** has held two seminars related to sustainable development in 1999. The first one was held on 12-15 April in Cairns, Australia. The project gathered examples of best practice environmental initiatives in the APEC region to encourage the adoption of sustainable tourism principles among member economies. The other seminar was held in Manzanillo, Mexico on 13 May, during the XIV TWG Meeting. The theme of the seminar was "Tourism and the Environment". The goals of the seminar were to allow APEC economies to assist each other in preparing for the new and dominant tendencies of the tourism industry, which increase travel flows towards those areas which boast natural beauty and interesting cultural attractions, and also in respecting sound environmental practices. The purpose of the seminar was to establish a few, basic principles and practices required for sustainable tourism in APEC economies, and to help define the tools necessary for decision makers to adopt in order to put into place the basic requirements for the implementation and monitoring of all current and future sustainable tourism projects in APEC economies.

**The Marine Resources Conservation Working Group (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. At its 12th meeting this year, the working group established an ad hoc group to draft a new approach that will ensure that the full scope of objectives within the Action Plan are addressed comprehensively, and will develop improved links and coordination with other APEC fora. The MRCWG has also organized a number of meetings related to sustainability of the marine environment, including the high level Oceans Conference. Current activities include projects on management and mitigation of harmful algae blooms; strengthening the coordination of integrated coastal management; assessment of the environmental safety of aquaculture farms; implementing recommendations from the Workshop on Decommissioning of Offshore Oil and Gas Platforms; and establishing an APEC

Marine Environmental Training and Education Center in Korea. The MRCWG also has two complementary networks designed to link centers of excellence in APEC economies; the Ocean Model and Information System, and the Ocean Research Network for the Pacific.

During its 12th meeting, the MRCWG also held its first joint session with the Fisheries Working Group 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 second year, and develop collaborative projects. The first of these will be on destructive fishing practices and their impacts.

The **Fisheries Working Group (FWG)** continued to implement a number of collaborative regional projects to address environmental and sustainable development issues. The projects include the development of a regional research and development network focusing on the culture of live reef fishes, and the development of a common approach to aquaculture education and training. These projects will work towards developing the skills to meet the challenges of a growing aquaculture industry whilst maintaining environmental integrity and long-term sustainability of aquaculture operations. At the same time the FWG is trying to address the issue of cyanide fishing and other destructive fishing practices and will be working with the Marine Resources Conservation Working Group on a multi-year program to deal with the problem, including holding inter-session discussions specifically focusing on coral reef issues.

**The Trade Promotion Working Group (WGTP)** has addressed issues on sustainable development indirectly through its ongoing activities. In this regard, the Third APEC International Trade Fair held in November, 1998 in Kuala Lumpur set its main theme as “Enhancing Global Competitiveness through Technology and Human Resource Development”, and the fair focused on how new technology and skilled manpower contribute to the economic development of APEC economies. The fair also adopted “Emergency Preparedness in APEC” as its sub-theme to highlight products, services and technologies related to emergency preparedness in APEC as part of the initiatives to develop expertise in this area. The website of the APEC WGTP, APECNet, enables the business/private sector to search for business opportunities or post inquiries. The website also covers energy, chemicals and engineering/technological services.

Sustainable agriculture is one of the seven priority areas of cooperation for **the Agricultural Technical Cooperation Experts Group (ATCEG)**. The ATCEG has identified sustainable agriculture as a new priority area of the group in 96. In June 1999, the scope of this priority area has been expanded, and to reflect the expansion, the title of the priority area has been renamed “sustainable agriculture and related environment issues”. Its first seminar-workshop was held on 12-14 June 1999, in the Philippines. The workshop emphasized the need to share information on policies, to build capacity in technologies for the sustainable development of agriculture and to establish a framework for future cooperation across the APEC region.

The Integrated Plan of Action for SME Development (SPAN) which was endorsed by APEC Leaders in Kuala Lumpur, in November 1999, recognized that one of the strategic directions in addressing the access to technology is the need to create and increase awareness of environmental friendly and cost effective technology. However, **the Ad Hoc Policy Level Group on Small and**

**Medium Enterprises (PLGSME)** has had no specific projects addressing sustainable development issues this year.

The **Infrastructure Workshop (IWS)** has been holding an annual Public-Private Dialogue since 1994. In Kuala Lumpur, Ministers welcomed the *APEC Infrastructure 1998 Report on Activities to Implement the 1997 Vancouver Framework*. Ministers recognized that investment in infrastructure development can contribute to economic recovery in the region and called for further progress in the five areas of:

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

### **3.5.2 Recommendations for Sustainable Development Priorities in APEC**

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

### **3.5.3 Recommendations for SOM to consider**

- Inviting relevant APEC fora to examine their activities in the light of developments in the global environment agenda

- Inviting relevant APEC fora to examine their activities in the light of new and emerging opportunities to ensure that development in the wake of the East Asian financial crisis is put on an environmentally sustainable footing
- Encouraging Senior Environment Officials to work together to provide analytical inputs on the environment and sustainable development to relevant APEC fora, including development of criteria to provide a basis for objectively assessing future progress on sustainable development. It could be useful for Senior Environment Officials to review APEC sustainable development objectives from time to time to ensure they reflect the evolving priorities of member economies.
- Encouraging Senior Environment Officials to develop environment and sustainable development project proposals for consideration by relevant APEC fora.

An overview of APEC activities in Sustainable Development for 1999 is given in **Annex 8**.

### **3.6 Strengthening the dynamism of the small and medium enterprises (SMEs)**

Small and Medium Enterprise support-related discussions in APEC were first mandated at the 1993 APEC Economic Leaders' Meeting in Seattle. Since then, APEC member economies have shown a growing awareness of the important role SMEs play, as reflected in joint declarations on SME support measures concluded at ministerial and summit-level meetings. The Manila Framework included strengthening the dynamism of SMEs in 1996. Because of this heightened interest in SMEs, other fora are also reflecting SME issues in their discussions, enabling substantial progress in SME-fostering discussions throughout APEC. This heightened interest is clear from a search through the APEC Project Database, which showed 58 "SME" projects among 11 fora.

The six priority themes of SME-fostering are interrelated with other themes in APEC. Namely, SME-fostering is closely connected with discussions on capital, human resources development, technology, information, trade, investment, competition policy, and others. Therefore, issues relating to SME-fostering should not be confined only to the PLGSME, which is directly concerned with SME matters, but should be reflected in the discussions of all APEC fora. The discussions and activities of all APEC fora have at least an indirect impact on the business environment of SMEs. However, the inclusion of agenda items directly pertaining to SMEs by other fora in 1998 were limited to TELWG's activation of electronic commerce for SMEs, the ABAC, and the Women Ministerial Meeting.

In other words, SME issues have been treated broadly and generally in many fora but not enough in detail. That means SME issue is not a major concern of most APEC fora.

The following proposals should be examined at the ESC for improving the coordination and effectiveness of SME support activities within APEC:

#### **3.6.1 Recommendations for Improving Coordination and Effectiveness**

The following proposals should be examined at the ESC for improving coordination and effectiveness of SME support activities within APEC:

- Summaries of completed and on-going projects should be compiled and reported by the APEC Secretariat for the six Priority Areas at the final ESC of each year through the updated “Matrix of Projects and Activities related to ECOTECH according to the Six Priority Areas”. Matrix needs to be more specific and access to the completed projects needs to be guaranteed to those who are interested.
- To obtain more outcome-oriented results, project evaluations should be undertaken. So far, economies proposing a new project have included an evaluation as part of its proposal. However, there could be some limitation on self-evaluation and evaluation cost. To ensure unbiased evaluations, they should be carried out not by the economy responsible for the project but by other economies. Each forum could evaluate projects and decide on several excellent projects through a comprehensive annual evaluation process (to be disseminated via e-mail or at the meeting). APEC could learn from the success points of the selected projects and thereby improve the overall performance of projects.
- The APEC Project Database covers most projects in APEC and can help for a maximize synergy effects. In order to supplement the contents of the APEC Project Database, the results of completed projects or their summary should be uploaded onto the database and made available for free downloading, thereby expanding the sharing of project results and improving information sharing.
- Private-sector participation in SME-related activities is relatively high. But to ensure that future activities are more practical, private-sector input should be constantly encouraged, especially the participation of representatives from the business community. The joint meeting of APEC SME ministers and APEC SME entrepreneurs held in Christchurch, New Zealand, April 1998, could serve as a good example. Moreover, from planning to the evaluation of projects, private-sector contributions should be welcomed. Going a step farther, more business opportunities should be provided through facilitated business matching programs for investments, technical collaborations and other activities that could strengthen the market base of SMEs.
- Gender has been a cross-cutting issue. Recently, women entrepreneurs’ business activities have expanded and developed. In a knowledge-based economy, women’s abilities play a powerful role in creating the value-added. Women entrepreneurs have usually been involved in SMEs, especially micro firms. In this context, SME-related activities should show more concern towards women entrepreneurs and micro firms. SMEPLG and Women Leaders Network could cooperate each other, for instance, by holding a joint session or sharing information through liaison.
- The cross-cutting nature of SME issues means that the involvement and cooperation of other fora are critical to the implementation of many initiatives and proposals made at the SME Ministerial Meeting. The results of the SME Ministerial Meeting should be conveyed through the Chair or the Secretariat to other ministerial meetings in order to get their feedback and to maintain greater consistency in SME-related discussions. Through this, we hope that other fora

will be encouraged to hold more activities related to SME issues, and that those in APEC will help SMEs gain access to necessary and various resources.

- The SME Ministerial Meeting and the SMEPLG should seek further dialogue with other APEC fora. The Chair of the SME Ministerial Meeting and the lead shepherd of the SMEPLG should join other ministerial meetings and fora, and remind them of policy needs of SMEs. Or, conversely, the SME Ministerial Meeting and the SMEPLG could invite other fora members to their meetings.
- We should remind ourselves of the Manila Framework, APEC Framework for strengthening economic cooperation and development, concluded in 1996. ESC needs to expand its role in realizing goals of the Manila Framework. The ESC should be more actively involved in the coordination among APEC fora. Namely, it should remind other fora of the importance of Economic and Technical Cooperation (ECOTECH) in APEC.

The details of Korea's paper on improving coordination under the theme of strengthening the Dynamism of SMEs are given in **Annex 9**.

#### **4. HIGHLIGHTS OF PROJECTS FLOWED OUT FROM INITIATIVES ENDORSED BY LEADERS IN KUALA LUMPUR IN 1998.**

APEC has launched numerous "action-oriented integrated strategies" that have ECOTECH aspects, under such names as initiatives, action agendas, frameworks, and blueprints. An informal compilation by the APEC Secretariat lists more than 40 recent such initiatives, many of which entail significant ECOTECH dimensions, often involving several APEC fora. These various action programs **as given in Annex 10** undoubtedly pursue worthy objectives and often respond to Economic Leaders' and/or Ministers' priorities. Most are at least broadly relevant to one or more of the Manila Framework's six priority themes. The follow-up, coordination and implementation of APEC's many initiatives are very important in order to achieve significant results. The ESC is monitoring and overseeing the implementation of two most notable initiatives endorsed by Leaders in Kuala Lumpur in November in 1998: Kuala Lumpur Action Plans in Skills Development and APEC Agenda for Science and Industrial Technology for the 21st Century.

##### **4.1 Kuala Lumpur Action Plans in Skills Development**

Human resources development (HRD) is a key factor for sustained economic growth and investments in human resources will assist in economic recovery. Skills upgrading of the region's workforce will enhance the flexibility of economies to cope with the challenges in the new millennium. Ministers in Kuala Lumpur approved the *Kuala Lumpur Action Program on Skills Development* to further intensify efforts towards upgrading the skills of the region's human capital and instructed APEC fora, particularly the HRD Working Group (HRDWG), to implement the Action Program. They welcomed the members' efforts to expand or initiate programs for skill development following the Action Program. They also recognized the importance of business/private sector contributions in skill development and encouraged greater contribution from the business/private sector in progressing the relevant projects of the HRDWG. The Action

Program will bring to focus and encourage **concerted efforts** in activities that contribute directly towards a more rapid building up of the skill base of the region's workforce in four specific areas:

***Upgrading the industrial skills base:*** Upgrading the skills base across APEC economies will contribute towards greater efficiency, enhanced technology flow and increased productivity, resulting in more efficient and effective utilization of resources;

***Spawning new entrepreneurs:*** Small and medium enterprises form the backbone of our economies. A thriving SME sector is crucial for a successful adjustment to the rapidly changing business environment. As such entrepreneurial skills should be encouraged and their growth promoted;

***Technology skills for the new millennium:*** The workforce must be equipped with new skills to match the rapid pace of transformation from an industrial economy to an economy that is characterized by greater use of new technologies such as information technology, biotechnology and composite/ advanced materials; and

***Strengthening institutional infrastructure to facilitate trade and investment liberalization:*** The promotion of trade and investment liberalization must be supported by corresponding efforts to strengthen the institutional capacity required to enable effective response to market demands. This includes the capacity for more effective implementation of facilitation and supervisory measures. Inadequate capacity for regulatory supervision has been attributed as one of the factors leading to the current financial turmoil.

The immediate results of the Action Plan was the holding of a seminar in Penang, Malaysia on 6-7 May 1999, to share experiences on public-business/private sector partnership in skills development. Three main recommendations to enhance development of skills in the region were identified as outcomes of the seminar. The recommendations were:

- Successful models of public-business partnership can be duplicated subject to modifications to suit local conditions
- Smart partnerships between public and business sectors applying market driven approaches will assist in meeting the demand of industry
- Establishing networks among skills development providers is imperative to enable resource sharing, shared learning and adoption of best practice.

Penang Skills Development Cooperation (PSDC) being organizer of the seminar, has offered to coordinate the network.

Several APEC economies and APEC fora have responded positively to the calls as stated in the Action Program. Japan and HRDWG for example focused on accelerating/ intensifying the implementation of these projects to achieve a concerted push to upgrade the skill levels of its workforce and these projects are on going. Some of the projects, which could contribute towards focused outcomes on skill development through concerted APEC efforts in 1999, are given below.

- Maintenance of the APEC LMI Database



- Best Practices Workshop on School-to-Work Transitions in APEC Member Economies for Youth at Greatest Risk of Unemployment
- Integration of Information and Communication Technologies (ICTs) through Teacher Professional Development and Pre-Service Teacher Training
- Economic Restructuring & Labor Market Dynamics
- Trainers Training Program in Industrial HRD School-Industry Linkages in Quezon City, Philippines, 12-16 April 1999
- Alternative Dispute Resolution Executive Education Project
- Application of Total Productive Maintenance (TPM) in Small and Medium Industry in Bangkok, Thailand
- Cross-Cultural Comparison on Open Learning System in APEC Member Economies
- Successful Practices in Human Resources Development in the Workplace: Contributions from Labor, Management and Government in Victoria, Canada on 25-28 June 1999
- Chief Human Resources Officer (CHRO) Network Project Phase III in Bangkok, Thailand 3-4 March 1999
- Achieving High Performing Schools
- APEC Experts-Trainers-Executives Workshop on International Quality Assurance Systems (IQAS II)
- Workshop on International Migration and its Policy in the APEC Member Economies.
- APEC Forum on Human Resources Development: Vocational Training towards 21st Century

Funding of projects on a sustained basis is a critical issue. The ESC hope that economies could further intensify the participation of business undertaking in these projects. The business/private sector should be encouraged to contribute to APEC's longer-term capacity building measures such as skills development. Japan's Partnership for Progress is a good example of involving the business/private sector and we hope similar efforts can be undertaken in other APEC economies. Japan's proposals on Skill Development are as follows:

- Partnership for Progress
  - Training of Experts on Trade Financing (in Singapore)
  - Management Diagnosis of SME's and Supporting Industry (in Thailand)
  - Production and Management Skill to Improve Productivity (in Singapore)
- Local training of up to 10,000 persons in cooperation with Japanese capital affiliated enterprises
- Dispatch of experts to Penang-type Public/Private sector Skill development centers.
- Remote type human resource network arrangement (making use of technical assistance from a distance)

#### **4.2 APEC Agenda for Science and Technology Industry Cooperation into the 21st Century.**

Recognizing the potential of scientific and technological advancements to promote economic growth, Ministers endorsed the *APEC Agenda for Science and Technology Industry Cooperation into the 21st Century* approved at the Ministers Conference on Regional Science and Technology Cooperation. The agenda encourages enhanced collaboration and cooperation through the creation of strong open innovation systems and the development of sustainable regional

science and technology networks and partnerships. The Ministers called for an annual progress report on implementation of the agenda.

The Agenda for Science and Technology Industry Cooperation into the 21st Century is an ambitious statement, covering a wide array of objectives. APEC's databases have hitherto not been well suited to the analysis of work, which contributes to meeting the agenda's objectives. In the face of this challenges, and less than one year after its launch, the ISTWG Report as given in **Annex 11** provides a first assessment of the extent to which the agenda is being implemented through APEC's ECOTECH activities. In some ways this is an exploratory report, and is offered in this spirit. Subsequent reports can build on, and refine, the approaches adopted here.

Overall, APEC Working Groups appear to be addressing the agenda in a comprehensive way – both in the number of activities and their range across working groups. There appears to be significant business/private sector involvement in this work and widespread industrial relevance. However, this important dimension warrants deeper investigation. As called for in the agenda there is significant collaboration between working groups in a number of specific technologies. This is most evident in the area environmental technologies and the exploitation of natural resources. However, there are also signs of collaboration on the key technologies for the 21st century – biotechnology and information technology. Other significant enabling technologies, such as advanced materials and electronics, do not appear to be the focus of much collaboration through APEC ECOTECH activities.

Notwithstanding generally positive indications about the implementation of the agenda, there are signs of some gaps. It seems unlikely that the goal of encouraging greater involvement by women in science and technology is being comprehensively addressed. It may be time for the development of a specific agenda on gender and S&T, limited in its ambition but clearly promising a higher level of uptake and action by working groups. One such action might be an APEC policy dialogue on women in science and technology. Another possible gap in the implementation of the agenda relates to encouraging an S&T policy dialogue. The IST WG may wish to address this by including such discussion in its meetings and encouraging suitable projects, focusing on more detailed comparative S&T policy analysis. More speculatively, there may also have been inadequate paid attention to the role of SMEs in the knowledge based economy, a key issue in light of growing recognition of the role of technology in long term growth. Relevant working groups might wish to explore this more deeply and respond accordingly.

In this analysis it has not been possible to assess the **outcomes** of the work of the agenda. This strategic issue may warrant coordinated attention across APEC's ECOTECH activities. This ISTWG report identified a wide range of projects contributing to the implementation of the Agenda, across a range of APEC working groups. No analysis was attempted on possible duplications of effort, or of failure to exploit synergies. Nevertheless, it seems prudent to consider the scope within ECOTECH to minimize duplication and maximize synergies. The inclusion of project **proposals** in the ECOTECH Projects Database might offer a powerful tool to maximize the benefits of project coordination. The ESC will consider this suggestion in more detail.

Arising from the findings of this report, ISTWG requested that the ESC forward the following recommendations to the SOM III for endorsement:

- That the IST Working Group, in partnership with the Policy Level Group on SMEs, and in collaboration with other relevant APEC fora, should strengthen APEC's ECOTECH focus on the opportunities and challenges for small and medium sized enterprises in knowledge based economies.
- That the IST Working Group, in collaboration with all APEC fora, should develop an action agenda to strengthen the involvement of women in science and technology in the APEC region.
- That the IST Working Group, in collaboration with other relevant APEC fora, should strengthen science and technology policy dialogue in the region.
- That the APEC Secretariat and member economies should work together to further strengthen ECOTECH project coordination across all APEC fora, using, as appropriate, the approach proposed in this report.
- That the second progress report on the *APEC Agenda for Science & Technology Industry Cooperation into the 21st Century* should build on the encouraging results of this report and provide deeper analysis of the nature and depth of business/private sector involvement in APEC ECOTECH projects, of the response since the adoption of the Agenda and of the impact of projects on their intended beneficiaries. On a voluntary basis, economies can provide to the Working Groups for possible inclusion in this report any relevant information on their individual contributions to implementing the Agenda.

## **5. IMPLEMENTATION OF THE GUIDANCE ON STRENGTHENING MANAGEMENT OF APEC ECOTECH ACTIVITIES**

The guidance **given in Annex 12** issued by the SOM Chair to all APEC fora on 9 July 1998 with immediate effect aims to improve the quality of APEC's ECOTECH work. The guidance aims to ensure that APEC ECOTECH activities relate to one or more of the six priorities and are goal- and results-oriented. APEC fora that propose ECOTECH projects are enjoined to ensure that they do not duplicate efforts already underway. The Budget and Management Committee (BMC) and APEC Secretariat are urged to scrutinize projects to prevent such lack of coordination. APEC fora are also encouraged to work together with business representatives to develop their collective work programs and to involve business in all stages of the ECOTECH project cycle.

The Chair of the APEC Business Advisory Council through his letter given in **Annex 13** has welcomed the new guidance and pledged to work closely with APEC fora on their ECOTECH agendas.

### **5.1 Implementation of the Guidance by APEC Fora**

The SOM I in Wellington reiterated the importance of the guidance and urged all APEC fora, including CTI, BMC and the Secretariat to take the guidance into consideration when developing and approving new ECOTECH projects. All APEC fora that conduct ECOTECH activities, including the CTI, BMC and Secretariat are asked to include in their regular reports to the SOM a discussion of the steps taken to implement the ECOTECH guidance. The Secretariat should compile these various entries in a separate report for consideration at ESC meetings. The APEC

Executive Director's Letter to all Committee Chairs and Lead Shepherds reiterating the importance of implementing the guidance is given in **Annex 14**.

It is believed that rigorous implementation of this guidance will enhance the quality of APEC's ECOTECH work and help to realize the objectives of the Manila Declaration. A quick survey among the APEC fora showed that most fora had the chance to discuss new project proposals for 1999. All the chairman of committees and lead shepherds of working groups are fully aware of the guidance and took into account compliance to it before submitting new project proposals.

The ESC expected full implementation of the guidance by all APEC fora that conduct ECOTECH activities, which run longer than a year. It is quite clear that most fora have taken notice of the emphasis in the guidance on "focused action-oriented outcomes" and that they are working "together with business representatives to set priorities and develop collective work plans of the fora."

Given the importance of enhancing the effectiveness of APEC's ECOTECH agenda, the ESC would like to ensure full implementation of the guidance by all fora that conduct ECOTECH activities. In general, fora need to be convinced that the ESC will remain concerned with implementation of this guidance and will monitor their progress. At the same time, we should avoid burdensome new reporting requirements.

Many of the APEC fora have submitted ECOTECH project proposals for funding approval to the March 1999 and July 1999 meetings of the **Budget and Management Committee (BMC)**. A key aspect of implementation was to ensure that all new project proposals fully reflect this guidance. As of July 1998, BMC representatives have played the role of defending projects originating from their economies. The BMC continued to scrutinize project proposals' results-orientation and compliance with financial procedures. The BMC has approved new guidelines on funding applications for APEC databases and emphasized that proposed new databases need to be justified by market needs and long-term sustainability.

