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APEC's Eco-Tech: Prospects and Issues

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**KOREA INSTITUTE FOR
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Abstract

The purpose of this paper is to assess the current status of APEC's work on economic and technical cooperation(Eco-Tech), and make suggestions on the ways to strengthen Eco-Tech. The review of Eco-Tech projects reveals that the current Eco-Tech program in APEC faces serious challenges such as duplication of work, passive attitude of member governments toward Eco-Tech, limitation of project designs, and so on. In order to achieve successful economic and technical cooperation, APEC needs to develop more concrete and result-oriented Eco-Tech projects. In addition, earnest support and guidance from the developed member economies are crucial in the process of project development.

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Contents

I . Introduction	5
1. The Evolution of Eco-Tech in APEC	5
2. The Unbalanced Pillars of APEC	8
3. Purpose of the Paper	8
II . The Current Status of Eco-Tech	10
1. An Overview of APEC's Eco-Tech	10
2. The Characteristics of Eco-Tech	15
III . Challenges to Eco-Tech	20
1. Duplication of Work: Intra- and Extra-APEC	20
2. Passive Attitude of Governments toward Eco-Tech	21
3. Limitation of Project Designs	22
4. Growing Number of Fora	23
IV . Conclusion: How to Strengthen Eco-Tech	24
References	28
Annex: Description of Eco-Tech Projects	30



I . Introduction

1. The Evolution of Eco-Tech in APEC

TILF(Trade and Investment Liberalization and Facilitation) and Eco-Tech (Economic and Technical Cooperation) have been the two driving pillars of APEC.¹⁾ Ever since its establishment, APEC has promoted these two issues continuously. Discussions on Eco-Tech issues have been covered in all the documents of the four Leaders' Meetings, including the APEC Leaders Economic Vision Statement, the Bogor Declaration, the Osaka Action Agenda and the Manila Action Plans for APEC (MAPA).

Following its launching in 1989, APEC developed a program with a wide-range activities aimed at promoting trade and investment and economic and technical cooperation in Asia-Pacific region. The Leaders' Meetings in 1993 at Blake Island, 1994 in Bogor, 1995 in Osaka, and 1996 in Subic intensified and focused the work. At Blake Island, APEC Economic Leaders conceived a vision for a new Asia-Pacific community with improved economic and social well-being for its people and reduced economic disparities among APEC economies. The Bogor Declaration and the Osaka Action Agenda(OAA)²⁾ subse-

1) APEC Economic Leaders' Declaration for Action, which was adopted at the third Leaders' Meeting of November 1995, mentioned the three pillars of trade and investment liberalization, their facilitation, and economic and technical cooperation. However, liberalization and facilitation are treated together here due to their inseparable nature.

2) The Eco-Tech activities devised in The Osaka Action Agenda can be divided into two parts. Part I consist of the economic and technical

quently articulated specific goals and work agendas to achieve this vision. The Osaka Action Agenda devised two-general categories: Part I is under the rubric of "trade and investment liberalization and facilitation(TILF)" and part II is "economic and technical cooperation (Eco-Tech)." However, both parts contain the Eco-Tech activities in a various range of areas, and Eco-Tech in Part II has been expanded to 13 areas including Economic Infrastructure, Small and Medium Enterprises and Agricultural Technology.

Last year's fourth Economic Leaders Meeting in Subic³⁾ provided

cooperation activities that directly support trade and investment liberalization and facilitation(TILF). These activities include: standards and Conformance(CTI Standards & Conformance Subcommittee), Customs Procedures(CTI Customs Subcommittee), Intellectual Property Rights(CTI IPR Get-together and EC Market Framework Studies), Competition Policy & Deregulation(CTI and EC Market Framework Studies), Dispute Mediation(Dispute Mediation Experts Group), Information Gathering and Analysis(EC, CTI, and TID Working Group).