The new guidelines are aimed at strengthening the reporting and evaluation of APEC projects. The BMC decided to form seven small groups to better scrutinize the evaluation reports of the projects, provide feedback, and will consider what sanctions should be imposed on non-compliant fora/economy. All these efforts are aimed at better assessing the effectiveness and results of projects.

**The Committee on Trade and Investment (CTI)** is mandated to undertake and coordinate the work of Trade and Investment Liberalization and Facilitation (TILF) as well as the two pillars of the Osaka Action Agenda. The CTI is also committed to contributing towards the ECOTECH agenda. This underscores the supportive yet important role that ECOTECH plays in the TILF process. The CTI has implemented the SOM *Guidance on Strengthening Management of APEC ECOTECH Activities*, where appropriate. A number of CTI projects are results-oriented and aimed at relevance to the business/private sector by having more business/private participation in its activities.

**The Policy Level Group on Small and Medium Enterprises (PLGSME)** has complied with points 1, 2 and 3 of the guidance. However, when it comes to ensuring that an activity does not

duplicate previous activities, the group will have to rely on the judgement of the Program Director responsible for PLGSME for advice. Unfortunately the PLGSME is not in close coordination with other APEC fora, making it more difficult to avoid any duplication. The PLGSME strongly encourages economies to develop activities, which would draw the active participation of all member economies. The business/private sector has always been actively engaged in PLGSME activities. Almost every workshop/seminar held under auspices of the group has involved business/private sector. One of the projects of the PLGSME in 1999, the Consumer Education and Protection Initiative, is a business/private sector led initiative and is fully funded by the business/private sector.

**Trade Promotion Working Group (WGTP).** At the 11th WGTP Meeting on 9-12 March 1999, a Steering Group was established to better link the WGTP with the SOM and ABAC, and to improve communication between member economies in ensuring consistency of the WGTP activities. The WGTP adopted a common format for reporting within WGTP to enable it to monitor its projects more effectively. The WGTP strongly encourages the participation of the business/private sector in its activities. One of its two projects to be completed in 1999, the Trade and Investment Insurance Training Program, a joint program with HRDWG which also involves the business/private sector, focuses on the provision of training executives in the trade and investment insurance industry.

**Human Resources Development Working Group (HRDWG).** The 20th meeting in Hong Kong, China on 10-14 May 1999 discussed how to further respond to the call of the Leaders and Ministers on strengthening ECOTECH activities. Recognizing the importance of ECOTECH as one of the pillars of APEC, and HRD as the first priority area in the ECOTECH agenda, the working group agreed that the Lead Shepherd make a report to the SOM, on the basis of the discussions at this meeting, to express its support in further strengthening ECOTECH activities. It is hoped that greater emphasis will be placed on HRD activities in strengthening ECOTECH, that there will be increased coordination to avoid duplication and that more resources will be allocated to support HRD ECOTECH activities across APEC.

The **Fisheries Working Group (FWG)** has taken a positive step towards the implementation of the *Guidance on Strengthening Management of APEC ECOTECH Activities*. The FWG projects such as the establishment of a *Collaborative APEC Grouper Research and Development Network* and *Collaborative Aquaculture Education Program* aim to be results-oriented. Every effort is made to avoid duplication of the activities of other APEC fora and those of other international organizations. The FWG recently held a joint session with the MRCWG to discuss issues of duplication and complementarily. At the 10th FWG Meeting in May 1999 the working group endorsed the FWG's *Guidelines on Business Involvement and Private Sector Participation* which encourages business/private sector participation in FWG meetings and industry involvement in project development and implementation.

The **Marine Resource Conservation Working Group (MRCWG)** has implemented the SOM *Guidance on Strengthening Management of APEC ECOTECH Activities*, especially by making more relevant to business sector and involving them to participate in its activities. As indicated in the self-review, the MRC has adopted a set of guidelines for involvement of the business/private-sector in MRC activities to enhance its efforts in implementing the guidance.

The **Energy Working Group (EWG)** has implemented the *SOM Guidance on Strengthening Management of APEC ECOTECH Activities*. In fact, a few EWG projects for funding in 2000 were prepared based on recommendations from the business/private sector. The EWG has also set up an EWG Business Network comprising of business/private sector representatives who will provide advice to the EWG.

The **Telecommunication Working Group (TELWG)** projects are designed to be results-oriented with practical application to the business sector. There is a substantial involvement of the business/private sector in TELWG activities in line with the guidance. The business/private sector is involved in the design and implementation of TEL projects thus ensuring the project's usefulness to industry. Each TELWG meeting involves a dialogue session with the business/private sector, which is jointly organized with the PECC.

The **Transportation Working Group (TPTWG)** new project proposals are drafted and revised in line with the Guidance for ECOTECH activities. The working group's Steering Committee Coordinators, Lead Shepherds and project overseers have taken special care to avoid duplication of activities within the fora or with other APEC fora. The last TPTWG meeting, in April 1999, decided to invite ABAC representatives and other sectoral business representatives (provided consensus is reached among the group) to discuss and present ideas on the current work plan and future strategic directions.

The **Tourism Working Group (TWG)** complied with the *Guidance on Strengthening Management of APEC ECOTECH Activities*. The group, in line with the guidance, assesses project proposals before they are adopted. The TWG agreed at its 14th meeting to implement an improved management system for all activities. The formation of an Executive Management Committee (EMC) consisting of five ex-officio members (past Chair, present Chair and future Chair, current host economy and future host economy) was approved. The EMC will develop its terms of reference for consideration at the next TWG meeting. The EMC will improve management of projects between TWG meetings by simplifying and improving coordination, but noted that all decisions will have to be adopted by consensus. The TWG also agreed to strengthen business/private sector participation by presenting the APEC Tourism Charter to an APEC Tourism Forum attended by key private sector tourism interests. The forum will be asked to formally note the charter.

The **Agriculture Technical Cooperation Experts Group (ATCEG)** has fully implemented the *Guidance on Strengthening Management of APEC ECOTECH Activities*. The Group has considered the relationship to the six priorities is goal- and results-oriented, avoids duplication of activities with other fora within and outside of APEC and encourages maximum participation of member economies before finalizing or deciding on any project. The ATCEG is also working closely with PECC in the areas of marketing, processing and distribution of agricultural products in order to expand the business/private sector participation.

The **Industrial Science and Technology Working Group (ISTWG)** is actively working to implement the *Guidance on Strengthening Management of APEC ECOTECH Activities*. The group has suggested several ways in which the ECOTECH matrix can be enhanced to maximize synergies and minimize duplication between the working groups. The group also analyses the strengths and identifies areas in which further efforts are required for the optimal realization of this

Leader's initiatives. There is room for improvement in the area of business/private sector involvement in ISTWG despite a number of notable projects with private sector involvement. The APEC Center, notable for Technology Exchange for Small and Medium Sized Enterprises, and APEC Technomart III, to be held in Australia in November 1999, are classic examples of direct business/private sector involvement in ISTWG activities. The expected strong participation of the business/private sector in the APEC Conference on the Contribution of Science, Engineering and Technology to Sustainable Economic Development in the APEC Region 27-29 October 1999 in New Zealand is another proof of the group's compliance to the guidance.

## **5.2 Implementation of the Guidance by the APEC Secretariat**

The **APEC Secretariat** provided valuable support to APEC fora that developed and implemented ECOTECH activities and to the BMC for review of their merits. The Secretariat provided comments on issues of duplication, results-orientation, financial procedures and other aspects of the project it felt competent to address. The Secretariat also made full use of its information sharing role and its database capabilities. The Secretariat's compliance with the guidance can be summarized as follows:

- **ECOTECH Database**

The Secretariat developed a comprehensive database of ECOTECH project activities being undertaken by APEC fora. This was in response to the Secretariat's own reference and evaluation work of the BMC and SOM Sub-Committee on Economic and Technical Cooperation (ESC). It also provided a central reference point for APEC fora to ascertain convergent or complementary projects being undertaken by others.

The database is able to generate matrix reports listing projects according to: the six priority themes in the Manila Declaration; APEC fora; and Initiatives endorsed by Economic Leaders. The database is currently in a testing phase and can be accessed through the Internet at <http://203.127.220.68/apecp1.nsf?opendatabase>.

The Secretariat received inputs from the Committee Chairs and Lead Shepherds of working groups/*ad hoc* groups on their impressions of and comments on the database and its content. The system was further refined in line with the comments received. The Secretariat demonstrated the versatility of the database service at the ESC and SOM III in Rotorua in August 1999.

- **BMC website**

The Secretariat has started using an access-controlled website for disseminating papers for meeting papers for the July 1999 BMC meeting. This website allows BMC members to post comments on the papers and project proposals, and project overseers to clarify their positions, ahead of their meeting face-to-face. This website facilitated discussions of key issues and expedite decision-making. The URL for the site is [http://www.apecsec.org.sg/bmc\\_disc/sec\\_bmc.htm](http://www.apecsec.org.sg/bmc_disc/sec_bmc.htm). All documents transmitted to the Secretariat for discussion at the BMC meeting were uploaded to the website. This included discussion papers as well as project proposals. Documents can be

downloaded individually, or in batches. The Secretariat monitored the BMC members' comments and made the necessary follow up with the overseer.

- **Project Analysis**

The APEC Secretariat provided comments on project proposals seeking APEC funding including compliance with the Guidebook on Financial Procedures, and aspects of the Format for Projects. The comments range from the proposals' formality, relevancy of the descriptions of each part of the format to the possible duplication of the project. The APEC Secretariat also provided comments on the evaluation reports of the completed projects, which were submitted by the overseers via the relevant fora. The comments are as constructive as possible, which contribute to possible improvements on effectiveness of the project and/or to the follow-up assessment on their impact against project objective/purpose. The Secretariat identified failures (if any) from various perspectives, such as non-compliance with the Guidelines for Reporting and Evaluation System for APEC Projects from a policy point of view.

The APEC Secretariat independently of any particular APEC fora, 'without fear or favor' carried out these processes.

## **6. ESC NEW INITIATIVES**

### **6.1 Evaluation of ECOTECH projects for ESC/BMC's consideration**

The Wellington ESC meeting in February received two suggestions on possible approaches to assess project proposals against APEC's ECOTECH objectives. The Australian proposal was based on a matrix to weight ECOTECH priorities arising from Ministers and Leaders' tasking guidance to APEC fora. The New Zealand proposal was based on the ESC taking a more proactive role in assessing APEC ECOTECH projects in a similar manner to that of the CTI in assessing CTI sub-fora project proposals.

At the *ad hoc* meeting held by New Zealand and Australia at the request of the Chair during ESC1, it was decided that the Australian matrix should be developed further, in close consultation with Lead Shepherds and the Budget and Management Committee (BMC).

Although the ESC has produced general guidelines (*Guidance on Strengthening Management of ECOTECH Activities*) for the preparation of ECOTECH projects for funding from the Operational Account, they do not include a means by which the relevance of a project can be measured against APEC's ECOTECH objectives. In the interest of ensuring outcome-oriented and value-added projects, as directed by Ministers and Leaders, the *ECOTECH Weightings Matrix*' has been developed in close conjunction with ESC members and the Lead Shepherds/Chairs of APEC fora.

The aim of the matrix is to provide working groups/fora with a better appreciation of the overall ECOTECH priorities of APEC and to encourage more concrete and focused project outcomes. The matrix would provide the BMC with a ready guide to the main features of a proposed project along with the net score achieved. This would allow the BMC to make more informed judgements



on funding priorities. The ESC agreed to implement the matrix as given in **Annex 15**. The ESC also agreed to periodically consider a sample of weighted matrix and monitor how the system is operating.

## **6.2 Enhance ECOTECH Information flow**

The ESC sees a need to enhance information flows between the identification of ECOTECH “needs” and the capacity to provide appropriate expertise. The objective of this is two-fold:

- (a) To strengthen coordination and further improve the effectiveness of economic and technical cooperation activities; and
- (b) To avoid duplication of ECOTECH activities in APEC.

The ESC envisaged the establishment of a mechanism that would be dynamic and on-going, that would serve as a “Clearing House” for the matching of economy “needs” and capacities to respond to those needs. It would be necessary to scope out potential information to collect information on “expertise” and “needs” and to define the boundaries of the “Clearing House”. A number of approaches would be used to collect the information on “expertise” and “needs”. One approach would involve using consultants to assist economies in the initial identification of their “needs.” Another approach is for members to identify their own “needs” and “expertise”. These need not be mutually exclusive.

The ESC envisaged the “Clearing House” to be an electronic mechanism, such as a website. It would be useful for this mechanism to be linked beyond APEC, to multilateral organizations. The mechanism should be dynamic and economies with capacities in a defined area should be encouraged to identify this capacity to the “Clearing House” on an on-going basis, regardless of whether needs in that particular area have been pre-identified.

The ESC initiated a feasibility study on this proposal that provided guidance on what would be possible in terms of mechanisms to achieve the desired objectives in the most efficient and cost-effective manner. The “Clearing House” would: add value to economic and technical cooperation activities conducted within APEC, provide a unique collection of information and enable users to go to one location where all relevant information on APEC economic and technical activities was indexed. The concept of the “Clearing House” is responsive to Leaders and Ministers’ priorities of strengthening the coordination of ECOTECH agenda, and improving the effectiveness of economic and technical cooperation activities.

The meeting considered and endorsed New Zealand’s paper on “Economic and Technical Cooperation Clearing House” as in **Annex 16** which addresses the specification of technical requirements for the “Clearing House”, the determination of cost, and resource implications (both technical and human). The analysis included options for either the APEC Secretariat or an external agency to manage the “Clearing House”. The specification also included options for a phased implementation plan, with an initial launch on a limited functionality basis and additional functionality and features to be added over time.

The Secretariat expressed concern about the impacts on its current human resources in having to assume the entire information management role at the outset. New Zealand clarified that management assistance would be made available during the development phase to minimise the impact on Secretariat resources. Following development, the information maintenance responsibility would be transferred to the Secretariat.

The meeting agreed to request SOM III to agree that the establishment of the “Clearing House” should be included among recommendations submitted to Leaders and Ministers in September. Assuming that Leaders/Ministers endorse the establishment of the “clearing house”, the specific project proposal would be included among the urgent initiatives emerging from the Auckland Leaders and Ministers meeting. Approval for 2000 funding for these urgent initiatives would be sought inter-sessionally from the BMC (and subsequently the SOM) after September. Subject to approval by BMC/SOM, funding would be available for implementation of the project to commence on 1 January 2000.

The meeting approved the “Draft project proposal for funds for the ECOTECH “Clearing House “ as in **Annex 17**.

## **7. SELF REVIEW BY WORKING GROUPS, ATC, PLGSME SELF-REVIEWS**

The ESC received a full compilation of self-reviews by the working groups, including the ATC and PLGSMEs with the view to providing policy comments to the SOM. It is observed that all the self-reviews of the working groups/*ad hoc* groups are consistent with the common guidelines for self-review approved by APEC Ministers.

The representatives of the Policy Level Group on Small and Medium Enterprises (PLGSME), Energy Working Group, Transport Working Group, IST Working Group and Agriculture Technical Cooperation Experts Group, made presentations on their respective draft or completed self-reviews at the Christchurch ESC meeting. This provided them with the opportunity to talk directly to the members of the ESC before finalizing their reports, and to assist the ESC in finalizing comments to the SOM on the policy aspects by the requested deadline of 16 July 1999. The meeting discussed a range of policy elements of the working group’s self-reviews including business participation and practical endeavors to help working groups build their capability. The question of a mechanism for regular dialogue with working groups was also discussed. The focus of the Working Group, ATC, PLGSME self-reviews can be summarized as follows:

The **Policy Level Group on Small and Medium Enterprises (PLGSME)** identified five broad areas of potential strength in their self-review that it should build on:

- Its close linkages with the SME community, which allowed it to identify clear and direct business/private sector perspectives;
- Its advocacy of SME issues across the APEC process from the working group level, the CTI and SOM process up to Ministers;
- Its coordinating role in informing and identifying work priorities on SME issues across the process and in ensuring that APEC’s allocation of resources reflected these priorities;

- Its role in ensuring the sharing of ‘best practices’ in policy development and implementation between members; and
- Its responsibility proactively to reach out to the business community to inform it of the practical ways in which APEC was assisting business.

The self-review of the **Energy Working Group (EWG)** focussed on its mandate developed from a number of sources, amongst them a Vision Statement approved by the SOM in 1994. The objectives of the EWG embraced sustainable economic growth, enhanced energy security and mitigation of the impact of energy on the environment. The EWG has promoted discussion and reform of members’ energy policies in a number of areas including, in 1996 when Energy Ministers endorsed the 14 non-binding energy policy principles and agreed to incorporate them in their domestic policy deliberations.

The EWG seeks to facilitate trade and investment in the energy sector by reducing regulatory, institutional and procedural impediments to trade and investment in energy infrastructure, products and services. In 1998 the APEC Leaders “welcomed the Natural Gas Initiative approved by Energy Ministers at Okinawa”. The delivery of Agenda Papers and other relevant documents for EWG meetings has been considerably enhanced through the extensive use of the EWG’s secure website, which is considered an efficient and effective means of distribution and communication with member economies. The EWG has established eight sub-groups, including its five Expert Groups. Energy Ministers meeting in Okinawa endorsed the EWG Business Network. The Network’s main objective is to provide strategic input, from a business/private sector perspective, into the work of the EWG.

The self-review of the **Transportation Working Group (TPTWG)** reported that the group has carried out substantial work to meet its established priorities, and has achieved many concrete outcomes. Notable among these are the Model Mutual Recognition Arrangement for Automotive Products, signed by APEC Transport Ministers with the goal of harmonizing the market for automotive products within the region and internationally, thus increasing trade flows; the Transportation Congestion Points study, with the goal of identifying existing bottlenecks in the seamless flow of goods and passengers throughout the Region; the completion of Phase II of the Transportation Electronic Data Interchange Study and the initiation of the Electronic Data Interchange trial program, as well as the creation of the TPT-WG website. These latter projects are contributing to APEC’s electronic commerce work program, including the “Paperless Trading Initiative”. Other initiatives included contributions to transportation safety in the region through the creation of the Group of Experts on Aviation Safety and Assistance (GEASA) and its projects; the Satellite Navigation and Communications Advisory Committee; the Maritime Safety Group and the Road Safety Experts Group; and the formulation of options for more competitive air services. **It was noted that, at the most recent meeting of the Working Group, a number of economies had reported on steps they were taking to implement the identified options for more competitive air services.** The TPTWG also undertook a number of initiatives in 1996-1998 to improve its management process and operations. The group noted considerable interest in the experimental approach by the ESC for strengthening coordination and management of the ECOTECH agenda.

The **Agriculture Technical Cooperation Experts Group (ATCEG)**. According to the results of the self-review, ATCEG have done many useful cooperative activities mainly through the seven

priority areas. The ATCEG holds an annual plenary meeting and has seven shepherds for the seven areas pursuant to the seven areas of cooperation, in order to implement various areas of agricultural cooperation. Each priority area implements a task based on each action plan such as holding a seminar or workshop. The FEEEP report was forwarded to Ministers and Leaders in Kuala Lumpur in November 1998, and was endorsed by them. Leaders instructed that Ministers undertake efforts to implement these joint actions. The SOM 2 in Wellington decided to allocate the proposal of the FEEEP joint actions to most relevant fora for implementation. A considerable part of FEEEP joint action (food part) has been allocated to the ATCEG in addition to its present tasks. The Chair pointed out that ISTWG's endorsement of the proposal "A feasibility study for the development of a post harvest network for the APEC region" overlaps with an important area of ATCEG work and recommended duplication should be avoided between ATCEG and ISTWG. Private sector representatives were invited to major seminars and workshops and the ATCEG worked closely with PECC.

The self-review of the **Industrial Science and Technology Working Group (ISTWG)** focused on six priorities including improved availability of information in response to the Leaders' request in Vancouver in 1997. The working group had concentrated on implementing Leaders' initiatives, particularly in light of the Agenda for Science and Technology Industry Cooperation into the 21st century. The ISTWG established a "Leaders' Initiative Co-ordination Group" to optimize implementation of the three major Leaders' and Ministers' initiatives including the Mexico declaration and the Cleaner Production Strategy. The ISTWG kept a reasonably clear distinction between ISTWG and other APEC fora, despite some common interest with HRDWG. The group noted considerable interest in the experimental approach by the ESC for strengthening coordination. Business Groups were not formally represented at ISTWG meetings. However, individual economies may have business/private representatives as part of their delegations. Business/private participants are involved in individual appropriate projects. **The group noted considerable interest in the experimental approach by the ESC for strengthening coordination and management of the ECOTECH agenda**

The self-review of the **Human Resources Development Working Group (HRDWG)** focused its mandate on the 1989 APEC Ministerial Statement. Generally, the work of HRDWG is guided by the 1994 Jakarta Declaration on Framework for HRD. The overall objective of the HRDWG is the continuous development of HRD in the APEC region and enhancement of cross-cultural understanding among the peoples of the Asia-Pacific region. The HRDWG has provided leadership in APEC in addressing issues relating to social impacts of the financial crisis and the participation of women in APEC. The HRDWG has made significant progress in achieving its medium-term strategic objectives and had a review of its organization and mandates in 1997. The HRDWG developed and implemented a project management guide to facilitate effective project management in 1998 and established a task force to consider ways to improve the evaluation of HRDWG activities and communication of outcomes.

At its 20th meeting in Hong Kong, China in May 1999, the HRDWG is considering fundamental issues and questions associated with moving towards a more cost-effective structure. The working group is considering reducing the number of meetings to one a year; reducing the structure of the working group, with the possibility of merging the five networks into three; and increasing the use of IT within the working group's operation (using the APEC Secretariat website as a clearing house for information about projects). HRD is a crosscutting theme within APEC and the APEC

Secretariat works closely with the HRDWG and other APEC fora to avoid duplication or overlap of project activities. To avoid duplication with non-APEC fora (such as UNESCO, SEAMEO and ILO), the HRDWG is recommending an expanded role for the APEC Secretariat, to take a more active role in monitoring HRD policy and project developments to ensure that HRDWG builds synergies on, and avoids duplication of work in these fora. The HRDWG sees opportunities for collaboration with business/private sector in a number of ways such as learning from business management practices and IT training.

The self-review of the **Fisheries Working Group (FWG)** focused on the priority objectives set out in the Osaka Action Agenda. It reviewed the past and present work of the FWG in addressing the priority objectives, particularly in the areas of fisheries resource management, sustainable development of aquaculture, food safety and quality of fish and fisheries products as well as trade and investment liberalization and facilitation issues. Several projects were completed during the 1997-1998-review period relating to food safety issues. Several new projects were initiated in the area of aquaculture and the FWG continues to work on projects relating to trade and investment liberalization and facilitation in the fisheries sector. The self-review also focussed on collaboration with the Marine Resource Conservation Working Group and in particular the joint session of the two working groups in May 1999 which identified five broad themes for closer cooperation.

The self review of the **Marine Resource Conservation Working Group (MRCWG)** focused on the mandate of the MRCWG which comes from a few sources, including The Vision Statement and Ministerial Statement in 1993, the Osaka Action Program in 1995 and the Action Plan for Sustainability for the Marine Environment in 1997. The objective of the MRCWG is to promote initiatives in the APEC region, which will protect the marine environment and its resources and ensure continuing socio-economic benefits through maintenance of marine environmental quality. The MRCWG is committed to protecting the marine environment and to achieving sustainability of the marine environment through its activities focused on integrated approaches to coastal management; prevention, reduction and control of marine pollution; and sustainable management of marine resources. As directed by the APEC Environment Ministers, the MRCWG is also trying to coordinate the activities of other APEC fora related to the marine environment and to facilitate the implementation of the Action Plan for Sustainability of the Marine Environment. In Kuala Lumpur, Malaysia in 1998, both APEC Economic Leaders and Ministers reiterated their commitments to advance sustainable development, including protection of the marine environment, and Ministers further directed appropriate APEC fora to progress work in the area.

The self-review of the **Telecommunication Working Group (TELWG)** focused on the tasks mandated by the APEC Ministers responsible for Telecommunications and Information Industry as set out in the Seoul, Gold Coast and Singapore declarations. The Seoul Declaration tasked the TEL with the development of the Asia-Pacific Information Infrastructure (APII). The self-review looked at progress in implementing projects in this area. The Gold Coast Declaration, which contained a Program for Action, focussed on continuing liberalization and facilitation efforts. In this regard the TELWG has completed a number of activities such as an agreement on a set of International Value Added Network Services (IVANS) guidelines. The Singapore Declaration highlighted the Mutual Recognition Arrangement for Conformity Assessment of Telecommunication Equipment, which has been completed and is in the process of implementation. The Singapore Declaration also encouraged further work on electronic commerce. Several past and present TEL projects are in the area of e-commerce.

The self-review of the **Trade Promotion Working Group (WGTP)** focused on the work done so far to meet the working group's core priorities. The self-review explained the sources of its mandates and how its activities correspond with them. It noted the WGTP's completed activities, which range from APEC fairs and training courses to the setting up of APEC networks. The self-review reflects how the WGTP has dealt with the necessity of encouraging business representatives' participation in its meetings, and suggested some measures to achieve this purpose. The WGTP works under the guiding principles of equality, assistance, partnership, and consensus building. Its activities are goal-oriented (trade fairs, training courses, experts exchange, networks, etc.) and include the evaluation of the business outcomes. The participation of private sector occurs not only at the formal meetings, but also, and more actively, in the APEC Fairs, which are held at least biannually.

The self-review of the **Tourism Working Group (TWG)** focused on its performance on existing Collective Action Plan (CAP) and Trade and Investment Liberalization and Facilitation (TILF) objectives. The group also identified the need to refine and advance the objectives as contained in the CAP and TILF matrices. The group has agreed to the development of an APEC Tourism Charter which will address the following eight issues which are crucial to the tourism industry:

- the development of a common approach to leveraging off the GATS initiative;
- minimizing regulatory impediments to the growth of tourism
- removing barriers to environmentally and socially sustainable tourism;
- removing barriers to the movement of capital, earnings and labor in the tourism sector;
- facilitating moves towards removing congestion and passenger processing facilitation and transport related impediments (to the extent that such issues can be addressed by the TWG);
- identification of emerging issues affecting Tourism;
- improving understanding of Tourism within APEC economies; and
- Enhancement of visitor services and amenities.

The Charter will be formally noted by the Tourism Private Sector at the APEC Tourism Forum in Hong Kong, China in April 2000, before being endorsed by APEC Tourism Ministers at the first Tourism Ministers Meeting in June 2000.

The summary evaluation of Working Groups – policy Aspect is given in **Annex 18**.

## **7.1 ESC Comments on Policy Aspects of Working Groups, ATC, PLGSME**

The Part 2 of the Osaka Action Agenda and the Manila Framework Declaration for Strengthening Economic Cooperation and Development are the most relevant ECOTECH tests. They have set goals, basic principles, priorities, and short-, medium- and long-term work plans for both APEC as a whole and the APEC fora.

In providing its policy comments, the ESC took into consideration the fora's compliance with the objectives of Part 2 of the Osaka Action Agenda, which contains the essential elements of economic and technical cooperation. Another consideration was whether the working groups, ATC, PLGSME has complied with the Manila Framework Declaration for Strengthening

Economic Cooperation and Development. The framework recapped the objectives and governing principles of ECOTECH. It elucidated the guidelines in the pursuit of APEC economic and technical cooperation, particularly as these relate to the increasing role of business/private and joint government/private sector cooperation, the concept of shared responsibilities and broad benefits and the goal oriented nature of the exercise (with explicit objectives, milestones and performance criteria).

The most significant feature of the framework was a set of six organizing themes and priorities for joint cooperative activities. The framework gave coherence and direction to economic and technical cooperation activities in APEC.

## **7.2 Compliance with the Osaka Action Agenda (OAA)**

The Osaka Action Agenda defined the three essential elements of Economic and Technical (ECOTECH) Cooperation as consisting of Common Policy Concepts, Joint Activities, and Policy Dialogue. Each of the thirteen areas of ECOTECH has a defined set of goals, basic principles, and priorities which constitute its Common Policy Concepts which guide the formulation of joint activities and provide information on the development of each economy's policies and activities.

Policy Dialogues also constitute an important element of APEC's ECOTECH work. These dialogues allow the working groups and APEC fora to develop and review the goals, priorities, themes, and joint activities of each ECOTECH area with the view of ensuring relevance in the work programs of APEC. The dialogues also allow APEC economies to share expertise and experience and exchange views on their policies and activities in line with ECOTECH goals and priorities.

Currently, there are about 250 projects and activities under the APEC Economic and Technical Cooperation Agenda. The progress of these activities is being monitored by the ESC to determine ways by which economic and technical cooperation may be pursued with greater focus and coherence.

The ESC observed that most fora have complied with Part II of the OAA in various degrees as follows:

The **Human Resources Development Working Group (HRDWG)** derives its mandate from statements and references by APEC Leaders and Ministers and other documents. The working group has made considerable inroads in addressing priority and program areas outlined in the HRD Action Program under the Osaka Action Agenda. The group also established a Labor Market Information (LMI) home page on the Internet. These initiatives provided business people and investors easier access to information that would assist them in their decisions on trade, investment, and employment. The HRDWG is faced with the challenge of continuing activities intended to prepare a more responsive work force and is ready to meet the challenges of the next century. The HRDWG reviews and amends its draft annual work plan on an annual basis to respond to recent directions from Leaders' and Ministers' meetings

The **Transportation Working Group (TPTWG)** has undertaken most of its work in compliance with Part 2 of the OAA. The working group's main purpose is to assist in the development of an efficient, safe and integrated regional transportation system, and it has worked in accordance with these stated specific objectives. Through its Steering Committees on More Competitive Transportation Industry (including Infrastructure), on Safe and Environment-Friendly Transportation Systems (including New Technologies), and on Human Resources Development (including Training, Research and Education), the TPTWG has undertaken many APEC- and self-funded activities and projects to meet its OAA priorities. After eight years, the TPTWG has achieved action in most of its priority areas, which include increasing the harmonization, coordination and transparency of transport policies, regulations, procedures and standards; and some work in infrastructure.

The **Trade Promotion Working Group (WGTP)** has been conducting activities related to the five objectives stated in Part 2 of the OAA. APEC Trade Fairs are being held regularly. An APECnet website developed by Singapore has been adopted and promoted among its members. Several courses on trade promotion-related skills have been conducted and others are seeking approval as APEC-funded projects including a project from Australia on Core Characteristics of Trade Promotion organizations. All these objectives require a permanent work commitment from the WGTP and, in that sense, the objectives are still to be met.

The **Fisheries Working Group (FWG)** has been addressing the priority objectives in the Osaka Action Agenda. It has been promoting the conservation and sustainable use of fisheries resources, particularly the sustainable development of aquaculture. The FWG has been addressing common fisheries resource management problems and aquaculture disease control. The FWG has addressed some food safety issues concerning quality of fish and fisheries products by holding comprehensive region-wide training courses in Hazard Analysis and Critical Control Points (HACCP)-based seafood inspection. The FWG has promoted sector-specific work relating to trade and investment liberalization and facilitation through projects such as the four-year self-funded project on *Trade and Investment Liberalization in Fisheries*, a study on *Free Trade and Investment in the Fisheries Sector of the Asia-Pacific Region: Economic Analysis of Tariffs* and the production of a manual on the air shipment of live and fresh seafood to selected markets in APEC. The FWG has also taken on the responsibility of implementing the non-tariff, facilitation and ECOTECH elements of the EVSL Fisheries Sector proposal including a study on subsidies in the fisheries sector and a study on impediments to early voluntary sectoral liberalization in the fisheries sector.

The **Telecommunication Working Group (TELWG)** has been working to accomplish the tasks set out by the APEC Minister responsible for Telecommunications and Information Industry. These are contained in the Seoul, Gold Coast and Singapore Declarations issued by the Ministers. The Seoul Declaration which provided the direction for the development of the Asia-Pacific Information Infrastructure (APII) is consistent with Parts I and II of the Osaka Action Agenda which identifies the APII as a priority objective for the TELWG. The TELWG has made substantial progress towards achieving the objectives of the Osaka Action Agenda. These included the establishment of the APII Cooperation Center in Korea and the APII Technology Center in Japan; the implementation of APII Test Bed projects; agreement on the Mutual Recognition Agreement on Conformity Assessment for Telecommunications Equipment; agreement on a



Framework for Interconnection; a number of ongoing projects on electronic commerce and several projects on human resources development such as the Distance Learning Project.

The **Policy Level Group on Small and Medium Enterprise (PLGSME)** has made great efforts in fulfilling the objectives of the OAA, especially in the five priority areas that were outlined by the first SME Ministerial Meeting in Osaka in 1994. The emphasis of the efforts has shifted depending on the priority theme(s) chosen by the Chair of SME Ministerial Meeting. Consequently there are some gaps among these five priority areas. The areas of human resources development and market access have been given most attention, while problems in the areas of information access, financing, and technology-sharing need to be further addressed.

The **Marine Resource Conservation Working Group (MRCWG)** achieving the approved MRCWG objectives/tasks (as contained in OAA) is a continuous and ongoing process. While some initiatives have been completed or close to completion, others are still ongoing. The Action Plan for the Sustainability of the Marine Environment approved by the Environment Ministers in 1997 has further supplemented the OAA and provided additional mandates to the MRCWG.

The **Energy Working Group (EWG)** work program is ongoing and is regularly updated and reviewed to respond to the much energy related issues within the region. Due to the complexity of the issues concerned, implementation of some activities has been prolonged compared with their original timetable contained in the OAA.

The **Industrial Science and Technology Working Group (ISTWG)** has continued to implement the Osaka Action Agenda, focussing its efforts on six key priorities. The ISTWG six key priorities (revised in 1998) are: improved availability of information; improved human resources development; improved business climate; contribution to sustainable development; enhanced policy dialogue and review; and facilitation of networks and partnerships. The working group currently has 51 ongoing projects providing a significant collaborative endeavor towards the goals of economic and technical cooperation.

The objectives and activities of the **Agriculture Technical Cooperation Experts Group (ATCEG)** are in line with the principles and essential elements of Economic and Technical Cooperation set out in Part 2 of the Osaka Action Agenda. Initially, the activities of ATCEG's focused on the following seven areas of cooperation:

- conservation of and utilization of plant and animal genetic resources;
- research development and extension of agricultural biotechnology;
- Production, development, and extension of agricultural biotechnology;
- plant and animal quarantine and pest management;
- agricultural finance system;
- agricultural technology transfer and training; and
- Sustainable agriculture and related environment issues.

The 3rd ATCEG meeting held in June incorporated part of FEEEP's joint actions into the ATCEG's new framework for cooperation. The area of marketing, processing and distribution of agricultural products has been expanded into production, processing, marketing, distribution and consumption of agricultural products. The scope of sustainable agriculture was agreed to be

expanded. These new undertakings are full reflection of the three principles provided in the common policy concepts in the section of agricultural technology: due consideration to the diversity of agricultural sectors, recognizing the rapid changes occurring in the sector; and adding value to activities undertaken by international agencies.

The **Tourism Working Group (TWG)** has been meeting the objectives contained in Part II of the Osaka Action Agenda through various initiatives and the development of projects closely linked to the elements of economic technical cooperation. It also identified impediments to tourism growth and formulated strategies that will improve tourism movements and investment in the Asia-Pacific Region. These impediments are to be addressed through the discussion and implementation of an APEC Tourism Charter, to be adopted by Ministers during the First APEC Tourism Ministers Meeting, scheduled for the year 2000 in Korea. Joint Activities such as the Economic Impact of the Asian Financial Crisis to the Tourism Sector Reports, Seminars of Tourism and Sustainable Development and Technical Demonstrations have been held, linked to the compilation and sharing of up-to-date information. The Symposium on Tourism and Cultural Festivals in APEC Economies has permitted the TWG to analyze current and future economic trends, and develop policy measures.

### **7.3 Compliance with the Manila Framework for Strengthening Economic cooperation and Development**

The ESC assessment of fora's compliance to the Manila Framework for Strengthening Economic Cooperation and Development are as follows:

- All the Working Groups, ATC, PLGSME have complied with the goals and guidelines of the Manila Framework by embodying the six organizing themes and priorities in its activities.
- In consonance with the goals, principles, and themes laid out in this framework, it is observed that all the relevant fora coordinated with each other and integrated their work on cross-cutting issues to achieve focused outcomes and demonstrated breakthroughs in advancing the goals of APEC in the light of the themes mentioned.
- Most of the ECOTECH projects and activities undertaken by the fora in various degrees were goal-oriented with explicit objectives, milestones, and performance criteria in line with the framework.
- The business/private sectors in APEC fora are obviously playing an increasing role in participating or initiating economic and technical cooperation activities in line with APEC goals. Thus, economic and technical cooperation activities combine government actions, business/private sector projects and joint public-private activities with the public sector playing a direct or indirect role in creating and enabling an environment for business/private sector initiative.

### **7.4 Recommendations**

APEC has evolved rapidly in the past 11 years, and has developed its own vision, objectives, work plans and unique structure. A large number of meetings, with participation at all levels from that of Economic Leaders to technical experts are convened every year and hundreds of APEC projects are proposed and implemented annually. It is time for APEC to review its management process to ensure that APEC will be more productive in delivering expected outcomes. The ESC agreed to recommend the following policy issues to the SOM for consideration.

- In view of the mechanism already in place, it is recommended that the ESC have a broader role by focusing, coordinating and managing the cross cutting nature of the ECOTECH agenda as well as identifying value-added initiatives for cooperative actions.
- Verbal presentations made by working group Lead Shepherds or representatives have been well received by the ESC. It is recommended that the working groups should report to the ESC (perhaps in the same way that the CTI sub-fora report to the CTI), consistent with the ESC's proposed coordination and the management role.
- To ensure that the activities of APEC fora are clearly focused on the priorities identified by Ministers and Leaders, it is recommended that the meetings of Joint Fora be fully utilized to coordinate the efforts of APEC fora. While the fora continue to report to the SOM directly on important policy issues, the fora coordinated by the ESC could be required to make reports to the ESC on the implementation of their action programs, if possible.
- To ensure that the themes chosen by the SOM for the year will be discussed and pursued by the APEC fora, it is recommended that all APEC fora coordinated by the ESC, report the outcome of their meetings held early in the year to the second ESC meeting, if possible.
- The relevant APEC fora to strengthen communication efforts with the ESC through ongoing virtual meetings to highlight publicly achievements in the area of ECOTECH activities.

## **8. CONCLUSION**

The attraction and value-added of APEC activities lies on the fact that the APEC agenda goes beyond trade and investment liberalization and facilitation and extends to economic and technical cooperation. ECOTECH measures not only contribute to the attainment of APEC goals in this area but also facilitate the adjustment process attendant to liberalization. In 1999, APEC achieved a greater focus in this area and ECOTECH measures produced clear and effective outcomes through the following considerations:

- ensuring targeted and effective outcomes, including how to specify outcomes and the identification of beneficiaries;
- establishing performance criteria to allow for the proper rating of APEC ECOTECH projects and activities; and
- measurement of benefits to facilitate prioritization.

The various ECOTECH projects and activities have shown a formidable range of strong commitments across most APEC fora and the need for positive policies to support economic and

technical cooperation. Good work has been done, and all working groups appear to support the importance of ECOTECH activities. There are obvious merits in those activities that are being carried out with a reasonably clear overall plan, and sufficient coordination. It is also quite clear that these activities are benefiting the participants in each economy's marketplace and having a definite impact on the governmental policies and the marketplace. Nonetheless, new strategies and coordinating mechanisms are required to maximize the results of APEC's investments in APEC ECOTECH activities in order for them to be more effective and efficient.

There has been criticism from time to time from some quarters over the quality of ECOTECH projects and the relative priority being accorded to TILF in comparison with ECOTECH. ECOTECH activities are an integral part of achieving APEC's broad goals and deserve continuing emphasis. The ESC believes that APEC is increasing its emphasis on ECOTECH while maintaining its focus on TILF. APEC's ECOTECH achievements are substantial – the 250 projects currently in progress represent a significant body of work. More effort should be devoted to publicizing ECOTECH activities and achievements since much of this work is not well known beyond the relevant working groups.

## **ANNEX 1**

### ***Terms of Reference of SOM Sub-committee on Economic and Technical Cooperation***



## **TERMS OF REFERENCE OF 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*

4. 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 two-year term.

**ANNEX 2**

***1999 WORK PROGRAMME OF  
SOM SUB-COMMITTEE  
ON ECONOMIC AND TECHNICAL COOPERATION***

## **1999 WORK PROGRAMME OF SOM SUB-COMMITTEE ON ECONOMIC AND TECHNICAL COOPERATION**

The mission of the SOM Sub-Committee on Economic and Technical Cooperation (ESC) is to assist the SOM in the managing and coordinating the APEC ECOTECH agenda. The ESC shall:

- Monitor and evaluate implementation of the Guidance of Strengthening Management of APEC ECOTECH activities which was approved by SOM.
- Identify areas where relevant working groups/fora should intensify work. The ESC should in undertaking this task, take careful recognition of the financial crisis besetting some APEC economies and continue to put priority on capacity building initiatives which contribute towards reinforcing foundations for sustainable growth.
- Oversee the implementation and follow-up of the APEC Agenda for Science and Technology Industry Cooperation in the 21st Century.
- Coordinating and managing the APEC ECOTECH agenda as well as identifying value added initiative for cooperative action along the six following priority themes of the Manila framework of strengthening economic and development cooperation.
  - Developing human capital,
  - Developing sound, safe and efficient capital market,
  - Strengthening economic infrastructure,
  - Harnessing technologies for the future,
  - Safeguarding the quality of life through environmentally sound growth,
  - Strengthening the dynamism of small and medium enterprises,
- Oversee the follow up on decisions taken on 1998 priority themes of Harnessing Technology for the Future and Human Resources Development (Capacity Building).
- Continue to review APEC ECOTECH activities in consultation with relevant working groups/fora, and assess their contribution to the goals of APEC's ECOTECH agenda, identifying gaps, potential duplication on cross-cutting issues and make appropriate recommendations.
- Make recommendations to SOM on enhancing the involvement of the private/business sector in APEC ECOTECH activities.
- Review the ECOTECH component of EVSL to ensure that the proposed ECOTECH activities are supportive of and contribute to the liberalization and capacity building objectives of all the sectors selected by Ministers in 1997.

**ANNEX 4**

***SUMMARY TABLE OF ECOTECH ACTIVITIES BY APEC FORA AND PRIORITY THEMES***

1999

## SUMMARY TABLE OF ECOTECH ACTIVITIES BY APEC FORA AND PRIORITY THEMES

APEC For a	EWG	FWG	HRD	IST	MRC	TEL	TWG	TP	TPT	ATC	CTI	EC	SME	ESC	SOM	Total
<i>Priority Themes</i>																
<i>Developing Human Capital</i>	-	2	36	6	-	10	2	-	4	-	20	-	-	1	1	82
<i>Fostering safe, efficient capital markets</i>	-	-	1	-	-	-	-	-	-	-	1	4	-	-	-	6
<i>Strengthening economic infrastructure</i>	5	-	-	-	-	4	-	-	5	2	4	5	-	-	-	25
<i>Harnessing technologies for the future</i>	8	-	1	18	-	10	-	-	5	5	4	-	-	-	-	51
<i>Promoting environmentally sustainable development</i>	8	1	3	27	7	1	1	-	3	1	1	-	-	-	-	53
<i>Encouraging the growth of the small and medium enterprises</i>	-	2	-	1	-	4	-	2	-	-	1	-	11	-	-	21
<i>Other activities</i>	3	1	-	-	-	-	3	2	-	-	3	-	-	-	-	12
<b>TOTAL</b>	<b>24</b>	<b>6</b>	<b>41</b>	<b>52</b>	<b>7</b>	<b>29</b>	<b>6</b>	<b>4</b>	<b>17</b>	<b>8</b>	<b>34</b>	<b>9</b>	<b>11</b>	<b>1</b>	<b>1</b>	<b>250</b>



**ANNEX 5**

*1999*

***SUMMARY TABLE ON THE BREAKDOWN OF ECOTECH ACTIVITIES BY APEC FORA***

# 1999

## SUMMARY TABLE ON THE BREAKDOWN OF ECOTECH ACTIVITIES BY APEC FORA

<b>APEC Fora</b>	<b>EWG</b>	<b>FWG</b>	<b>HRD</b>	<b>IST</b>	<b>MRC</b>	<b>TEL</b>	<b>TWG</b>	<b>TP</b>	<b>TPT</b>	<b>ATC</b>	<b>CTI</b>	<b>EC</b>	<b>SME</b>	<b>ESC</b>	<b>SOM</b>	<b>Total</b>
<i>Breakdown of Activities</i>																
<i>Training</i>	-	-	12	4	-	5	-	-	2	-	11	-	2	-	1	37
<i>Exchange Program</i>	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-	2
<i>Workshop/ Seminar</i>	10	-	10	5	3	1	3	-	-	-	10	1	3	-	-	46
<i>Physical Centers</i>	-	-	4	1	1	2	-	-	-	-	-	-	1	-	-	9
<i>E-Commerce</i>	-	-	-	-	-	3	-	-	1	-	-	-	-	-	-	4
<i>Study/Research/ Report</i>	8	3	6	10	1	9	3	2	6	-	6	6	3	1	-	64
<i>Database/Network Development</i>	4	3	7	18	-	5	-	-	3	2	6	2	-	-	-	50



<b>APEC Fora</b>	<b>EWG</b>	<b>FWG</b>	<b>HRD</b>	<b>IST</b>	<b>MRC</b>	<b>TEL</b>	<b>TWG</b>	<b>TP</b>	<b>TPT</b>	<b>ATC</b>	<b>CTI</b>	<b>EC</b>	<b>SME</b>	<b>ESC</b>	<b>SOM</b>	<b>Total</b>
<i>Breakdown of Activities</i>																
<i>Policy Reforms/Standards</i>	-	-	1	-	-	3	-	-	5	1	-	-	-	-	-	10
<i>Mixed/Other</i>	2	-	-	14	2	-	-	2	-	5	1	-	2	-		28
<b>TOTAL</b>	<b>24</b>	<b>6</b>	<b>41</b>	<b>52</b>	<b>7</b>	<b>29</b>	<b>6</b>	<b>4</b>	<b>17</b>	<b>8</b>	<b>34</b>	<b>9</b>	<b>11</b>	<b>1</b>	<b>1</b>	<b>250</b>

**ANNEX 6**

***DEVELOPING HUMAN CAPITAL -  
COORDINATION PAPER***



15 July 1999

## **DEVELOPING HUMAN CAPITAL–COORDINATION PAPER**

### **BACKGROUND**

At its first meeting in 1999, held in Wellington February 5-6, the SOM Sub-Committee on Economic and Technical Cooperation decided to prepare reports on two of the ECOTECH priority themes, for discussion at the next ESC meeting in Christchurch in early May. Canada and the People's Republic of China agreed to take responsibility for these papers, on the themes of "developing human capital" and "harnessing technologies" respectively.