Part II provides a common framework for 13 specific areas of economic and technical cooperation(Eco-Tech): Human Resources Development(HRD WG), Industrial Science and Technology(IST WG), Small and Medium Enterprises(Ad Hoc Policy Level Group on SMEs), Economic Infrastructure (Infrastructure Dialogue under EC), Energy(Energy WG), Transportation (Transportation WG), Telecommunications and Information(Telecommunication WG), Tourism(Tourism WG), Trade and Investment Data(TID Review WG) Trade Promotion(TP WG), Marine Resource Conservation (MRC WG), Fisheries(Fisheries WG), Agricultural Technology(Ad Hoc Agricultural Experts Group)

- 3) The notable achievements for Eco-Tech at the Subic Leaders' Meeting 1996 are the following: Adopting the Manila Declaration on an Asia-Pacific Economic Cooperation Framework, making sustainable development a

new momentum for Eco-Tech. At the meeting, the Leaders adopted the "APEC Framework for Strengthening Economic Cooperation and Development", which provides the overarching framework for the implementation of Part II of the Osaka Action Agenda. The Framework articulates the goals, guiding principles and themes for focused outcomes in key areas of APEC economic and technical cooperation. Specifically, leaders selected six priority Eco-Tech areas to concentrate on: developing human capital; fostering safe and efficient capital markets; strengthening economic infrastructure; harnessing technologies for the future; safeguarding the quality of life through environmentally sound development; and developing and strengthening the dynamism of small and medium enterprises.

The Framework reflects the argument that Eco-Tech is important in accelerating the structural adjustment of developing economies, which, in turn, will expedite the opening of developing economies' markets. Also, the adoption of the Framework illustrates the developed economies view that promoting TILF is limited without Eco-Tech. Developed economies have begun to be more concerned with Eco-Tech in the sense that Eco-Tech could play a compensating role to TILF for developing economies. Meanwhile, Canada, the host economy of the fifth Leaders' Meeting, is expected to bring up Eco-Tech issues such as infrastructure and environmentally sustainable development as the main themes of the meeting. This will strengthen the momentum for Eco-Tech, and as a result, the promotion of Eco-Tech will surely

central APEC objective, establishing the Labor Market Information(LMI) Framework to Address HRD Minister's Call to Action, establishing the APEC Center for Technology Exchange and Training of Small and Medium Enterprises(ACTETSME), adopting the APEC Economic Infrastructure Action Program, making the APEC Education Foundation operational.

be more active thereafter.

2. The Unbalanced Pillars of APEC

It would not be accurate, however, to say that TILF and Eco-Tech have been pursued in a balanced manner during APEC's development. Actions have predominantly been concentrated on TILF.

There are several reasons for this: first, the developed economies of APEC, which tend to have more say than developing economies, have emphasized TILF in order to expedite the opening of developing economies markets. Second, developed economies, which are also the main suppliers of capital and technology for Eco-Tech, have displayed a somewhat reserved attitude towards Eco-Tech, arguing that it should be promoted by the private sector rather than by the government. Third, since developed economies have tried to strengthen the WTO system through APEC activities, TILF matters, which have been more relevant to WTO issues, were emphasized more. Fourth, developing economies have concentrated more on TILF because TILF has a greater immediate impact on their economies than Eco-Tech. Lastly, because TILF results receive much more public attention than Eco-Tech, bureaucrats focused their attention on TILF related issues. As a result, SOM, the main working body of APEC, allocated much time to discussions on TILF rather than on Eco-Tech.

3. Purpose of the Paper

The goals of economic and technical cooperation in APEC can be

summarized as follows: achieving sustainable growth and equitable development in the Asia Pacific region, reducing economic disparities among APEC economies, improving economic and social well-being of the region, and building a true Asia-Pacific Community. These objectives are distinct from, although related to, the TILF objective of free and open trade and investment by 2010/2020.