In preparing this report, the author wrote to all Lead Shepherds and invited them to contribute their ideas and experiences, and their input was very helpful. Another very important contribution to this analysis was the Secretariat's Matrix of ECOTECH Activities distributed at the February ESC Committee as document 99/SOM1/ESC/002. This report was initially discussed at the May ESC meeting. The Committee noted the interim recommendations and requested additional input be solicited from Lead Shepherds and member economies. This final report, presented to ESC at its August meeting is based on this further period of consultation. What follows is presented in the APEC spirit of mutual respect, open dialogue and willingness to learn from each other. Canada hopes that as a result of ESC's conclusions about this crucial cross-cutting theme, we can improve our capacity to strengthen and coordinate APEC's work in the area of human resources development.

### **STRUCTURE OF REPORT**

Section 1 briefly describes the current activities in the field of human resources development that are being carried out in the various APEC fora. This is not intended to be a detailed analysis, since a complete inventory of such projects is included in the ECOTECH Matrix document. Section 2 comments on the strengths of the current range of activities, while Section 3 identifies gaps and areas for improvement in the existing HRD strategy. The final section outlines a number of recommendations, based both on the ESC's discussion of May 3, and further input from Lead Shepherds.

#### **Section 1 – Current Activities**

There are 78 activities listed in the ECOTECH Matrix under the theme Developing Human Capital. They include best practice workshops, labour market research projects, training courses, a task force on the human resource and social impacts of the financial crisis, education curriculum ideas, and personnel exchanges. While the HRD Working Group has the largest number of projects (31), seven other working groups also sponsor projects related to human resources development. In addition, the Committee on Trade and Investment and its sub-committees have 20 projects in this category. Two recent additions to the list of HRD initiatives are the Kuala

Lumpur Plan on Skills Development, approved at last year's AELM and the Action Plan to strengthen training for bank supervisors and securities regulators under the aegis of the APEC Finance Ministers. It is interesting to note that of the 78 projects, only 27 indicate any specific involvement of the private sector. It is unclear from the Matrix how many economies participate in each project – this information is simply not noted. Budget data are also not included in this inventory, but it seems evident from the scope of the projects described that they range in size from quite small activities involving only one or a few economies to quite large initiatives extending over several years and including most member economies. Various methods are used to implement the activities, with the most common being case studies, research, databases and websites, seminars, and training courses.

## **Section 2 – Strengths of Current Activities**

The current set of human resource development projects has been created over a number of years in response to Leaders and Ministers direction, and in particular the Manila Framework for Economic and Technical Cooperation, of which “developing human capital” is one of the six designated priority themes. The diversity of the projects reflects the creativity and professionalism of the member economies and working groups. In a short period of time, the fora of APEC have initiated an extensive program of research, information exchange, training and sharing of best practices in human resource development. This accomplishment should not be overlooked, as in less than a decade, the diverse economies in APEC have been successful in working together in the working groups, and this has led to strong links among government officials in all the APEC fora.

From a policy point of view, there is a readily accepted view that while the working group on Human Resources Development has an overall mandate to support what might be called “generic” human resource development, each of the other “sectoral” working groups also has a responsibility to strengthen the human resources in their own specific policy fields. The HRD Working currently has about 20 centrally funded and more than 30 self-funded projects, all of which are carried out under eight medium-term strategic priorities. Most of the sectoral working groups also have active human resource activities: two examples of this are that the Transportation Working Group has established three steering committees for its work, one of which is focused on human resources development, while the Industrial, Science and Technology Working Group has identified “improved human resources development” as one of its six key priorities. In this sense, there is a well established understanding that HRD is a cross-cutting theme for APEC, and that all parts of APEC have a role to play in advancing the cause.

Another strength of the current situation is that the general theme of HRD has been a subject of consistent interest from Leaders and in recent years each of the economies which has hosted APEC has put special attention on this subject – Canada, Malaysia and New Zealand have all pointed to human resources as key elements in their approach to “their” years as APEC host economies. Early indication are that Brunei may put a similar emphasis on HRD next year. In addition, the social impacts of the Asian financial crisis had underlined even more the vital need to take care of the human resources in each economy. The result of this high level support is that everyone “in the trenches” knows that human resource development simply cannot be forgotten when work plans are prepared each year.

It is always difficult to single out specific projects, but to provide a flavour of what is being achieved, the following activities are the sort of successful initiatives which could readily be replicated elsewhere, and which deserve greater dissemination: the Fisheries Working Group had a project which involved a comprehensive regional program of on-site in-plant training sessions for seafood inspection regimes that will lead to enhanced overall quality and safety of seafood products produced in APEC member economies; the IST Working Group held its first Youth Science Festival in Korea last year which not only promoted greater awareness of APEC youth in science and technology, but also generated much exchange of new ideas among young scientists from different economies; and the HRD Working Group's Task Force on the Human Resource and Social Impacts of the Asian Financial Crisis showed the capacity of member economies to work together with many sectors of society in identifying new ways of responding to the financial crisis. It cannot be denied that a number of the HRD projects appear to have had a very positive impact on the participants who have been involved in them, and that a large amount of comprehensive data has been collected and analyzed. In a number of instances, specific groups of people have been trained, personnel exchanges have been organized, guidelines have been prepared for the use of educational and curriculum specialists, and promotional material has been created to increase understanding of linkages among APEC economies. An APEC body of literature on human resource development in the region now exists for the benefit of policy makers and the marketplace.

But is this good enough? What is missing from the current program of activities, and what more could be done to enhance APEC's strategy to develop the human resources of the member economies and the region as a whole?

### **Section 3 – Gaps and How to Improve**

One of the difficulties of analyzing the human resource development activities of the various APEC fora is the relative lack of comprehensive and accurate information about the projects. The Matrix does not capture data about budgets, level of economy participation, involvement of the private sector and evaluative outcomes. There are other documents, of course, where this information could be expected to be found, such as in budget proposals and progress reports, but currently the information is scattered. In some cases, the project sponsors have not kept the Secretariat up to date on projects, and in others, the project deadlines have slipped. A certain amount of inaccuracy is probably to be expected in trying to keep track of projects based in a many different economies, and it is possible that more comprehensive information provided by the project sponsors would respond to some of the conclusions reached in this analysis. However, based on the data available, there are a number of areas for concern that the SOM Sub-committee on Economic and Technical Cooperation may wish to address.

First, there is no overall HRD strategy or program in APEC. There is a wide array of activities, run by about a dozen different fora, but it would be difficult to describe these activities as a coherent package. The result is a reflection of the interests and creativity of different Working Groups, but it does not amount to a clear and consistent vision of what APEC should be trying to achieve in the area of human resource development, nor does it contain clear measures of implementation, accountability and evaluation.

The second observation is that there is little indication of what all these activities are actually achieving in the way of concrete results or definite outcomes. It is true that many projects can point to specific outputs—for example, a workshop, a publication, a database, a curriculum for a training course, even certificates for graduates of training courses. However, what impact do these outputs have on public policy in the respective economies? How do these activities help the private sector to create jobs, sell their products, and compete internationally? Can we say that APEC’s work to promote better human resource development is actually helping the people of the region to live better lives, increase their standard of living and strengthen families? The only answer an objective observer can give to these questions at the moment is: “I don’t know”. The issue here is a serious lack of evaluative information about the impact of the HRD projects.

Sharing information and research are often the first, and necessary steps to developing and changing public policies, but it seems that the emphasis in APEC is on the exchange of information rather than on results in the marketplaces of the region. And what of the marketplace? Is it reflected in APEC’s human resource development projects? The most generous answer would be “to some extent”, but when you see less than one third of the projects even mentioning the private sector in their project descriptions, there is reason to be concerned about whether marketplace participants are involved in and benefiting from these projects. Furthermore, even where the private sector is mentioned, it seems to be only the “business” or commercial private sector. Except for a couple of projects in the HRD Working Group, there is little if any participation from labour or worker organizations, consumers, indigenous people or other disadvantaged groups. This, despite frequent admonitions from Leaders and Ministers to increase public engagement and support for APEC. A basic guideline for economic and social development is that the involvement of the people you are trying to help is both a helpful part of the planning process and a necessary condition to achieve success; yet, it appears this criterion is seldom being employed by most of the HRD projects in APEC.

Another gap is that at present, there is not very much being done to take gender considerations into account in project development and implementation, that is, most activities seem to be oblivious to what may be the differential impact on men and women. While gender analysis is widespread in many international fora, it is just a beginning in APEC, for example the HRD Working Group included gender analysis information sessions at its 19th meeting last January, and there is great potential for greater use of this tool for project development and implementation to ensure that the particular needs of both men and women are fully addressed by APEC’s human resource strategy.

From the reaction of several Lead Shepherds, it may be possible to conclude there are too many projects, some too small to be effective, and many only involving a small number of economies. There is a risk that much energy is being dissipated with too little in the way of results. To put it more colloquially, we can’t see the forest for the trees.

While there is little evidence of pure duplication in APEC’s human resource development activities, the author believes there could be value added if there could be a higher degree of cooperation and coordination among the various fora, especially at the early stages of project development. It has been suggested, for example, that the Matrix document could be updated electronically on a regular basis by including all new project proposals before they have been endorsed by individual fora. It has also been suggested that electronic means of communication could be more effectively

used to hold discussions among Lead Shepherds to avoid duplication and benefit from the synergy of common consideration of ECOTECH themes. Some discussion among Lead Shepherds does take place, and the Secretariat has been very helpful in referring projects to several Lead Shepherds where it appears there is potential for overlap, but more could be done to enhance the level of joint planning for APEC's human resources development activity. It should also be noted that there is little contact at present between the Lead Shepherds and the Finance Officials, and given the Finance Officials' emphasis on training for bank and securities staff, it would appear their attention is increasingly in the area of human resources, rather than purely "financial" matters.

In terms of the substance of the HRD activities, a lot of attention has gone into training courses of one kind or another, research into what different economies are doing in a variety of fields (such as vocational training, marketplace regulation and labour market policies.), and workshops where mostly government officials exchange experiences with each other. But little effort has been focused on examining and comparing the overall situation of businesses, workers and families from the standpoint of their educational attainment, training capability, social supports and what could be done to improve standards across the region. In the past year, this has started to change as a result of the increased concern with the impact of the financial crisis in the region, and initiatives such as the HRD Working Group's Task Force on the Human Resource and Social Impact of the Financial Crisis indicate a willingness to look more deeply at some of the fundamental human resource questions of the Asia Pacific community.

#### **Section 4 – Recommendations for Improving Coordination and Effectiveness**

On the basis of the Committee's consideration of this paper on 3 May, and further input from Lead Shepherds since May, the following recommendations are presented for consideration by the Committee at its next in August:

1. To invite the Lead Shepherd of the Working Group on Human Resources Development, in full consultation with the other Lead Shepherds, to develop a three- year work plan and priorities for APEC's HRD activities, for submission to ESC during the next year. Once established, this HRD work plan should be regularly reviewed and reported annually to the ESC by the HRD Lead Shepherd.
2. To request Brunei's incoming SOM Chair to make provision for a full opportunity at the 2000 Joint For a meeting for the Lead Shepherds to discuss their common interests in HRD and to plan their coordinated approach for the coming year.
3. To recommend to the HRD Lead Shepherd and the other Lead Shepherds to make use of electronic means such as the ASTWeb to work together on HRD matters between their annual Joint For a meetings.
4. To recommend to the APEC Secretariat to revise, in full cooperation with the Lead Shepherds, the Matrix document on ECOTECH activities, taking into account for each project more information on project proposals, budgets, evaluation measures, private sector participation, and gender analysis.



5. To recommend to all Lead Shepherds, and the BMC, to include in all project proposals clear indication of how the private sector is to be involved, how the project is to be evaluated, how gender analysis will be carried out, and how project results will be disseminated.
6. To explore with the newly created APEC International Assessment Network (APIAN) the possibility of carrying out an assessment of APEC's human resource development activities of the past few years, for presentation at a future ESC meeting.
7. To request the Director of Public Affairs in the APEC Secretariat to provide advice to the Lead Shepherds on how to disseminate more effectively the results of HRD projects both within and outside APEC.
8. To recommend to Lead Shepherds greater emphasis on the participation of as many economies as possible in their HRD-related projects seeking central funding, to ensure both widespread impact and greater benefit for the investment of APEC funds.

## CONCLUSION

This analysis has shown a formidable range of projects, with a strong commitment across most fora to support human resource development. Good work is being done, and all working groups appear to support the importance of human resource development; yet, the many activities are being carried out without a clear overall plan, and with insufficient coordination. It is also unclear whether the activities are having a positive effect on the participants in each economy's marketplace, or whether they are having a definite impact on the governmental policies or the marketplace performance of each economy. To be more effective and efficient, we require new strategies and coordinating mechanisms if the results of APEC's investments in human resource development are to be fully realized.

**ANNEX 7**

***COORDINATION PAPER ON  
“HARNESSING TECHNOLOGIES FOR THE FUTURE”***



## **COORDINATION PAPER ON “HARNESSING TECHNOLOGIES FOR THE FUTURE”**

### **Background**

At its first meeting in 1999, held in Wellington, 5-6 February 1999, the APEC SOM Sub-Committee on Economic and Technical Cooperation (ESC) decided to prepare coordination reports on two of the Ecotech priority themes for discussion at the next ESC meeting in Christchurch in early May. Canada and the People’s Republic of China agreed to take responsibility for these papers, on the themes of “Developing Human Capital” and “Harnessing Technologies for the Future” respectively. In preparing this report, inputs were sought and received from the Lead Shepherds of APEC fora. At the second meeting of the ESC at Christchurch in May, useful comments were made by member economies. All these are highly appreciated.

### **I. Current Status**

Since “harnessing technologies for the future” was identified by APEC Leaders in 1996 as one of the six ECOTECH priority areas, substantial efforts have been devoted by various APEC fora to meet the goals set forth on this theme.

According to the “Matrix of Projects and Activities Related to ECOTECH Cooperation” prepared by APEC Secretariat and submitted to SOM I in February 1999, there are a total of 58 projects targeting directly at this particular theme, taking on modalities of seminars/workshops, subject to review or analysis, establishment of networks/centers, exhibitions, joint study, survey and data compilation. They are conducted by EWG (9), HRD WG (2), IST WG (23), TEL WG (10), TPT WG (2), ATC (3), CTI: SCCP (1), CTI: IPEG (3) and the Economic Committee (5). Technology areas covered by these projects include energy technology, medicine, material technology, disaster prevention and alleviation, telecommunication, transportation technology and biotechnology. IPR issue was also touched by the IPEG under CTI.

It is noted that a large number of the projects are cross-cutting, relating to some other priority areas as well, including developing human capital, strengthening economic infrastructure, promoting environmentally sound development and encouraging the growth of SMEs. It is observed that the IST WG projects on the themes of “promoting environmentally sustainable development” and “encouraging the growth of SMEs” could also be considered to address “harnessing technologies for the future”.

### **II. Overall Appraisal**

While there have been occasional projects which have not achieved all their goals, the 58 projects mentioned above have been generally assessed as worthwhile and beneficial to the

lead and participant economies. Covering a variety of technology areas, they signified and embodied the strong intention of member economies in strengthening their cooperation in this regard. Some of the said projects were conducted by one lead economy, with participation and contribution from other economies; others were jointly implemented by a number of economies. Actually, in the practice of some APEC fora like the IST WG, it is a prerequisite for new project proposals to obtain a minimum of two co-sponsoring economies before being approved.

Heavy involvement and substantial input of business/private sectors were observed in many of the projects. As a matter of virtue, other than those purely policy-oriented projects, business/private sectors were either involved or consulted at different stages of the projects.

It is noted that all the IST WG projects, be they under this theme or others in the matrix, are concerned with harnessing technologies for the future. It is reported that a very significant proportion of the TEL WG's projects is related to this theme. Three out of four sub-groups within TEL WG spend the vast majority of their time on work relating to harnessing technologies, be it advanced satellite networking trial or training program in broadband technologies and multimedia applications. More significantly, a great deal of effort is being made in TEL WG trying to bring into reality the Asia-Pacific Information Infrastructure, which is hoped to form the foundation of the Asia-Pacific Information Society. It is also noted that all the nine EWG projects on this theme are cross-cutting. Though the matrix confines projects to a single priority for the sake of avoiding appearance of one project under two or more themes, there is high potential for them to address more than one priority.

The present set of projects has been initiated over a number of years in response to the direction from APEC Leaders and Ministers, and in particular the Manila Framework for Economic and Technical Cooperation, of which "harnessing technologies for the future" is one of the six designated priority themes. Over the past few years, a series of guiding APEC documents in this area were adopted, including the APEC Agenda for S&T Industry Cooperation into the 21st Century, the Mexico Declaration on Partnerships and Networks and the Cleaner Production Initiative. While all APEC member economies attach much importance to these documents, the APEC IST WG has taken the implementation of them as its major task for years ahead. It would be safe to assume that all projects initiated thereof contribute to the theme of "harnessing technologies for the future".

### **III. Areas for Improvement**

As indicated above, projects devoted to harnessing technologies for the future cover a wide spectrum of technology areas. While this reflects the diverse interests of member economies in line with the diversity in the APEC region, there is reason to believe that these projects could have greater coherence based on common interests so that they could achieve more focused outcomes. There is also potential for member economies to propose such new initiatives as to probe into areas like information technology and other new and emerging technologies, which are of direct linkage with the future.

Another area for examination is how projects could be better designed to encourage maximum participation by member economies and promote the adoption of the most suitable modality, with a view to ensuring effective follow-up and generating more tangible benefits.



#### IV. Suggestions for Better Coordination

1. **To member economies** – It will be useful to ask member economies to target specific Ecotech themes when developing new project proposals, bearing in mind the priorities set forth in the related major APEC documents.
2. **To APEC Secretariat** – The ECOTECH matrix could be further revised so as to get a full assessment of the extent to which projects are contributing to the theme. It is also suggested that the budget and time span of projects be added to the matrix to make it more comprehensive.

The APEC Secretariat's ECOTECH Project database could be improved to include relatively well-developed ideas for new project proposals. This will allow the Lead Shepherds across all fora to comment on the ideas before the proposals are put to the relevant working group for approval.

3. **To IST WG and other WGs** – WGs should provide necessary and timely information on prioritization, development and implementation of ECOTECH activities to ESC for its review in line with its coordination functions. In view of the heavy task that IST WG bears in harnessing technologies for the future and its responsibility in implementing the APEC Agenda for S&T Industry Cooperation into the 21st Century, the Mexico Declaration on Partnerships and Networks and the Cleaner Production Initiative, it should formulate a detailed mid-term work plan. Implementation of the work plan could be reviewed and reported to the relevant APEC fora on a regular basis.
4. **To ESC** – The ESC could play a useful role in ensuring better coordination and focused efforts, and these could be achieved without creating yet another fora under SOM. In line with its coordination functions, the ESC could help pull the threads together by proposing broad guidelines at the beginning of each year on prioritization in accordance with the Leaders' priority. In addition, it could make recommendations to SOM on steps needed to avoid duplication and fill in gaps if there are any.

Taking advantage of the APEC Science and Technology Website set up by the IST WG, the ESC could establish on the site a "Lead Shepherds Forum" to allow more frequent contacts among the Lead Shepherds. This will facilitate greater coordination among working groups, which, combined with access to well-developed ideas for project proposals as described above, would constitute a powerful mechanism to maximize synergy and minimize duplication among the APEC fora.

5. **For the other efforts** – In addition to coordination, evaluation of WG projects addressing this theme was also suggested. Efforts in formulating criteria for assessing project proposals and their impacts should be encouraged.

**ANNEX 8**

***SUMMARY***

***APEC IN SUSTAINABLE DEVELOPMENT 1999***





## SUMMARY

### APEC IN SUSTAINABLE DEVELOPMENT 1999

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

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

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

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

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

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

Regrettably, this year there is no new activities drawn directly from the Sustainable Cities initiative, and neither on FEEEP. Some projects touch on these issues but not as primary focus. However, the list of projects and activities in this overview is not exhaustive. Apart from the projects and

activities listed in this year overview, they are many on-going projects and activities on sustainable development undertaken by APEC fora that have been introduced in the previous years.

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

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

### **Recommendations for Sustainable Development Priorities in APEC**

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

The SOM may wish to consider:

- Inviting relevant APEC fora to examine their activities in the light of developments in the global environment agenda
- Inviting relevant APEC fora to examine their activities in the light of new and emerging opportunities to ensure that development in the wake of the East Asian financial crisis is put on an environmentally sustainable footing

- Encouraging Senior Environment Officials to work together to provide analytical inputs on the environment and sustainable development to relevant APEC fora, including development of criteria to provide a basis for objectively assessing future progress on sustainable development. It could be useful for Senior Environment Officials to review APEC sustainable development objectives from time to time to ensure they reflect the evolving priorities of member economies.
- Encouraging Senior Environment Officials to develop environment and sustainable development project proposals for consideration by relevant APEC fora.



**ANNEX 8**

***OVERVIEW OF APEC ACTIVITIES IN SUSTAINABLE  
DEVELOPMENT FOR 1999***



## **OVERVIEW OF APEC ACTIVITIES IN SUSTAINABLE DEVELOPMENT FOR 1999**

### **1. INTRODUCTION**

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

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

### **2. SUMMARY OF APEC ACTIVITIES RELATED TO SUSTAINABLE DEVELOPMENT**

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

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

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

Business participation is encouraging. Even though 17 projects did not specify any business participation, 12 of which are self-funded projects, the rest include business sector involvement. Six workshops/symposiums involved the business sector as speakers as well as the participants. Four projects involved business in implementation. Three projects were designed with the active participation of business right from the planning stage. Meanwhile the NGO involvement was limited to only four projects.



### 3. BACKGROUND

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

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

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

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

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

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

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

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

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

### A. Committee Initiatives

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

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

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

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

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

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

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

### B. Working Group Initiatives

#### **The Human Resources and Development Working Group (HRD WG)**

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

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

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

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

### **The Industrial Science and Technology Working Group**

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

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

### **The Energy Working Group**

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

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

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

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

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

### **The Transportation Working Group (TPT WG)**

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

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

### **The Telecommunications Working Group (TEL WG)**

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

### **The Tourism Working Group (TWG)**

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

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

### **The Marine Resources Conservation Working Group (MRC WG)**

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

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

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

### **The Fisheries Working Group (FWG)**

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

work towards developing the skills to meet the challenges of a growing aquaculture industry whilst maintaining environmental integrity and long term sustainability of aquaculture operations.

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

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

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

### **Trade Promotion Working Group (TPWG)**

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

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

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

### **The Agricultural Technical Cooperation Experts Group (ATC EG)**

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

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

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

## **Infrastructure Workshop (IWS)**

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

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

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

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

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

## **Early Voluntary Sectoral Liberalization**

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

### **1. EXPECTED “OUTPUTS” FOR 1999**

#### **1. Study / Research / Report / Publication**



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

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

## 2. Workshop / Symposium

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

examine the reasons for those differences, and, where possible, to propose ways of overcoming those differences. EWG

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

### **3. Database / Network**

- “Conservation of Plant and Animal Genetic Resources” – to identify APEC-wide needs for genetic resources management based on the genetic resource database of individual member economies; establish an APEC information network for the exchange of genetic resources related information; develop APEC networks and channels for exchange of genetic resource materials. ATC
- “Sustainable Agriculture” – to establish APEC information network to assist the development of practices which will promote sustainable agriculture. ATC
- “Emerging Infectious Disease; Enhancing E coli 0157 surveillance” - To assist APEC economies to address a key pathogen related to food safety. ISTWG
- “A Feasibility Study for the Development of Post harvest Network for the APEC Region” - To establish a database on "Post harvest Network" for the APEC region (a website was created in 1999 – see <http://cape.uwaterloo.ca:80/postharvest/>). ISTWG

- “Ocean Model and Information System for APEC Region (Year 3)” – aims at developing useful ocean information systems for member economies, and allowing member economies to apply useful and friendly ocean information to policy making for marine resources conservation. MRCWG
- “Ocean Research Network for the Pacific” – is aimed at building a network of centers of excellence in ocean and coastal research and related technology to support the marine interest of the economies of the Pacific region. MRCWG
- “APII Test-bed Project” – to build effective APII and enhances interconnectivity and interoperability between test-beds. TELWG
- “Experts Group on Maritime Safety” – to identify maritime safety issues and problems in the region and propose recommendations for improvement. TPTWG

#### **4. Policy Reform / Standard Harmonization**

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

#### **5. Training / Technology Exchange**

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

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

**ANNEX 9**

***ENCOURAGING THE GROWTH OF SMEs  
BY THE REPUBLIC OF KOREA***



## **ENCOURAGING THE GROWTH OF SMES**

### **By Republic of Korea**

#### **Importance of Cultivating SMEs in APEC**

SMEs account for a major portion of both the domestic economies and APEC as a whole. Their flexibility and creativity are also expected to contribute greatly to the revitalization of APEC member economies. Recognizing this, APEC has continued interest in cultivating SMEs. According to the “Questionnaire on SME issue in APEC” which was circulated last June, 92% of respondents agreed or strongly agreed that the SME issue is very important for APEC.

Due to difficulties stemming from small scale, insufficient capital resources, and limited access to technology and information, SMEs have faced a competitive disadvantage in the marketplace. The primary focus of SME-related discussions within APEC has been on eliminating these impediments and creating a business climate conducive to enhancing SMEs’ competitiveness. Market failures (e.g. in the areas of information and management training) have left SMEs less equipped to deal with competition than large firms. Appropriate support is needed for SMEs to embrace the challenges and opportunities presented by competition so that SMEs may be able to function to their full potential.

The regional economic crisis has driven many SMEs out of business. Nevertheless, SME start-ups and growth have been essential in overcoming the crisis. Therefore, APEC should do more to enhance the effectiveness of its SME-fostering efforts.

#### **Current Activities**

The current status of APEC’s SME-related discussions and activities have been analyzed, including the 25 support projects under the ECOTECH Matrix, the search results of the APEC Project Database, relevant activities of other fora and the responses to the “Questionnaire on SME issue in APEC”.

At the ECOTECH Sub-Committee (ESC) held in February 1998, the APEC Secretariat distributed the “Matrix of Projects and Activities related to ECOTECH according to the Six Priority Areas,” comprising a total of 289 Ecotech activities. Among these, only 25 projects were concerned with SMEs, ranking fifth among the Six Priority Areas. Thus, despite the recognized importance of fostering SMEs, efforts to promote SMEs have been comparatively modest.

In the “Matrix of Projects and Activities”, SME support-related projects were carried out by eight fora, including nine projects by SMEPLG, four each by Telecommunications (TEL) and Trade Promotion (TP), and three by Human Resources Development (HRD). Specific events and projects organized by these fora include 10 websites or databases, five training programs, three workshops or seminars, two surveys, three studies, and two business matching opportunities.



A search of “SMEs” conducted on the APEC Secretariat’s trial website for the APEC Project Database (<http://203.127.220.68/apecp1.nsf?OpenDatabase>) at the end of July 1999 turned up 75 individual projects. These searched projects have been managed by 12 fora; for example, 20 projects by SMEPLG, 14 by Industrial Science & Technology (IST), 11 by HRD, six by TP and five each by Committee on Trade and Investment (CTI), Energy Working Group (EWG) and Agricultural Technical Cooperation (ATC). The result of the APEC Project Database search provides more detailed and richer information than does the “Matrix of Projects and Activities,” including such specifics as project background, summary, expected output, business/academic involvement, and funding sources.

According to responses to the “Questionnaire on the SME issue in APEC”, respondents generally thought that APEC activities encouraging SMEs had not been given the attention that SMEs deserve. Additionally, a few respondents pointed out there had been some duplication in SME related activities.

### **Strengths and Weaknesses of Current Activities**

SME support-related discussions in APEC were first mandated at the 1993 APEC Economic Leaders’ Meeting in Seattle. Since then, APEC member economies have shown a growing awareness of the important role SMEs play. The Manila framework included “Strengthening the dynamism of SMEs” in 1996. Because of this heightened interest in SMEs, many fora have been also reflecting SME issues in their discussions and incorporating them into their agenda, as evidenced in the search results (that is, 75 projects among 12 fora) of “SMEs” through the APEC Project Database.

Among the six “priority themes”, SME-fostering is interrelated with other five priority themes in APEC. Namely, SME-fostering is closely connected with discussions on capital, human resources development, technology, information, trade, investment, competition policy, etc. Therefore, the discussions and activities of APEC fora have an impact on the business environment of SMEs. However, the inclusion of agenda items directly pertaining to SMEs by other fora in 1998 were limited to TELWG’s activation of electronic commerce for SMEs, the ABAC, and the Women Ministerial Meeting. In other words, SME issues have been treated broadly and generally at a macro level but not sufficiently at a micro level by APEC fora. Proposals on cultivating SMEs have not achieved the concrete results and micro firms, in particular, have not received due consideration.

We have often said that APEC means business. APEC’s basic objective is to facilitate business. So, in many ways, greater business sector involvement has been encouraged. Among the 25 “SME-fostering” projects included in the Matrix, 76% or 19 projects were carried out with the input of the business sector. This level of private-sector participation is relatively high, compared with 35% in “Developing Human Capital” projects and 54% in “Harnessing Technologies for the Future” projects. This clearly attests to the importance of incorporating business-sector needs and input into SME-fostering activities. In this context, 76% private-sector participation in APEC’s SME-fostering projects is very encouraging.

After five key “bottleneck” areas facing SMEs (human resources development, access to

information, technology, financing, and market access) were selected at the 1st APEC SME Ministerial Meeting in October 1994, SME-fostering activities within APEC have focused on resolving these five problems. According to the Matrix, brisk efforts are underway in the areas of access to information, market access and human resources development, while those in financing and technology have been relatively sluggish.

The main venues for SME-fostering discussions have been the annual SME Ministerial Meeting and SMEPLG Meeting. SME-fostering efforts, however, by the above two fora have some limitation. Without cooperation from other fora, for instance, on human resources development, financing, technology, trade and others, discussions on fostering SMEs are unable to take concrete shape.

Due to a lack of systematic consultation and cooperation between fora, duplication has occurred. For example, recently as SMEs are welcoming electronic commerce as a new means to improving market access, there have been some overlapping projects undertaken by different fora on the “Electronic Commerce and SMEs.”

### **Recommendations for Improving Coordination and Effectiveness**

The following proposals should be examined at the ESC for improving coordination and effectiveness of SME support activities within APEC:

1. Summaries of completed and on-going projects should be compiled and reported by the APEC Secretariat for the six Priority Areas at the final ESC of each year through the updated “Matrix of Projects and Activities related to ECOTECH according to the Six Priority Areas”. Matrix needs to be more specific and access to completed projects needs to be guaranteed to those who are interested.
2. To obtain more outcome-oriented results, project evaluations should be undertaken. So far, economies proposing a new project have included an evaluation as part of its proposal. However, there could be some limitation on self-evaluation and evaluation cost. To ensure unbiased evaluations, they should be carried out not by the economy responsible for the project but by other economies. Each forum could evaluate projects and decide on several excellent projects through a comprehensive annual evaluation process (to be disseminated via e-mail or at the meeting). APEC could learn from the success points of the selected projects and thereby improve the overall performance of projects.
3. The APEC Project Database covers most projects in APEC and can help fora maximize synergy effects. In order to supplement the contents of the APEC Project Database, the results of completed projects or their summary should be uploaded onto the database and made available for free downloading, thereby expanding the sharing of project results and improving information sharing.
4. Business/Private sector participation in SME-related activities is relatively high. But to ensure that future activities are more practical, business/private sector input should be constantly encouraged, especially the participation of representatives from the business community. The

joint meeting of APEC SME ministers and APEC SME entrepreneurs held in Christchurch, New Zealand, last April, could serve as a good example. Moreover, from planning to the evaluation of projects, business/private sector contributions should be welcomed. Going a step farther, more business opportunities should be provided through facilitated business matching programs for investments, technical collaborations and other activities that could strengthen the market base of SMEs.

5. Gender has been a cross-cutting issue. Recently, women entrepreneurs' business activities have expanded and developed. In a knowledge-based economy, women's abilities play a powerful role in creating the value-added. Women entrepreneurs have usually been involved in SMEs, especially micro firms. In this context, SME-related activities should show more concern towards women entrepreneurs and micro firms. SMEPLG and Women Leaders Network could cooperate each other, for instance, by holding a joint session or sharing information through liaison.
6. The cross-cutting nature of SME issues means that the involvement and cooperation of other fora are critical to the implementation of many initiatives and proposals made at the SME Ministerial Meeting. The results of the SME Ministerial Meeting should be conveyed through the Chair or the Secretariat to other ministerial meetings in order to get their feedback and to maintain greater consistency in SME-related discussions. Through this, we hope that other fora will be encouraged to hold more activities related to SME issues, and that those in APEC will help SMEs gain access to necessary and various resources.
7. The SME Ministerial Meeting and the SMEPLG should seek further dialogue with other APEC fora. The Chair of the SME Ministerial Meeting and the lead shepherd of the SMEPLG should join other ministerial meetings and fora, and remind them of policy needs of SMEs. Or, conversely, the SME Ministerial Meeting and the SMEPLG could invite other fora members to their meetings.
8. We should remind ourselves of the Manila Framework, APEC Framework for strengthening economic cooperation and development, concluded in 1996. ESC needs to expand its role in realizing goals of the Manila Framework. The ESC should be more actively involved in the coordination among APEC fora. Namely, it should remind other fora of the importance of Economic and Technical Cooperation (ECOTECH) in APEC.

## CONCLUSIONS

In analyzing SME support efforts in APEC, "information sharing" is the key factor in effectively coordinating projects among fora. To increase information sharing, maximum use should be made of the existing ESC and APEC Project Database projects.

Supporting SMEs is a crucial task in order to overcome the regional economic crisis. As regards to this task, the Economic Committee has included the SME issue in its project, "APEC Economies beyond the Asian Crisis".

SME support-related discussions should be expanded and related projects should be more effectively coordinated. Of course, such coordination and expansion of SME discussions must follow the basic direction of market principles, private sector initiatives, and corporate competitiveness, with the ultimate goal being the cultivation of internationally competitive SMEs.

APEC has recognized the importance of fostering SMEs, but concrete actions to that effect have been insufficient. Now is the time to engage in actions encouraging the growth of SMEs.

**ANNEX 10**

***SELECTED APEC INITIATIVES, ACTION PLANS  
AND PRINCIPLES***



## SELECTED APEC INITIATIVES, ACTION PLANS AND PRINCIPLES

INITIATIVE	STATUS
Osaka Action Agenda (1995)	Implementation underway.
Manila Action Plan for APEC (1996)	Superseded by subsequent versions of IAPs.
Blueprint for APEC Customs Modernization (1997, 98)	Implementation underway in SCCP.
Framework for Strengthening Economic Cooperation and Development in APEC (1996)	Implementation underway. ESC trying to strengthen management and coordination.
Framework for SME Activities (1997)	Superseded by subsequent plan?
Sustainable Cities Program of Action (1997)	Implementation underway. An integral part of the Infrastructure Workshop's current work program
Vancouver Framework for Enhanced Public-Private Partnerships for Infrastructure Development (1997)	Implementation underway, initial report on which given to Ministers 11/98. Consultations on the information highway, integrated transportation systems and power sector proposals are being conducted by TEL WG, TPT WG / Senior Environment Officials and the EWG respectively with input from the Infrastructure Workshop. Consultations on infrastructure to support sustainable urbanization and rural integration and diversification are being coordinated through the Infrastructure Workshop.
Asia-Pacific Information Society (1997)	TEL WG trying to implement reporting mechanism
Cleaner Production Strategy (1997)	Implementation underway with projects by IST WG, HRD and EWG.
Economic Governance Capacity Building Initiative (1998)	Australia to take bilateral action. No collective action planned yet.
Kuala Lumpur Action Program on Skills Development (1998)	Implementation underway with initial seminar May 1999 in Penang.
Framework for the Integration of Women in APEC (1998)	Ad hoc Task Force now seeking to operationalize.
Asia-Pacific Transportation System	
Natural Gas Initiative (1998)	Implementation getting underway with most work under EWG.

INITIATIVE	STATUS
APEC Agenda for Science and Technology Industry Cooperation into the 21 <sup>st</sup> Century (1998)	ISTWG is seeking a structural approach to correlate its projects with the Agenda and established a Coordination Group to prepare a report on projects of IST and other APEC fora that contributed to the Agenda and to advise the possible gaps to be bridged.
APEC Framework for Capacity Building Initiatives on Emergency Preparedness (1998)	
Integrated Plan of Action for SME Development (SPAN) (1998)	Calls for action by individual economies.
APEC Blueprint for Action on Electronic Commerce (1998)	Implementation getting underway with activities being considered by various fora.
Asia-Pacific Information Infrastructure (1995)	TELMIN1 "Seoul Declaration for the APII," included Five Objectives for the APII, and Ten Core Principles for the APII. Implementation proceeding.
Non-Binding Investment Principles (1994)	Calls for action by individual economies to implement. ABAC continues to press for action.
Non-Binding Government Procurement Principles (1997-99)	GPEG aims to complete by end-1999. Calls for action by individual economies to implement.
Voluntary Action Plan for Supporting the Freer and Stable Flow of Capital (under discussion in FMP)	Calls for action by individual economies to implement.
Voluntary Principles for Facilitating Private Sector Participation in Infrastructure (1997 FMP)	Calls for action by individual economies to implement. Vancouver Framework responding
Voluntary Principles in Promoting Financial and Capital Market Development (1997 FMP)	Calls for action by individual economies to implement.
Jakarta Declaration for the HRD Framework for APEC (1994?)	
APEC Action Program for HRD (1996)	
Framework of Principles for Integrating Economy and Environment in APEC (1994)	
Sustainable Development Action Program (1996)	
Non-Binding Energy Policy Principles (1996) Model Vocational Education and Training	



INITIATIVE	STATUS
Framework for Telecommunications (1996)	
Gold Coast Telecommunications Program for Action (1996)	
SME Action Program (1996?)	Superseded by subsequent plans?
Action Plan for Sustainability of the Marine Environment (1997)	Implementation underway with activities by MRC WG
Best Practice Principles for Independent Power Producers (1997)	
SME Action Plan (1997)	Superseded by subsequent plan?
TEL WG Reference Framework for Action on Electronic Commerce (1998)	TELMIN3, "Singapore Declaration," Annex A. Adjunct to APEC Blueprint for Action on E-com. Implementation underway.
Universal Access Principles (telecoms) (1998)	TELMIN3, "Singapore Declaration," Annex B. "For those APEC economies who believe there is a need to provide universal access to telecoms services, the principles provide guidance on how ... [this] can be accomplish[ed]."
Reference List of Elements of a Fully Liberalized Telecommunications Services Sector (1996)	TELMIN2, "Gold Coast Declaration"
Collective Actions for Trade and Investment Liberalization in the Telecommunications and Information Sector (1996)	Evergreen TEL document, first recognized by TELMIN2 in "Gold Coast Statement"
Investment liberalization 'menu' approach (options for voluntary inclusion in IAPs) (1998)	Calls for action by individual economies to implement. IEG to record economies' selections from the menu.
Action Plan on Infectious Diseases (1998)	Implementation underway in IST WG.
Voluntary Action Plan on Asset-backed Securitization (1998)	Finance Ministers process responsible for implementation. Little apparent action.

28 April 1999

## **ANNEX 11**

### ***FIRST PROGRESS REPORT ON THE APEC AGENDA FOR SCIENCE AND TECHNOLOGY INDUSTRY COOPERATION INTO THE 21<sup>ST</sup> CENTURY***



**FIRST PROGRESS REPORT ON THE APEC AGENDA FOR SCIENCE AND  
TECHNOLOGY INDUSTRY COOPERATION INTO THE 21<sup>ST</sup> CENTURY**

Prepared by the APEC Industrial Science & Technology Working Group  
3 August 1999

## **Overview**

*The Agenda for S&T Industry Cooperation into the 21<sup>st</sup> Century is an ambitious statement, covering a rich array of objectives. At the same time, APEC databases have hitherto not been well suited to the analysis of work which contributes to meeting the Agenda's objectives.*

*In the face of these challenges, and less than one year after its launch, this report provides a first assessment of the extent to which the Agenda is being implemented through APEC's Ecotech activities. In some ways this is an exploratory report, and is offered in this spirit. Subsequent reports can build on, and refine, the approaches adopted here.*

*Overall, APEC working groups appear to be addressing the Agenda in a comprehensive way - in the volume of activities and its range across Working Groups.*

*There appears to be significant private sector involvement in this work and widespread industrial relevance. However this important dimension warrants deeper investigation.*

*As called for in the Agenda there is significant collaboration in a number of specific technologies. This is most clear with environmental technologies and the exploitation of natural resources. However, there are also signs of collaboration on the key technologies for the 21<sup>st</sup> Century - biotechnology and information technology. Other significant enabling technologies, such as advanced materials and electronics, do not appear to be the focus of much collaboration through APEC Ecotech activities.*

*Notwithstanding generally positive indications about the implementation of the Agenda, there are signs of some gaps. It seems unlikely that the goal of encouraging greater involvement by women in science and technology is being comprehensively addressed. It may be timely for the development of a specific agenda on gender and S&T, limited in its ambition but clearly promising a higher level of uptake and action by working groups. One aspect of this might be an APEC policy dialogue on women and science and technology*

*Another possible gap relates to encouraging an S&T policy dialogue. The IST WG may wish to address this by including such discussion in its meetings and encouraging suitable projects, focusing on more detailed comparative S&T policy analysis.*

*More speculatively, there may be inadequate attention to the role of SMEs in the knowledge-based economy, a key issue in light of growing recognition of the role of technology in long-term growth. Relevant Working Groups might wish to explore this more deeply and respond accordingly.*

*In this analysis it has not been possible to assess the **outcomes** of the work to implement the Agenda. This strategic issue may warrant coordinated attention across APEC's Ecotech activities.*

*This report identifies a large range of projects contributing to the implementation of the Agenda, across a range of APEC Working Groups. No analysis was attempted of possible duplications of*

*effort, or of failure to exploit synergies. Nevertheless, it seems prudent to consider the scope to minimise duplication and maximise synergies. The inclusion of project **proposals** in the Ecotech Projects Database might offer a powerful tool to help maximise the benefits of project coordination. The ESC might wish to consider this suggestion in more detail.*

### ***Recommendations***

Arising from the finding of this report, ISTWG invites the ESC to forward the following recommendations to SOM III for endorsement<sup>1</sup>:

1. That the IST Working Group, in partnership with the Policy Level Group on SMEs, and in collaboration with other relevant APEC Fora, should strengthen APEC's Ecotech focus on the opportunities and challenges for small and medium sized enterprises in knowledge based economies.
2. That the IST Working Group, in collaboration with all APEC Fora, should develop an action agenda to strengthen the involvement of women in science and technology in the APEC region.
3. That the IST Working Group, in collaboration with other relevant APEC fora, should strengthen science and technology policy dialogue in the region.
4. That the APEC Secretariat and member economies should work together to further strengthen Ecotech project coordination across all APEC Fora, using, as appropriate, the approach proposed in this report.
5. That the second progress report on the *APEC Agenda for Science & Technology Industry Cooperation into the 21<sup>st</sup> Century* should build on the encouraging results of this report and provide deeper analysis of the nature and depth of private sector involvement in APEC Ecotech projects, and of the impact of projects on intended beneficiaries.

<sup>1</sup> Please note that one economy has been unable to support this document going forward as an agreed ISTWG position, agreeing only "to submit this report as an interim report to the ESC".

## Introduction

This paper has been prepared by the Industrial Science and Technology Working Group (IST WG) to encourage active and balanced implementation (across all working groups) of the *APEC Agenda for Science and Technology Industry Cooperation into the 21<sup>st</sup> Century*.

It is forwarded by IST WG for consideration by the ESC and SOM. In doing so, one economy has been unable to support the document going forward as an agreed ISTWG position, agreeing only “to submit this report as an interim report to the ESC”.

## Background

The *APEC Agenda for Science and Technology Industry Cooperation into the 21<sup>st</sup> Century* (the *Agenda*) was developed largely by IST WG in response to a call by the Leaders at their Vancouver meeting in 1997.

The *Agenda* was endorsed by Science and Technology Ministers at their meeting in Mexico (October 1998), and by Leaders at their meeting in Kuala Lumpur (November 1998). Leaders instructed Ministers to take action to ensure the *Agenda's* implementation.

The *Agenda* will facilitate the APEC vision of harnessing technologies for the future and catalysing the development of strong sustainable regional science and technology networks and partnerships. All APEC fora, particularly the IST WG, have been instructed to develop and implement specific initiatives and activities that support the vision and principles under the *Agenda*.

## Vision and mechanisms

The *Agenda's* vision is of a dynamic and prosperous Asia-Pacific region, built on the development and application of industrial science and technology, which supports economic growth and improves quality of life, while safeguarding the environment and the natural resources necessary for economic sustainability.

The successful development, application and commercialisation of industrial science and technology will depend on the ability of APEC economies to create a strong open innovation system and to work cooperatively to catalyse the development of strong sustainable regional Science and Technology (S&T) networks and partnerships.

The *Agenda* provides five mechanisms through which its vision is to be achieved. These are:

1. Improved availability 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

## Cross-cutting APEC Themes

It is important to ensure that activities taken to implement the *Agenda* also include balanced consideration of key cross-cutting APEC themes. In the current analysis, two cross-cutting themes have been considered.

### *Gender*

At the Ministerial Meeting on Women at Manila in 1998, gender was identified as a cross cutting APEC theme. Ministers suggested that special efforts to improve the recruitment and retention of women in science and technology be considered in implementation of the *Agenda*.

### *Private Sector involvement*

Enhancing the involvement of the private sector is a longstanding issue for APEC. The Osaka Action *Agenda* sought involvement of the business/private sector wherever possible, and the Manila Declaration strongly encourages the private sector to participate and initiate economic and technical cooperation activities in line with APEC goals.

The *Agenda* pays particular attention to the role of the private sector/business organisations, noting that collaborative activities should ensure, whenever possible, the active participation of private-sector companies, especially SMEs.

Sustainable Development is a key element of the *Agenda*'s vision statement and is also an APEC cross-cutting theme. However, in view of other relevant reports (notably the Annual Review by Senior Officials of APEC Work on sustainable development) APEC work on sustainable development is not assessed here. The thrust of the draft report is that although APEC fora are pursuing a significant number of relevant activities, more coordination is required at a senior level to ensure focus, coordination, and results.

## Methodology

The *Agenda* is an ambitious statement, covering a rich array of objectives and calling for action across a range of working groups. At the same time, APEC databases, in particular the Ecotech Project Database, has hitherto not been well suited to the analysis of work which contributes to meeting the *Agenda*'s objectives.

In the face of these challenges, and less than one year after its launch, the objective of this report is to provide a first assessment of the extent to which the *Agenda* is being implemented through APEC's Ecotech activities. In some ways this is an exploratory report, and is offered in this spirit. The *Agenda* is a long-term vision which will naturally call for subsequent analysis and assessments of progress. Subsequent reports can build on, and refine, the approaches adopted here.

In particular, three key analytical strategies have been used in this report. These relate to:

- the approach taken to handling the *Agenda*'s rich array of objectives
- the Ecotech projects included in the analysis



- the focus on science and technology

### ***Agenda objectives***

The *Agenda* is a long-term vision, encompassing a very wide range of issues and objectives. This first progress report focuses on a selected range of key issues. Issues not addressed here can be targeted in subsequent reports.

This report focuses on the extent of progress with:

(i) The *Agenda's* five mechanisms:

- Improved availability/access to information
- Improved human resource development
- Improved business climate
- Enhanced policy dialogue and review
- The facilitation of networks and partnerships

(ii) Selected cross cutting issues:

- Private sector involvement
- Gender and S&T

(iii) Collaboration on specific technologies identified in the *Agenda*:

- Biotechnology
- Environment/cleaner production
- Communications
- Information technologies
- Advanced materials
- Electronics
- Transport
- Resource management
- Energy
- Sustainable agriculture
- Emergency preparedness/climate prediction
- Exploitation of natural resources

Finally, to reflect the goals of the Industrial S&T Working Group, as well as an evident theme within the *Agenda*, the analysis focuses on the *industrial relevance* of projects contributing to the implementation of the *Agenda*.

Further information on the definitions used in this analysis are provided in *Appendix 1*.

### ***Ecotech projects included in the analysis***

This report aims to identify the volume of APEC projects, recent and in-progress, which contribute to the implementation of key aspects of the *Agenda*. Thus, the focus of analysis is the complete Ecotech Project Matrix.

This approach is motivated by a wish to identify aspects of the *Agenda* which appear to be receiving comprehensive attention, and other aspects which are the focus of less activity and may call for increased targeted effort.

In particular, the analysis is not directed at identifying projects which have been expressly stimulated by the Leaders' initiative.

### ***Focus on S&T***

The *Agenda* targets *science and technology* collaboration. At the same time, many of its mechanisms and objectives, such as improved human resource development or improved access to information, can arise in APEC projects which have little direct relevance to S&T collaboration. In the current analysis, projects are only considered as contributing to the implementation of the *Agenda* if the project description indicates some relevance for the promotion of S&T collaboration.

However, with respect to *Agenda* Mechanism 3, improved business climate, where the links to S&T may be indirect and complex, this approach could lead to a significant understatement of project activity contributing to the *Agenda*. To accommodate this, information is also provided below on projects aimed at improving the business climate but with no explicit link to S&T.

In this discussion of methodology two other issues warrant emphasis:

- The focus on project counts
- Information gaps

### ***Project counts***

The basic approach in this analysis is to count the number of projects which contribute to implementing various aspects of the *Agenda*, and to infer from these counts areas of relatively strong, and weak, focus. This approach takes no account of the relative size, comprehensiveness or impact of individual projects. To do so would not have been possible with the available information or resources.

Based, in part, on the exploratory findings of this report, the next progress report on the *Agenda* might take a more targeted analytical approach, investigating in detail the nature of the projects addressing issues of particular importance. Furthermore, before any analysis could be undertaken, project evaluation reports need to be made more widely available. This could possibly be achieved via the APEC's Ecotech Project Database, which has the facility for project reports to be added to project records.<sup>2</sup>

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<sup>2</sup> The same feature is being incorporated into the IST WG's APEC Science and Technology Website (ASTWeb, <http://www.apecst.org>) in relation to IST WG projects.

### ***Information gaps***

Many project records in the Ecotech Project Database carry very limited information. Thus the analysis for this report may have failed to capture some projects which contribute to the *Agenda*.

In addition, there are delays between the endorsement of projects by Working Groups and their appearance in the Ecotech Database as projects in progress. Once again, this may lead to an understatement of relevant project activity. This might be uneven across Working Groups, according to how recently a working group met prior to the updating of the Ecotech Database records used for this analysis.

In the overall assessment of activity contributing to the implementation of the *Agenda*, these information gaps do not appear to be severe - overall, the available information suggests a very substantial amount of Ecotech work contributing to the *Agenda* (see next section). Where the gaps might be more significant is in relation to the assessment of contributions from particular Working Groups.

### **Findings**

Overall, there is a very substantial level of activity which addresses the *Agenda* in one or more of its aspects (see Table 1). In total, 185 recent projects address the *Agenda*, with 144 of these currently in progress.<sup>3</sup> <sup>4</sup>This reflects a broad front of relevant work across different APEC Working Groups, with major contributions from the Industrial Science & Technology Working Group (providing 27 per cent of the projects) and the Human Resources Working Group (24 per cent), and significant contributions from the Telecommunications (12 per cent) and Energy (11 per cent) Working Groups. It is also striking that the Committee on Trade and Investment (7 per cent) appears to be actively contributing to the implementation of the *Agenda*.

Examples of relevant projects from the CTI include:

- The *IP Information Mall* involves the establishment of intellectual property offices' Internet homepages providing IP information; and the creation of a network providing easy and quick access to each member's IP information. (CTI 05/1999S, project in progress)
- *Pilot for training in the Application of Risk Analysis in Conformity Assessment of Foods* trains trainers in food regulatory systems so as to ensure compliance of food products, processes and premises. (CTI 06/1999T, project in progress)
- *Assistance with Jurisprudence and Administration Guidelines Surveys*: facilitates trade between the APEC economies by making important information readily available to potential users of intellectual property; and identifies areas in immediate need of further development in

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<sup>3</sup> A complete listing of the 185 projects which contribute to the *Agenda* is provided in Appendix 2.

<sup>4</sup> On the basis of the year specified in the project number allocated by the Secretariat, and reported in Appendix 2, there is some evidence to suggest that approximately 58% of the 185 projects identified in this report as contributing to the implementation of the *Agenda* were started in 1999, 17% in 1998, with the remainder starting before 1998 and the earliest starting in 1993.

the intellectual property rights systems of the member economies. (CTI 21/1999T, project in progress)

**Table 1 Projects addressing the S&T Agenda**

<b>Working Group/forum</b>	<b>Number of projects</b>	<b>Per cent</b>
Industrial Science and Technology Working Group	51 <sup>a</sup>	27
Human Resources Development Working Group	45	24
Telecommunications Working Group	22	12
Energy Working Group	19	11
Committee on Trade and Investment	13	7
Marine Resource Conservation Working Group	8	5
Agricultural Technical Cooperation Experts' Group	7	4
Transportation Working Group	7	4
Fisheries Working Group	5	3
Ad Hoc Policy Level Group on Small and Medium Enterprises	4	2
Trade Promotion Working Group	2	1
Economic Committee	1	1
Tourism Working Group	1	1
<b>Total</b>	<b>185</b>	<b>100</b>

Notes: <sup>a</sup> All IST WG projects contribute to the Agenda

### **Agenda mechanisms**

There is a substantial volume of activity aimed at improving human resources development (55 per cent) and access to information (33 per cent), and significant, but less, activity to facilitate networks and partnerships (24 per cent) and to improve the business climate (22 per cent) (see Table 2).

However, there appears to be much less activity directed at S&T policy dialogue.

Examples of projects which address the *Agenda* mechanisms include:

#### *(i) Improved Availability/Access to Information*

- The objective of the *Conservation of Plant and Animal Genetic Resources* project is to strengthen information sharing on plant and animal genetic resources by identifying APEC-wide needs for genetic resources management and establishing an APEC information network. (Agricultural Technical Cooperation Experts' Group, ATC 07/1999S, project in progress)
- The objectives of the *Facilitating S&T Information Flows* project are to enhance the flow and application of information, technology and expertise; and to enhance links between government agencies, the private business sector (including SMEs) and organizations engaged in collaborative research and development. (Industrial Science and Technology Working Group, IST 02/1998, project in progress)

- The *Ocean Research Network for the Pacific* will establish a network of centres in ocean and coastal research and related technology, thus facilitating information access among research institutions and APEC members. (Marine Research Conservation Working Group, MRC 01/1998s, project in progress)

(ii) *Improved Human Resource Development*

- The project *Internet and Electronic Commerce: Training based on Java Technology in APEC* provides training on electronic commerce activities in the Asia Pacific region (Human Resources Development Working Group, HRD 05/1998, project in progress)
- The *APEC Clean Fossil Energy Technologies Technical Seminars* is a on-going project since 1993 which will assist members in the formulation of integrated energy and environmental policies. (Energy Working Group, EWG 02/1998S, project in progress)
- The long term objectives of the *Collaborative Aquaculture Education Program* are to adequately train a critical mass of middle level managers and technicians in the science of aquaculture. (Fisheries Working Group, FWG 02/1999, project in progress)

(iii) *Improved Business Climate*

- *APEC/PFP Course on Management of Industrial Property Rights* aims to enhance APEC members' understanding of industrial property rights, related law and enforcement as well as computerisation of IPR administration (Committee on Trade and Investment, CTI 02/1999S, project in progress)
- *Review of Energy Efficiency Test Standards and Regulations in APEC Member Economies*, facilitates the process of acceptance of equivalence in accreditation and increasing harmonisation of energy standards. (Energy Working Group, EWG 03/1998T)
- The *Road Transport Harmonization Project* examines conformity assessment and certification requirements for automotive products in each member economy, so as to reduce the technical impediments to trade in the region. (Transportation Working Group, TPT 02/1998, project in progress)

(iv) *Enhanced Policy Dialogue and Review*

- The *Training Programme on Strategies to identify and facilitate investment in specific areas, e.g. SME Development, Industrial Linkages, High-Tech industries and R&D Activities*, benefits government agencies with responsibilities to formulate investment policies and implement investment strategies to promote SMEs, high-tech industries and R&D activities. (Committee on Trade and Investment, CTI 12/1998T, project in progress)
- The *Energy Efficiency Improvement Initiative* is designed to lead to improvements in energy efficiency and the adoption of environmentally friendly energy policies, which in turn will

reduce the negative impact of energy use. (Energy Working Group, EWG 04/1998S, project in progress)

- The *APEC Conference on the contribution of SET to sustainable economic development in the APEC region* explores the contribution of science, engineering and technology to economic growth through innovation. (Industrial Science and Technology Working Group, IST 44/1999S, in progress)

(v) *Facilitation of Networks and Partnerships*

- The aim of the *APEC Sustainable Development Training and Information Network: Phase II: Implementation* is to establish a higher level of ongoing communication, and to share information (including best practices) and training resources among the APEC working groups and member economies to effectively support local capacity building and human resource development. (Human Resources Development Working Group, HRD 02/1997S, project in progress)
- The aim of the *APEC Network of Science and Technology Industrial Parks* is to establish an APEC Network for trade in technology-driven services. (Industrial Science and Technology Working Group, IST 06/1999s, project in progress)
- *Facilitation of strategic alliances among enterprises in the APEC region* aims to enhance the exchange of information for SMEs on raw materials, production know-how and marketing strategies among the enterprises within the Asia Pacific. (Trade Promotion Working Group, TP 01/1999S, project in progress)

**Table 2: Project coverage of selected elements of the Agenda**

<b>Element of Agenda</b>	<b>Number of projects</b>	<b>Per cent<sup>a</sup></b>
Industrial relevance	111	60
Private sector involvement	99	53
Gender and S&T	4	2
Mechanism 2: Improved HRD	102	55
Mechanism 1: Improved availability/Access to information	62	33
Mechanism 5: Facilitate Networks/Partnerships	44	24
Mechanism 3: Improved Business Climate	41	22
Mechanism 4: Enhanced Policy Dialogue/Review	14	7

Note: <sup>a</sup> Percentages refer to per cent of the 185 projects contributing to the implementation of the Agenda

***Cross-cutting issues***

- (i) *Private sector involvement*

The *private sector* is involved in 53 per cent of the 185 projects which contribute to the implementation of the *Agenda* (see Table 2). This is a notable result which goes some way to counter a perception of inadequate private sector involvement in Ecotech activities. Nevertheless, in view of the emphasis on private sector participation made in the Manila Declaration, it would be useful to subject this striking result to deeper analysis in the next *Agenda* progress report.

Private sector participation appears to be relatively low for the projects which the Human Resources Working Group contributes to implementing the *Agenda* (see Table 3). This is significant in view of the large number of HRD projects which contribute to the implementation of the *Agenda* (Table 1). The HRD Working Group might wish to explore this result further and, as appropriate, consider the need for action.

Overall, notwithstanding the generally positive indications about private sector involvement in implementing the *Agenda*, it would be useful in the next *Agenda* progress report to analyse more closely the nature and depth of private sector involvement.

Examples of private sector involvement include:

- *APEC Technomart III* provides a comprehensive program of seminars, workshops, business-matching programs, site visits and new technology demonstrations, across a wide range of technological fields. (Industrial Science and Technology Working Group, IST 09/1999S, project in progress)
- The *APEC Aquaculture Forum* brought together non-government associations, industry and academia to progress sustainable development and growth in aquaculture. (Fisheries Working Group, FWG 01/1998, project completed)
- 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 commercialise 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. (Industrial Science and Technology Working Group, IST 43/1999, project in progress)
- *Research Development and Extension of Agricultural Biotechnology* involves exchange of information in the areas of biotechnology research, technology transfer, biosafety systems, the interface between public and commercial aspects and public perceptions. The workshop, held in November 1998 in Kuala Lumpur, was open to the private sector. (Agricultural Technical Cooperation Experts' Group, ATC 03/1999S, project in progress)
- *Assessment of Integrated Rural Energy and Village Power Programs for Potential Collaboration Projects in the APEC Region* aims to accelerate renewable energy deployment in the APEC region by identifying and exploring opportunities to integrate rural energy-economic development programs with village power programs. The business sector is being consulted during the course of the project (Energy Working Group, EWG 06/1998, project in progress)



- The *APEC Joint Multilateral Demonstration Project for Recovery and Utilisation of Coal Mines Gas*, which has been developed with the assistance of the mining sector, offers the potential to achieve significant economic benefits for the coal mine regions, the mine operators, and the miners. An increase in mine safety will coincide with the recovery of a valuable energy resource. (Energy Working Group, EWG 01/1999S, project in progress)

**Table 3 Private Sector involvement in the projects contributing to the Agenda  
( by APEC fora)**

<b>APEC Forum</b>	<b>Number of projects</b>	<b>Per cent<sup>a</sup></b>
Ad Hoc Policy Level Group on Small and Medium Enterprises	3	75
Agricultural Technical Cooperation Experts' Group	4	57
Committee on Trade and Investment	5	38
Energy Working Group	19	95
Fisheries Working Group	4	80
Human Resources Development Working Group	12	27
Industrial Science and Technology Working Group	29	57
Marine Resource Conservation Working Group	8	100
Telecommunications Working Group	10	45
Trade Promotion Working Group	1	50
Transportation Working Group	4	57
<b>Total</b>	<b>99</b>	

Note: <sup>a</sup> Percentages refer to per cent of the projects from the Working Group which contribute to the implementation of the Agenda.

(ii) *Gender and S&T*

One of the most striking features of the analysis for this report is the limited focus on *gender* issues in science & technology. Only 2 per cent of the projects which address the *Agenda* are clearly targeted at enhancing the role of women in science & technology (Table 2).

Projects relating to gender and S&T include:

- *Women in Aquaculture* will allow the APEC Fisheries Working Group and economies to decide how best to promote and contribute to the involvement of women in aquaculture. (Fisheries Working Group, FWG 03/1999, project in progress)
- The aim of the *APEC ISTWG Ad-hoc group on Gender and S&T* is to spread best gender practices in education, research and the work place. (Industrial Science and Technology Working Group, IST 02/1999S, project in progress)
- The aim of the *APEC ISTWG Women in Engineering and Sciences Program* is to train women engineers and scientists and to encourage them to enter non-traditional occupations in scientific and engineering disciplines. (Industrial Science and Technology Working Group, project not yet numbered, in progress)

(iii) *Industrial relevance*

In several places the *Agenda* underlines the need for S&T collaboration which is relevant to industry (this is also a principle objective of the Industrial Science & Technology Working Group).

There are strong indications that APEC Working Groups are comprehensively addressing the objective of *industrial relevance*. Of the 185 projects which contribute to implementing the *Agenda*, 112 (60 per cent) are assessed to be relevant to industry (see Table 2).

By way of example:

- A *Cross Border Inter Firm Linkages* project encourages linkages between large, small and medium enterprises in the supply of critical parts and components in joint R&D product development, as well as for other support and ancillary services. (Ad Hoc Policy Level Group on Small and Medium Enterprises, SME 03/1998, project completed)
- A *Study on Production of Valuable Agro-Chemicals from Unused Biomass by Cascade Utilization* examines extraction and production of tannin derivatives for wood from unused woody biomass. (Industrial Science and Technology Working Group, IST 42/1999S, project in progress)
- *Training on Cleaner Production for the Metal Finishing Industry in the APEC Member Economies* enhances environmental performance and productivity in the metal finishing industry. (Industrial Science and Technology Working Group IST 36/1999S, project in progress)
- The *Program to assist the implementation of electronic commerce for commercial messages* assists businesses involved in international transport and related trading activities to implement electronic commerce systems that best meet their needs (Transportation Working Group TPT 04/1998, project in progress)

### ***Specific technologies***

The *Agenda* calls for collaboration in a number of specific technologies, such as biotechnology, advanced materials, and sustainable agriculture. Overall, there appears to be considerable technological collaboration (Table 4).

There appears to be a relatively strong emphasis on environmental technologies and the exploitation of natural resources, including sustainable agriculture. There is also significant, if somewhat less, attention to the technologies which are increasingly seen as the technologies of the 21<sup>st</sup> Century, biotechnology and information technology. However, there appears to be little activity in relation to other technologies with a fundamental enabling role – advanced materials and electronics.

### **Improved Business Climate – Further Comments**

The preceding analysis was confined to projects which have a clear link to S&T. Thus the 41 projects relating to improved business climate in Table 2 have some clear connection to S&T.

However, contemporary discussions of innovation systems emphasise that S&T takes place within a broader framework of business conditions (such as tax, trade and investment regimes, competition law and product liability law). These business, or framework, conditions can have a

significant impact on the development and diffusion of technology and, by extension, the practice of science.

**Table 4 Collaboration in specific technologies identified in the Agenda**

<b>Technology</b>	<b>Number of projects</b>
Exploitation of Natural Resources	62
Environment/Cleaner Production	35
Sustainable agriculture	33
Information	28
Resource Management	25
Communications	13
Emergency Preparedness/Climate Prediction	12
Biotechnology	11
Transport	10
Energy	8
Advanced Materials	2
Electronics	1

To explore this issue, this analysis also identified projects directed at improving aspects of the general business climate but without a specific link to S&T. By influencing the framework conditions for innovation systems, such projects have the potential to impact on S&T, particularly over the medium and longer term.

Table 5 suggests that there are many APEC Ecotech projects of this kind, concentrated principally in the work of the Committee on Trade and Investment and the Human Resources Working Group. The role of the CTI is to be expected, with trade and investment liberalisation and facilitation fundamental aspects of an open business climate. The contribution from the HRD Working Group arises mainly from projects relating to employee mobility - the setting up of training courses, cross-cultural understanding and the harmonisation of education standards.

Examples of relevant projects include:

- *Accelerating Investment in Natural Gas Supplies, Infrastructure and Trading Networks in the APEC Region* aims to improve the climate for private sector investment in natural gas development in APEC, which in turn will accelerate investment in natural gas supplies, infrastructure and trading networks in the region. (Energy Working Group, EWG 01/1998S, project in progress)
- *Workshops on the Food / Drug Interface* aims to increase knowledge of member economies' regulatory requirements at the food / drug interface and in related areas such as health foods, function foods and dietary supplements. (Committee on Trade and Investment, CTI 13/1999T, project in progress)

- The *Compilation of Information on Food Labelling Laws, Regulations and Standards in the APEC Region* provided a better understanding of laws and regulations in regard to food labelling. (Committee on Trade and Investment, CTI 10/1998T, project completed)
- The *Trade and Investment Insurance Training Program* trains those who are working with institutions that provide trade and investment insurance in APEC economies with the view to contributing to the liberalization and facilitation of trade and investment in the APEC region. (Human Resources Development Working Group, HRD 01/1997T and HRD 04/1998T, project in progress - extended to 1999)
- *Comparability & disparity of Skill Testing Standards in the Asia-Pacific Region* analyzes skills levels, testing standards & related rules & regulations in the APEC region so as to implement the mutual recognition of skills qualifications. (Human Resources Development Working Group, HRD 11/1997, completed in 1999)

The role of Ecotech projects in improving the business climate warrants more detailed investigation. Nevertheless, the current exploratory analysis suggests that there may be a substantial volume of APEC work which, through time, will influence overall business conditions and provide a more effective platform for S&T collaboration.

**Table 5 Projects supporting the general business climate**

<b>Working Group/forum</b>	<b>Number of projects</b>	<b>Per cent</b>
Ad Hoc Policy Level Group on Small and Medium Enterprises	7	5
Agricultural Technical Cooperation Experts' Group	1	1
Committee on Trade and Investment	49	33
Economic Committee	2	1
Energy Working Group	7	5
Finance Working Group	5	3
Fisheries Working Group	2	1
Human Resources Development Working Group	44	30
Industrial Science and Technology Working Group	9	6
Telecommunications Working Group	8	5
Trade and Investment Data Review Working Group	4	3
Trade Promotion Working Group	4	3
Transportation Working Group	7	5
<b>Total</b>	<b>149</b>	<b>100</b>

## **Project Coordination – A Comment**

This report has identified a large range of projects contributing to the implementation of the *Agenda*, across a range of issues and APEC working groups. While no analysis has been

attempted of possible duplications of effort, or of failure to exploit synergies, it seems prudent to consider the scope to minimise duplication and maximise synergies.

One clear lesson from this analysis has been the value in extending the Ecotech Projects Database to provide a more powerful analytical tool. In this case, the Database was augmented to include information on the linkage between projects and specific Leaders' initiatives. The Database might be further extended to provide a sounder information base for identifying synergies and duplications at a relatively early stage.

In particular, the inclusion of project *proposals* in the Ecotech Projects Database might offer a powerful tool which a number of interested parties, particularly project coordinators and Lead Shepherds, might use to maximise the benefits of project coordination. The ESC might wish to consider this suggestion in more detail *and task the Secretariat with the implementation of any improvements*. This would be in accord with the Secretariat's mandate from Ministers to facilitate communications and data handling.

## Conclusions and Recommendations

Overall, APEC groups appear to be addressing the *Agenda for Science & Technology Industry Cooperation into the 21<sup>st</sup> Century* in a comprehensive way. A large number of projects address the *Agenda*, across many of its dimensions and across a significant range of Working Groups. Broadly, the structure of APEC's Working Groups, and their objectives, seem well-suited to achieving the objectives of the *Agenda*. Notwithstanding its very broad ambition, much of the *Agenda* is likely to be increasingly addressed over time.

Nevertheless, there are signs of gaps - some clear, others less evident but calling for further consideration.

It seems unlikely that the goal of encouraging greater involvement by women in science & technology is being comprehensively addressed. There is some useful work – notably in the Industrial S&T Working Group's *ad hoc* subgroup on Gender. Nevertheless, the level of activity is relatively low. It may be timely for the development of a specific agenda on gender and S&T, limited in its ambition but clearly promising a higher level of uptake and action by working groups. One aspect of this might be an APEC policy dialogue on women and science and technology.

Elements of the business environment, or business climate, can impact fairly directly on S&T or more indirectly. Both of these mechanisms are evident in APEC's Ecotech work. There are a significant number of projects aimed at changing aspects of the business environment which have a clear link to S&T. In addition, there is a large number of projects which, while not explicitly targeted at S&T, have the potential to change the business climate and thereby strengthen overall S&T activity over the medium to longer term.

There appears to be limited activity within APEC to encourage an S&T policy dialogue. This may be a significant gap and warrants further consideration, most obviously (but not exclusively) by the Working Group on Industrial Science & Technology.

In many economies, current policy discussions focus heavily on two sources of long term employment and prosperity: small and medium sized enterprises and the opportunities of the knowledge based economy. The interface between these themes, new technology based firms, is a significant policy focus in many economies. It is notable, however, that these key elements of technology in the 21<sup>st</sup> Century have not emerged clearly in this analysis of the implementation of the *Agenda for S&T Industry Cooperation into the 21<sup>st</sup> Century*.

While some relevant work is under way, for example, within the IST Working Group's *Networking of APEC R&D Leaders and Researchers*, the analysis for this report has not uncovered a clear emphasis on SMEs in the knowledge based economy. To some degree, this may reflect questions of definition and the characterisation of projects. Nevertheless, it is an important issue which warrants deeper consideration (and cooperation) by the Industrial Science & Technology Working Group and the Policy Level Group on SMEs.

The involvement of the private sector is a high priority for APEC Working Groups. The current analysis has provided a preliminary indication of significant success in this regard. Nevertheless, this important issue would benefit from a deeper assessment of the extent of private sector involvement in particular projects and of the private sector's attitude to the benefits of involvement.

This is the first attempt to comprehensively assess the implementation of the *Agenda for S&T Industry Cooperation into the 21<sup>st</sup> Century*. It is an ambitious undertaking, made in the face of limited resources and data. A number of caveats have already been emphasised.

There is, however, one over-riding caveat which warrants special emphasis: this analysis has not been able to focus on outcomes. There is no assessment of the ultimate impacts, the outcomes, of the projects contributing to the implementation of the *Agenda*.

Such an impact analysis is clearly not possible for the 144 projects which address the *Agenda* and are currently in progress. Importantly, it is also not possible for the remaining 40 plus completed projects which contribute to the *Agenda*. In particular, to date, there is no mechanism within APEC for the assessment and collection of project evaluations made after sufficient time has elapsed for impacts to be apparent.

In the case of the *Agenda*, where many projects are expected to take some time to have an impact, and where comprehensive implementation of such a substantial agenda will necessarily take several years, the absence of impact analysis is not an immediate problem. Nevertheless, it will become more pressing as time passes. It is a strategic issue which warrants coordinated attention across all of APEC's Ecotech activities.

### ***Recommendations***

Arising from the finding from the this report, ISTWG invites the ESC to forward the following recommendations to SOM III for endorsement<sup>5</sup>:

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<sup>5</sup> Please note, as indicated in the introduction, one economy has been unable to support this document going forward as an agreed ISTWG position, agreeing only "to submit this report as an interim report to the ESC".

1. That the IST Working Group, in partnership with the Policy Level Group on SMEs, and in collaboration with other relevant APEC Fora, should strengthen APEC's Ecotech focus on the opportunities and challenges for small and medium sized enterprises in knowledge based economies.
2. That the IST Working Group, in collaboration with all APEC Fora, should develop an action agenda to strengthen the involvement of women in science and technology in the APEC region.
3. That the IST Working Group, in collaboration with other relevant APEC Fora, should strengthen science and technology policy dialogue in the region.
4. That the APEC Secretariat and member economies should work together to further strengthen Ecotech project coordination across all APEC Fora, using, as appropriate, the approach proposed in this report.
5. That the second progress report on the *APEC Agenda for Science & Technology Industry Cooperation into the 21<sup>st</sup> Century* should build on the encouraging results of the first report and provide deeper analysis of the nature and depth of private sector involvement in APEC Ecotech projects, and of the impact of projects on intended beneficiaries.



## APPENDIX 1 – DEFINITIONS

These definitions relate to the elements of the *APEC Agenda for Science and Technology Industry Cooperation into the 21<sup>st</sup> Century* analysed in this report.

### *Agenda Elements*

- **Industrial Relevance:** Foreseeable commercial applicability and/or direct business involvement
- **Private sector involvement:** Ecotech project records include an indication of whether the private 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/access to information**
  - Systems to facilitate information access and communication among APEC fora and all sectors of APEC member economies, including SMEs and relevant business and NGOs.
  - Member economies commit to collection, standardising and disseminating the statistics and information necessary for policy makers and the private sector.
  - Interoperability of information exchanged through networks
  - S&T databases and information on technology management practices
- **Mechanism 2: Improved HRD**
  - 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 private companies in enhancing the human resources of SMEs
- **Mechanism 3: Improved Business climate:**
  - Open business climate, a consistent, transparent and timely legal framework
  - Include 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**
  - Sharing 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 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.

## Appendix 2 – The 185 projects addressing the Agenda - May 1999

Project Number	Leading APEC Forum	Project Name
SME 01/1999	Ad Hoc Policy Level Group on Small and Medium Enterprises	APEC Human Resource Management Symposium on SMEs
SME 03/1998	Ad Hoc Policy Level Group on Small and Medium Enterprises	Cross Border Inter Firm Linkages
SME 07/1997T	Ad Hoc Policy Level Group on Small and Medium Enterprises	Tech-Connect Forum
SME 10/1997T	Ad Hoc Policy Level Group on Small and Medium Enterprises	Eco-Efficiency in the Small and Medium Enterprises
ATC 01/1999S	Agricultural Technical Cooperation Experts' Group	Agricultural Technology Transfer and Training
ATC 03/1999S	Agricultural Technical Cooperation Experts' Group	Research Development and Extension of Agricultural Biotechnology
ATC 04/1999S	Agricultural Technical Cooperation Experts' Group	Marketing Processing and Distribution of Agricultural Products(1)
ATC 05/1999S	Agricultural Technical Cooperation Experts' Group	Plant and Animal Quarantine and Pest Management
ATC 06/1999S	Agricultural Technical Cooperation Experts' Group	Marketing Processing and Distribution of Agricultural Products(2)
ATC 07/1999S	Agricultural Technical Cooperation Experts' Group	Conservation of Plant and Animal Genetic Resources
ATC 08/1999S	Agricultural Technical Cooperation Experts' Group	Sustainable Agriculture
CTI 02/1999S	Committee on Trade and Investment	APEC/PFP Course on Management of Industrial Property Rights
CTI 03/1999T	Committee on Trade and Investment	IPEG Technical Cooperation Program to Assist the WTO/TRIPs Implementation
CTI 05/1998T	Committee on Trade and Investment	SCCP Program to implement the WTO "TRIPS" Agreement
CTI 05/1999S	Committee on Trade and Investment	IP Information Mall
CTI 06/1997T	Committee on Trade and Investment	Feasibility Study and Survey on Technical Infrastructure Development for Information Network and Services; Laboratory management and Accreditation; Inspection Bodies; Quality System and Product Certification Bodies Accreditation and Measurement
CTI 06/1999T	Committee on Trade and Investment	Pilot for training in the Application of Risk Analysis in Conformity Assessment of Foods
CTI 07/1997T	Committee on Trade and Investment	SCCP Program to Implement the WTO "TRIPS" Agreement
CTI 10/1998T	Committee on Trade and Investment	Compilation of Information on Food Labeling Laws, Regulations and Standards in APEC Region
CTI 12/1998T	Committee on Trade and Investment	Training Programme on Strategies to identify and facilitate investment in specific area e.g. SME Development, Industrial Linkages, High-Tech industries and R&D Activities_
CTI 13/1999T_	Committee on Trade and Investment	Workshops on the Food / Drug Interface
CTI 20/1999T_	Committee on Trade and Investment	UR Implementation Seminar on WTO New Agreements
CTI 21/1999T_	Committee on Trade and Investment	Assistance with Jurisprudence and Administration Guidelines Surveys.

CTI 22/1999T_	Committee on Trade and Investment	SCCP Program to implement the WTO Trips Agreement
EC 01/1998T	Economic Committee	Information Gathering and Analysis on Trade-Related Environmental Measures and Environment-Related Trade Measures in APEC
EWG 01/1998	Energy Working Group	Establishment and Operation of APEC Energy Data Base
EWG 01/1998S	Energy Working Group	Accelerating Investment in Natural Gas Supplies, Infrastructure and Trading Networks in the APEC Region
EWG 01/1999	Energy Working Group	Operation of APEC Energy Data Base
EWG 01/1999S	Energy Working Group	APEC Joint Multilateral Demonstration Project for recovery and Utilisation of Coal Mines Gas
EWG 01/1999T	Energy Working Group	Workshop on setting up and running an energy Performance Testing Laboratory
EWG 02/1997T	Energy Working Group	APEC Coal Trade and Investment Liberalization and Facilitation Workshop Series.
EWG 02/1998	Energy Working Group	Institutionalization of a Benchmarking Systems for Data on the Energy Use of Commercial and Industrial Buildings
EWG 02/1998S	Energy Working Group	APEC Clean Fossil Energy Technologies Technical Seminars
EWG 02/1999S	Energy Working Group	Environmental Cooperation Workshops for Sustainable Development of Mining Activities
EWG 03/1998S	Energy Working Group	APEC Energy R&D and Technology Transfer Seminar
EWG 03/1998T	Energy Working Group	Review of Energy Efficiency Test Standards and Regulations in APEC Member Economies
EWG 03/1999	Energy Working Group	Colloquium on the technical issues of minimum energy performance standards
EWG 04/1998	Energy Working Group	Workshop on Emerging Energy-Efficient Industrial Technologies
EWG 04/1998S	Energy Working Group	Energy Efficiency Improvement Initiative
EWG 04/1999	Energy Working Group	The Role of Petroleum Based and alternative transport (coal and natural gas derived) fuels in reducing emissions in the APEC region_
EWG 04/1999T	Energy Working Group	Symposium on Domestic Refrigeration Appliances
EWG 05/1999	Energy Working Group	Economy - Level Renewable Energy Roadmap
EWG 06/1998	Energy Working Group	Assessment of Integrated Rural Energy and Village Power Programs for Potential Collaboration Projects in the APEC Region_
EWG 06/1999	Energy Working Group	Workshop on Energy - Efficiency Retrofittings of Commercial / Office Buildings
FWG 01/1998	Fisheries Working Group	APEC Aquaculture Forum
FWG 01/1999	Fisheries Working Group	Collaborative APEC Grouper Research and Development Network
FWG 01/1999T	Fisheries Working Group	APEC Seafood Information System
FWG 02/1999	Fisheries Working Group	Collaborative Aquaculture Education Program
FWG 03/1999	Fisheries Working Group	Women in Aquaculture
HRD	Human Resources Development Working	Human Resources Development For Industrial

01/1993	Group	Technology In Small Business Informal Sector
HRD 01/1995	Human Resources Development Working Group	APEC HRD IN THE FOOD INDUSTRY : A Needs Assessment & Policy Review
HRD 02/1994	Human Resources Development Working Group	Assessing Industrial Technology Skills Shortages in Six APEC Countries
HRD 02/1996	Human Resources Development Working Group	HRD for Enhancement of International Quality Assurance Systems
HRD 02/1997S	Human Resources Development Working Group	APEC Sustainable Development Training and Information Network: Phase II: Implementation
HRD 02/1998S	Human Resources Development Working Group	Towards Mutual Recognition of Qualifications, Stage 3 (Engineering)
HRD 02/1999	Human Resources Development Working Group	Integration of Information and Communication Technologies (ICTs) Through Teacher Professional Development and Pre-Service Teacher Training.
HRD 03/1993	Human Resources Development Working Group	Industrial Technologies and Human Resource Strategies in the APEC region: A comparative study of 'Best Practice' approaches.
HRD 03/1995	Human Resources Development Working Group	Outlook and Strategies in Industrial Technology
HRD 03/1999	Human Resources Development Working Group	Trainers Training Program in Industrial HRD School-Industry Linkages
HRD 04/1993	Human Resources Development Working Group	Development of an Inventory of Working Models for Skills Training and Upgrading in Industrial Technology
HRD 04/1994	Human Resources Development Working Group	Human Resources for Sustainable Development Phase 1
HRD 04/1999	Human Resources Development Working Group	Application of Total Productive maintenance (TPM) in Small and Medium Industry
HRD 05/1995	Human Resources Development Working Group	APEC Workshop on Offshore Technology
HRD 05/1996	Human Resources Development Working Group	International Symposium on Capacity Building of Human Resources Development of Key Basic Industries in the APEC Region
HRD 05/1998	Human Resources Development Working Group	Internet and Electronic Commerce: Training based on Java Technology in APEC
HRD 06/1994	Human Resources Development Working Group	Environmental Problems and Sustainable Development-Economic impacts
HRD 06/1995S	Human Resources Development Working Group	Modalities of University-Industry Cooperation
HRD 06/1996	Human Resources Development Working Group	Research on Issues of Cross Cultural Technology Transfer (CCTT)
HRD 06/1997	Human Resources Development Working Group	Network of Industrial Technology Practices Firms.
HRD 06/1998	Human Resources Development Working Group	Human Resource Management For Cleaner Productions Needs In APEC
HRD 07/1993	Human Resources Development Working Group	Feasibility Study for APEC-NEDM Database
HRD 08/1996	Human Resources Development Working Group	Utilisation of Computer Network System For School Education
HRD 09/1994S	Human Resources Development Working Group	Effective Uses Of Educational Technology in Schools
HRD 10/1994S	Human Resources Development Working Group	Curriculum Development and Achievement Standards in Mathematics Education
HRD 10/1996	Human Resources Development Working Group	APEC Master of Sustainable Development Program (Formerly known as Human Resources For Sustainable Development (HRSD) Phase II)
HRD 11/1995	Human Resources Development Working Group	Research on Issues of Cross-Cultural Technology Transfer (CCTT)

HRD 12/1997S	Human Resources Development Working Group	Human Resources Development & Information Technology: Multimedia distance learning in the Asia-Pacific Region, Phase 1
HRD 13/1993S	Human Resources Development Working Group	Industrial Environmental Management In Asia-Pacific
HRD 13/1994S	Human Resources Development Working Group	Conference on "the Asian Manager: Global Competitiveness and Sustainable Development"
HRD 13/1996S	Human Resources Development Working Group	Seminar Environmental Management ISO 14000 Series
HRD 13/1999S	Human Resources Development Working Group	APEC Masters of Sustainable Development
HRD 14/1993S	Human Resources Development Working Group	Institute of International Studies and Training Tokyo, April 8-9 1993
HRD 15/1993S	Human Resources Development Working Group	International Seminar on Industrialization and HRD in the Asia Pacific Region.
HRD 15/1994S	Human Resources Development Working Group	APEC Vocational Training Program
HRD 15/1996S	Human Resources Development Working Group	Training on Quality Control of Ceramic Products
HRD 16/1993S	Human Resources Development Working Group	Innovation of Production systems in Manufacturing Industry
HRD 16/1996S	Human Resources Development Working Group	Economic & Environmental Investment: EDM Training for Policy Advisers & Managers
HRD 17/1996S	Human Resources Development Working Group	Future Directions in the Environmental Education of Engineers in Selected APEC Economies
HRD 18/1993S	Human Resources Development Working Group	International Seminar on Environmental Business Management, Assessment of Threats and Opportunities in Indonesia
HRD 19/1996S	Human Resources Development Working Group	APEC Symposium on HRD: HRD provided by Enterprises
HRD 20/1995S	Human Resources Development Working Group	Seminar on "Industrial Technology Education - Joint Seminar of IST & HRD Working Groups"
HRD 21/1996S	Human Resources Development Working Group	Medium-Small Sized Companies International Technology Conference '96
HRD 23/1994S	Human Resources Development Working Group	International Seminar on "Industrial Structural Change and HRD in the Asia Pacific Region
HRD 31/1997S	Human Resources Development Working Group	APEC White Collar Training Program on Production & Material Handling Management under the Total Management System
IST 01/1998	Industrial Science and Technology Working Group	Establishing APEC Center for Technology Foresight - Phase 1
IST 01/1999	Industrial Science and Technology Working Group	APEC - Wide Studies of Megacities and Technology and Learning in 2010 by the APEC Center for Technology Foresight
IST 01/1999S	Industrial Science and Technology Working Group	APEC Science and Technology Network (ASTN)
IST 02/1998	Industrial Science and Technology Working Group	Facilitating S & T Information Flow - Phase 4
IST 02/1999	Industrial Science and Technology Working Group	Determination of Priority Needs for Molecular Biology and Biotechnology Development in APEC Economies
IST 02/1999S	Industrial Science and Technology Working Group	APEC ISTWG Ad-hoc group on Gender and S&T
IST 03/1999S	Industrial Science and Technology Working Group	Public Awareness Activities for Science and Technology
IST 04/1999S	Industrial Science and Technology Working Group	Facilitation S&T Information Flow

IST 05/1999S	Industrial Science and Technology Working Group	APEC Coordinating Center for Good Clinical Practice (GCP)
IST 06/1999S	Industrial Science and Technology Working Group	APEC Network of Science and Technology Industrial Parks
IST 07/1999S	Industrial Science and Technology Working Group	Compilation of Technology and High Tech Product Catalogue in APEC Region
IST 08/1999S	Industrial Science and Technology Working Group	APEC Technomart Network
IST 09/1999S	Industrial Science and Technology Working Group	APEC Technomart III
IST 10/1999S	Industrial Science and Technology Working Group	A Feasibility Study for the Development of Postharvest Network for the APEC Region
IST 11/1999S	Industrial Science and Technology Working Group	Emerging Infectious Diseases: Enhanced Use of Communications to Strengthen Surveillance and Control of New Infections in APEC
IST 12/1999S	Industrial Science and Technology Working Group	Development of Biodegradable Plastics
IST 13/1999S	Industrial Science and Technology Working Group	Research on Industrial Measurement System
IST 14/1999S	Industrial Science and Technology Working Group	Collaborative Research on Disaster Prevention
IST 15/1999S	Industrial Science and Technology Working Group	Mutual Utilization of Research Facilities
IST 16/1999S	Industrial Science and Technology Working Group	Networking of APEC R&D Leaders and Researchers
IST 17/1999S	Industrial Science and Technology Working Group	Molecular Epidemiology of Dengue Viruses
IST 18/1999S	Industrial Science and Technology Working Group	Symposium on High Performance Metal Matrix Composites for Manufacturing Technology of Advanced Materials
IST 19/1999S	Industrial Science and Technology Working Group	Health Assessment and Prevention Related to Forest Fires: Population Exposures and Associated Health Impacts
IST 20/1999S	Industrial Science and Technology Working Group	Study on R&D Internationalisation in industrial Section Among APEC member Economies
IST 21/1999S	Industrial Science and Technology Working Group	Establishing Science and Technology Policy Research Center
IST 22/1999S	Industrial Science and Technology Working Group	Symposium on the Utilization of EDI in All Trade Areas in APEC
IST 23/1999S	Industrial Science and Technology Working Group	APEC Environmental Technology Verification_
IST 24/1999S	Industrial Science and Technology Working Group	Cleaner Production Initiative in the Electronics and Computer Service
IST 25/1999S	Industrial Science and Technology Working Group	Use of Industrial Environmental Performance Indicators by APEC Economies to Set Environmental Improvement Objectives
IST 26/1999S	Industrial Science and Technology Working Group	Innovation and Apprenticeship in Pollution Prevention
IST 27/1999S	Industrial Science and Technology Working Group	Training on Cleaner Production for Textile Dyeing and Finishing Industry in APEC Member Economies
IST 28/1999S	Industrial Science and Technology Working Group	Acid Rain Monitoring System
IST 29/1999S	Industrial Science and Technology Working Group	APEC Virtual Center for Environmental Technology Exchange



IST 30/1999S	Industrial Science and Technology Working Group	APEC Cooperation for Earthquake Simulation
IST 31/1999S	Industrial Science and Technology Working Group	Research Cooperation on Environmental Issues
IST 32/1999S	Industrial Science and Technology Working Group	Short-Term Climate Forecast and their Application for Social and Economic Development
IST 33/1999S	Industrial Science and Technology Working Group	Enhanced implementation of ISO 14001 Environmental Management System for APEC Economies
IST 34/1999S	Industrial Science and Technology Working Group	Cleaner Production Auditing System of APEC member Economies
IST 35/1999S	Industrial Science and Technology Working Group	Adoption and Development of A Multilingual Environmental Thesaurus System
IST 36/1999S	Industrial Science and Technology Working Group	Training on Cleaner Production for the Metal Finishing Industry in the APEC Member Economies.
IST 37/1999S	Industrial Science and Technology Working Group	APEC Telecommunications Network for Emerging Infections
IST 38/1999S	Industrial Science and Technology Working Group	Emerging Infectious Disease; Enhancing E coli 0157 surveillance
IST 39/1999S	Industrial Science and Technology Working Group	Emerging Infectious Diseases: Influenza Virus Surveillance Focused on the Rapid Identification of Newly Emerging Viruses
IST 40/1999S	Industrial Science and Technology Working Group	International Cooperative for Cleaner Production
IST 41/1999S	Industrial Science and Technology Working Group	Development of Utilization Technologies for Waste Water for Production of Valued Substances
IST 42/1999S	Industrial Science and Technology Working Group	Study on Production of Valuable Agro-Chemicals from Unused Biomass by Cascade Utilization
IST 43/1999S	Industrial Science and Technology Working Group	APEC Centre for Technology Exchange for Small and Medium Enterprise (ACTETSME)
IST 11/1999S	Industrial Science and Technology Working Group	APEC Materials Processing and Testing Network
IST 10/1999S	Industrial Science and Technology Working Group	2nd APEC Youth Science Festival
IST	<i>Industrial Science and Technology Working Group</i>	<i>APEC ISTWG Women in Engineering and Sciences Program</i>
IST 44/1999S	Industrial Science and Technology Working Group	APEC Conference on the contribution of SET to sustainable economic development in the APEC region
MRC 01/1997S	Marine Resource Conservation Working Group	APEC Workshop on Impact of Destructive Fishing Practice on the Marine Environment
MRC 01/1998	Marine Resource Conservation Working Group	Management of Red Tide and Harmful Algal Blooms in the APEC Region (Year 3)
MRC 01/1998S	Marine Resource Conservation Working Group	Ocean Research Network for the Pacific
MRC 01/1999	Marine Resource Conservation Working Group	Management of Red Tide and Harmful Algal Blooms in the APEC Region (Year 4)
MRC 02/1998	Marine Resource Conservation Working Group	Ocean Model and Information System for the APEC Region (phase 2)
MRC 02/1999	Marine Resource Conservation Working Group	Ocean Model and Information System for APEC Region (phase 3)
MRC 03/1998	Marine Resource Conservation Working Group	Workshop on the Regional Implementation of the Global Program of Action for the Protection of the Marine Environment from Land Based Activities
MRC 03/1999	Marine Resource Conservation Working Group	Assessment of environmental safety of aquaculture farms using biochemical indicator of distress
TEL 01/1998	Telecommunications Working Group	Universal Services Seminar

TEL 01/1999	Telecommunications Working Group	APEC Distance Learning Project
TEL 01/1999S	Telecommunications Working Group	Resource and Information Sharing
TEL 02/1999	Telecommunications Working Group	Disaster Recovery / Contingency Planning
TEL 02/1999S	Telecommunications Working Group	Collaborative research on Multimedia HRD System Network Technologies
TEL 02/1999T	Telecommunications Working Group	Implementation of WTO Agreement on Basic Telecommunication Project
TEL 03/1998	Telecommunications Working Group	Interactive Medical Curriculum Pilot Project
TEL 03/1999 _	Telecommunications Working Group	Symposium for Collaborative Strategies for Multimedia & World Wide Web Skills Development
TEL 04/1997T_	Telecommunications Working Group	Two seminars on Preparation and Confidence Building for the Familiarization and Mutual Understanding of the Member APEC Economies Equipment Certification Requirements and conformance Assessment Procedures_
TEL 04/1998 _	Telecommunications Working Group	Telecommunication Training Pilot Project_
TEL 04/1999 _	Telecommunications Working Group	Educational Seminar on Application of Global Positioning System (GPS) Technologies_
TEL 04/1999S_	Telecommunications Working Group	APII Technology Center_
TEL 05/1997T_	Telecommunications Working Group	APEC SME Electronic Commerce Survey_
TEL 05/1999S_	Telecommunications Working Group	Human Resource Exchange Program_
TEL 06/1999S_	Telecommunications Working Group	APII Cooperation Center_
TEL 08/1999S	Telecommunications Working Group	Interconnectivity and Interoperability
TEL 09/1999S	Telecommunications Working Group	APII Test-bed Project
TEL 10/1999S	Telecommunications Working Group	Supporting program for International Joint Research Projects
TEL 13/1999S	Telecommunications Working Group	Database of Existing Certification Authorities
TEL 14/1999S	Telecommunications Working Group	APEC TEL WG Website
TEL 15/1999S	Telecommunications Working Group	Telework Manual
TEL 16/1999S	Telecommunications Working Group	Electronic Commerce Seminar
TWG 01/1999	Tourism Working Group	Environmentally Sustainable Accommodation for Tourism
TP 01/1998	Trade Promotion Working Group	International Trade Promotion Skills Training Program
TP 01/1999S	Trade Promotion Working Group	Facilitation of strategic alliances among enterprises in the APEC region
TPT 01/1998	Transportation Working Group	Development and Dissemination of a Best Practices Manual to address urban transport problems in APEC region.
TPT 01/1999S	Transportation Working Group	Virtual Center for Transportation Research Development and Education
TPT 01/1999T	Transportation Working Group	Program to assist the implementation of electronic commerce for commercial messages

TPT 02/1998	Transportation Working Group	Road Transport Harmonization Project
TPT 04/1998	Transportation Working Group	APEC Database of Transportation Technology Research
TPT 06/1998S	Transportation Working Group	Port Experts Group
TPT 09/1998S	Transportation Working Group	Satellite Navigation and Communications Systems SN&C Advisory Committee

**ANNEX 14**

***LETTER FROM AMBASSADOR TIMOTHY HANNAH  
EXECUTIVE DIRECTOR OF APEC SECRETARIAT TO  
THE CHAIRS AND LEAD SHEPHERDS***



10 March 1999

Committee Chairs  
Lead Shepherds of Working Groups/Ad hoc Groups

Dear Colleagues,

**Follow up actions on the outcomes of the Joint Fora meeting**

Further to the outcomes of the Joint Fora meeting in Wellington last month, as described in the SOM Chair's letter and report of 8 March, I am writing to you as a follow up on the actions to be taken by the APEC Fora as follows:

***i) Strengthening the management of ECOTECH activities***

You may recall that the 1998 SOM Chair issued a guidance on 9 July 1998 to all APEC Fora aimed at strengthening the management of ECOTECH activities and enhancing business/private sector involvement in those activities. The need for additional guidance emerged from the initial review and evaluation of APEC ECOTECH activities conducted by the ESC last year which identified various issues in terms of duplication of effort, coordination among fora, results orientation and participation of the business/private sector.

The Joint Fora meeting in Wellington reaffirmed the need for full implementation of the Guidance for Strengthening the Management of ECOTECH activities. It was agreed that all APEC fora, including CTI, BMC and the Secretariat, should take the Guidance into consideration when developing and approving new ECOTECH projects. All APEC fora that conduct ECOTECH activities, including CTI, BMC and Secretariat are requested to include in their regular reports to SOM coverage of the steps taken to implement the ECOTECH Guidance. The Secretariat will compile these various entries into a separate report for consideration at future ESC meetings.

***ii) Canada and China as coordinators of MAPA themes: "developing human capital" and "harnessing technologies for the future"***

The ESC will initially focus on the themes of developing human capital, which will be coordinated by Canada, and harnessing technologies for the future, to be coordinated by China. Canada and China would write to the relevant Lead Shepherds seeking their cooperation and inputs into preparing reports for presentation to the May ESC meeting.

***iii) ECOTECH matrix according to the initiatives***

The APEC Secretariat will undertake to prepare a matrix on economic and technical cooperation projects/activities based on the new initiatives that were approved by Leaders/Ministers in Kuala

Lumpur. Lead Shepherds were encouraged to provide suggestions to the APEC Secretariat on ways to improve the format of the ECOTECH matrix.

***iv) Working group reports on TILF to CTI Chair***

The Working Groups are advised to submit their reports on TILF activities to the CTI Chair with a copy to the APEC Secretariat by 9 April 1999 for inclusion in the forecast of 1999 TILF deliverables which will be reported to the June Meeting of APEC Ministers Responsible for Trade. A review of progress on the CAPs is underway and CTI sought suggestions from the services related Working Groups (Energy, Transportation, Telecommunications and Tourism) about ways to improve the Services CAP.

***v) Inputs by Fora to Ad-Hoc Task Force on Women***

The role of the Ad-Hoc Task Force on the Integration of women in APEC is to develop a "Framework for the Integration of Women in APEC," which would include the following three key elements: guidelines for gender analysis; guidance on improving the collection and use of sex-disaggregated data; and approaches to greater involvement of women in APEC. The Ad-Hoc Task Force sought input from APEC fora in developing the Framework and had already written to Chairs and Lead Shepherds requesting a contact person with whom it could consult. Please note that SOM I had given strong support to the work being done in this area and stressed the importance of producing a good deliverable for the Leaders meeting this year.

***vi) Working groups to allocate priority to formulate responses to ABAC recommendations***

The Joint Fora meeting recognized that the Working Groups had an important role in giving definition to the ABAC recommendations and that it was necessary for them allocate priority to formulating their responses to ABAC. The Secretariat continues to compile action responses by all APEC fora and welcomes your inputs.

***vii) Business participation***

SOM I had agreed that Working Groups, PLGSME and ATC would be allowed the same, more flexible guidelines for contacts with the business/private sector that the SOM had approved in 1998 for CTI, EC and ESC. A separate letter on the subject has already been sent out to you.

***viii) Self review deadline***

Ministers in Kuala Lumpur directed all APEC fora to carry out a self-review of their mandates by the end of May 1999, based on the guidelines circulated by the APEC Secretariat, and that SOM I had agreed on procedures and timelines for managing the self-review process. The Joint Fora meeting stressed the need to ensure that the self-review process gets underway on schedule. Based on the results of the self-reviews, the SOM Chair will prepare a draft report to Ministers for consideration and further discussion by Senior Officials at SOM III.

We look forward for your continued cooperation. Please do not hesitate to write or call us if we can help as we are here to provide professional and direct support to all APEC fora on the APEC process.

Thank you.

Yours Sincerely,

Timothy Hannah  
Executive Director

Cc SOM Chair



**ANNEX 15**

***AUSTRALIAN DISCUSSION PAPER  
ASSESSMENT OF PROJECT PROPOSALS AGAINST  
APEC'S ECOTECH OBJECTIVES***



## AUSTRALIAN DISCUSSION PAPER ASSESSMENT OF PROJECT PROPOSALS AGAINST APEC'S ECOTECH OBJECTIVES

### Background

Although the ESC has produced general guidelines (*Guidance on Strengthening Management of Ecotech Activities*) for the preparation of Ecotech projects for funding from the Operational Account, they do not include a means by which the relevance of a project can be measured against APEC's Ecotech objectives. This was recognised by Trade Ministers who, at their meeting in Auckland in June, called for concrete outcomes in Ecotech, including in the development of 'a matrix to assist in the evaluation of Ecotech project proposals'.

In the interest of ensuring outcome-oriented and value-added projects, as directed by Ministers and Leaders, the following '*ECOTECH Weightings Matrix*' has been developed to assist the BMC in assessing a project's importance against APEC's Ecotech objectives. The aim of the *Ecotech Weightings Matrix* is to provide Working Groups/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 Working Groups/Fora themselves. The focus on specific outcomes in the matrix in no way diminishes the need for APEC Working Groups/Fora in developing project proposals to give due consideration to the broad ECOTECH goals spelt out in the Manila Declaration and the Osaka Action Agenda: "to attain sustainable growth and equitable development; 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 region".

The matrix will provide the BMC with a ready guide to the main features of a proposed project and, along with the net score achieved, allow it to make a more informed judgement on relative funding priorities. At the same time, the matrix does not, in any way, preclude the consensus-building approach adopted in the BMC, or indeed in other APEC processes, for the development and approval of projects. Nor does it foreclose any decisions the ESC might take in future on whether or not project proposals should be examined and ranked by the ESC before submission to the BMC.

### Criteria

In the sample matrix attached, the *criteria* column includes specific references to the instructions from Leaders/Ministers and the organising themes for economic and technical cooperation laid down by Ministers in the 1996 Manila Declaration. It also provides guidance to Working Groups/Fora on the specific outcomes they should be focusing on in developing project proposals, and encourages them to maximize private sector involvement, including financial involvement where possible and appropriate. The criteria themselves can be varied from year to year to reflect new or changed priorities, the instructions from Ministers and Leaders, or practical experience in using the matrix. It is envisaged that the first ESC meeting each year, the need for any changes to the matrix is discussed and the agreed recommendations conveyed to the SOM.

## **Weighting**

The *weighting* assigned to each criterion has been simplified from earlier drafts, but still provides the ESC with a mechanism to indicate to Working Groups/Fora and the BMC, the relative importance of the various criteria/outcomes.

## **Process**

The proposal is for the *Ecotech Weightings Matrix* to be incorporated in the existing *BMC Facesheet*, which Working Groups/Fora are already required to complete when submitting a project proposal for funding. This approach, is administratively simple and does not place an undue burden on Working Groups/Fora. Having the Working Groups/Fora fill in the matrix, instead of the ESC or APEC Secretariat, is also preferred because it avoids delays. Moreover, the Working Groups/Fora are best placed to advise on the features of a project.

When filling in the matrix, the Working Group/Fora would be required to indicate the extent to which the project rates against each of the criteria (i.e. in the *Linkage* column). Although there may be a temptation to exaggerate the relevance of a project to some of the criteria so as to maximise a projects' net score, Lead Shepherds/Chairs will be expected to closely supervise the completion of the facesheets before submitting them to the BMC. The BMC will also be able to question the scoring, especially if it is not readily supported by the information submitted on the project. In cases of wide discrepancy or clearly exaggerated claims, the BMC will be free to return the project to the Working Group/Fora concerned with a request for further information and/or an explanation.

## **Net Score**

The net score achieved by each project proposal could provide a basis for the final 'ranking' of projects, but it would be preferable if the scores were used as a tool for the BMC to assess the relevance of the project against Ecotech values – and by the Working Group/Fora to determine whether or not a project requires further work before submission to the BMC. Without specifying particular scores, it should be obvious to Working Groups that a low score (i.e. many zeros against the criteria) is unlikely to obtain BMC support. Although it could be argued that relying on net scores is a somewhat 'mechanistic' approach to assessing projects, there are several advantages in so doing. First, it would allow the ESC to fulfil its goal of assisting the BMC to assess the relevance of projects against APEC's Ecotech objectives. Secondly, the scores achieved provide Working Groups/Fora with an early indication of the likelihood of a project being approved by the BMC and the need for possible further work.

The net score derived from this matrix does not prejudge the BMC's rejection or approval of the project based on other considerations. Additionally, if for any reason a highly desirable project does not achieve a high score, it would still be open to the Lead Shepherd/Chair to either re-design the project or argue its merits in supporting statements to the BMC. In this way, unusual but valuable projects would still be able to secure funding.

## Ecotech Weightings Matrix

Criteria	Linkage	
	Yes =2 points unless otherwise specified below	No =zero points
Responds to a specific instruction from Leaders/Ministers <sup>#</sup>		
Meets a core Ecotech theme under the Manila Declaration		
Contributes to skills development or capacity building		
Measurably improves economic efficiency/performance <sup>*</sup>		
Is of practical benefit to the private sector and has private sector participation and/or funding <sup>**</sup>		
Assists economies meet APEC's TILF objectives, as laid down in the Osaka Action Agenda		
Assists economies meet Ecotech Common Policy Concepts, as laid down in the Osaka Action Agenda		
Assists economies attain sustainable growth and equitable development, while reducing economic disparities among APEC economies and improving economic and social well-being		
Represents cost-effective use of APEC resources		
<b>Net Score</b>		

**Footnote**

- <sup>#</sup> 3 points for this criterion to reflect its importance.
- <sup>\*</sup> Is of concrete, measurable benefit to participating economies or publics (eg development of improved customs procedures, energy efficiency, food safety standards etc).
- <sup>\*\*</sup> One point for each element up to a maximum of 3 points.

## **ANNEX 18**

### ***EVALUATIONS OF WORKING GROUPS – POLICY ASPECTS***



## EVALUATIONS OF WORKING GROUPS - POLICY ASPECTS

Working Group	Positive Features	Areas for Improvement
<p><b>ATC</b></p>	<p>Solid work plan and evidence of meeting Ecotech and TILF objectives</p> <p>Projects are outcome-oriented</p>	<p>Need for better co-ordination, notably with ISTWG, on some projects</p> <p>Need to look at ways to integrate industry views, over and above consultations with PECC</p>
<p><b>EWG</b></p>	<p>Solid work plan and evidence of meeting Ecotech and TILF objectives</p> <p>Very good record of producing deliverables each year as well as outcome-oriented projects</p> <p>Exemplary process for the engagement of business/public sector in the WG's deliberations and initiatives</p> <p>The requirement before each meeting for members to prepare and circulate papers on significant policy developments in their economies is a model other WGs could consider</p> <p>Evidence that the WG has taken hard decisions in rationalising its sub-fora</p> <p>The requirement for its sub-fora to prepare an Annual Operating Plan to ensure that they contribute to the overall objectives and priorities of the EWG is also exemplary</p> <p>Good outreach program through publication of a newsletter and articles in APEC Study Centre publications</p>	



Working Group	Positive Features	Areas for Improvement
<b>FWG</b>	<p>Good work plan and evidence of meeting Ecotech and TILF objectives</p> <p>Good record of producing deliverables each year as well as outcome-oriented projects</p> <p>Conscious effort to co-ordinate its activities with those of the MRC and other relevant international organisations</p> <p>The involvement of business/private sector and academia in the WG's deliberations and initiatives has improved in recent times. The WG specific Guidelines for Business/private sector participation is commendable</p>	<p>Should consider an outreach program to keep industry informed</p>
<b>HRD</b>	<p>The WG is one of the more prolific generator of projects</p> <p>The annual review of its workplan to reflect new directions from Ministers/Leaders is commendable</p> <p>The WG should also be commended for its timely effort in examining the human resource and social impact of the financial crisis</p>	<p>Not clear how work on 'Quality Basic Education' actually benefits member economies or is being taken up by them - ie not merely of academic interest</p> <p>Need for a strategy to better coordinate HRD activities across relevant APEC fora</p>
<b>IST</b>	<p>Solid work plan and evidence of meeting Ecotech and TILF objectives</p> <p>The WG's effort in developing and promoting internet access for virtual meetings and discussions is commendable and presents a good model for other APEC fora to adopt</p>	<p>Need to look at ways to better integrate industry views and participation</p>

Working Group	Positive Features	Areas for Improvement
<b>SME</b>	<p>Projects completed to date have achieved the objective of enhancing SME development for those directly involved in the projects.</p> <p>The proposal to move towards using more electronic communication and virtual networking is to be commended.</p>	<p>The PLG also needs to look at better co-ordination with other Working Groups to assist in developing projects of relevance to SMEs.</p>
<b>MRC</b>	<p>The MRC has carried out much research notably on red tides and ocean modelling</p> <p>Recent efforts to co-ordinate activities with FWG is a positive step in better directing workloads of both groups.</p> <p>New emphasis on involving business sector in projects is a welcome development.</p>	<p>Needs to focus more on core APEC objectives, notably the Action Plan for Sustainability of the Marine Environment, and less on long-term scientific research.</p>
<b>TP</b>	<p>The WGTP has met its objective of promoting trade through trade fairs.</p> <p>The WG has an effective public outreach program.</p>	<p>The WGTP needs to pay more attention to other of its key objectives eg trade financing.</p> <p>WGTP projects could be more focussed on achieving measurable outcomes. Current project evaluation processes need to be more rigorously applied.</p> <p>The forum may need to better address the apparent decline in business participation in its meetings.</p>

Working Group	Positive Features	Areas for Improvement
<b>TEL</b>	<p>Good work plan and evidence of meeting Ecotech and TILF objectives.</p> <p>Projects are outcome focussed and evaluation is comprehensive.</p> <p>The WG's practice of reviewing its mandates and structures regularly to keep up with the rapidly evolving nature of its work, is commendable.</p> <p>The WG has strong business sector participation in its activities.</p>	<p>Continued effort should be directed to coordination/communication with other fora to avoid duplication and to encourage complementary projects.</p>
<b>TPT</b>	<p>Good work plan and evidence of meeting Ecotech and TILF objectives</p> <p>Projects have a practical orientation and are outcome focussed.</p> <p>Project development processes are sound and incorporate good consultative measures.</p> <p>The fora has good business/private sector links</p>	<p>The WG should continue in its efforts to enhance close communication and cooperation with other WGs (and fora outside APEC) to avoid duplication of effort.</p> <p>Needs to build on business links and encourage better participation levels by the business sector in WG projects</p>
<b>TWG</b>	<p>TWG projects meet their stated objectives.</p> <p>TWG has good links with industry and non- APEC tourism agencies.</p> <p>The WG has an effective public outreach program.</p>	<p>Close cooperation/consultation with other APEC fora should be developed to avoid duplication of effort.</p>
<b>EC</b>	<p>The EC has fulfilled its terms of establishment, notably in providing information and analysis on economic trends and issues in the region.</p>	<p>It is noted that the EC's structure and role has been rationalised in line with the decision by Ministers in Kuala Lumpur last year.</p>

Working Group	Positive Features	Areas for Improvement
ESC	<p>The ESC has made progress in assisting the SOM in coordinating and managing the Ecotech agenda. Particularly valuable has been the ESC's work in reviewing Ecotech activities to assess their contribution to the goals of APEC's Ecotech agenda; in developing guidelines for the Working Groups on strengthening the management of Ecotech activities; in consulting with various APEC fora to identify gaps and avoid duplication of effort; and in encouraging enhanced private sector participation in Ecotech activities. At the same time, the ESC is a relatively new body which is still developing its role and relations with other APEC fora.</p>	<p>the ESC needs to take on a more disciplined and critical approach in managing the Ecotech agenda – particularly in discouraging duplication of effort and encouraging Working Groups to develop well-focused proposals that clearly advance APEC's core objectives</p>