Given these goals, the purpose of this paper is to assess the current status of APEC's work on economic and technical cooperation, and make suggestions on the ways to strengthen Eco-Tech. This paper supplies a detailed analysis of the past and current work in the area of Eco-Tech, and describes the problems and challenges that Eco-Tech work in APEC is facing. In the end, though, this paper searches for ways to flourish and strengthen Eco-Tech activities in APEC fora and the Asia-Pacific region.

II . The Current Status of Eco-Tech

1. An Overview of APEC's Eco-Tech⁴⁾

It is evident that APEC's Eco-Tech activities address all the significant issues facing APEC member economies today. For the convenience of description, we classify these issues according to the priorities set up by leaders.

The first Eco-Tech activity is the development of human capital, the Labor Market Information(LMI) Framework is a main element of developing human capital. This Framework is necessary for sound forecasting of trends and needs in human resource development. The other elements are education and training to reduce skill shortages and unemployment. Some projects closely related to these elements currently underway are a comparative analysis of lifelong learning policies and practices, and a series of projects are aimed at meeting the short-term needs of business and public sector managers.

In another related vein, the Economic Committee is promoting the FEEEP(Food, Energy, Environment, Economic Growth, and Population) project. The project is designed to analyze the relationship between these 5 factors. Human Resource Development(HRD) issues are of importance in this analysis, thus issues such as rural-urban migration or the role of women in labor market would be dealt with in the FEEEP context.

International labor mobility issues, such as the mobility of

4) This Section is based upon Report by the Economic Committee on the State of Economic and Technical Cooperation in APEC.

professional expertise and qualified workers, are also related to developing human capital. The related projects are projects on the recognition of professional qualification and projects on trade in education and training services. Relevant analytical work on temporary labor migration is also being conducted by both the Economic Committee and the HRD Working Group.

Further, the HRD Working Group is promoting projects on measuring and monitoring the effectiveness of education, the improvement of teacher preparation, curriculum development and use of technologies in education and training. These projects are important in order to strengthen education cooperation.

For the aim of fostering safe and efficient capital markets, financial market issues have been discussed in the Finance Ministers process. The APEC Finance Ministers agenda has focused on the role that prudent macroeconomic policies, improved financial market regulation, and more demanding public disclosure standards can play in maintaining a stable environment for capital flows and improving investor confidence. Discussion on the exchange rate between the US Dollar and the Yen is also an important element in this discussions.

Projects related to the mobilization of domestic savings have focused not only on financial market development, but also on integration into international markets by expanding the investment options, including equities and long-term debt instruments. APEC work in this area complements development assistance to developing member economies through the World Bank's International Finance Corporation, the Asian Development Bank. PECC's analysis on financial market deregulation is a good reference.

Foreign direct investment is also a major focus of Eco-Tech as well as TILF(Trade and Investment Liberalization and Facilitation). The

Investment Experts Group(IEG) is working on improving the Non-Binding Investment Principles and probing the possibility of changing it to binding agreement. Meanwhile, the Trade and Investment Data Review (TID Working Group) is collecting bilateral capital flows data, in line with the IMF's recently revised procedures. The project will support analytical works in this area. The Policy Level Group on SME (PLG SME) and the Trade Promotion Working Group(TPWG) are dealing with access to financing, including venture capital.

The Eco-Tech issues of strengthening economic infrastructure have been promoted in several APEC fora. The Infrastructure Dialogue under the auspices of the Economic Committee has addressed a full range of issues, drawing heavily on private sector input. The Public-Private Sector Dialogue held in Jakarta in 1995 provided an overview for these issues. The subsequent following Public Private Sector Roundtable held in Seattle in July 1996 focused on best practices as a means of facilitating private sector investment in public infrastructure.

APEC Finance Ministers have also included work on improving the business environment for infrastructure, simplifying and making procedures more transparent for private sector participation, privatization of state-owned enterprises, and the provision of appropriate markets and legal policy frameworks. The work has been complemented by the discussion by the Finance Ministers on financing for infrastructure. The discussion includes developing financing techniques that connect private savings to infrastructure.

Sector-specific infrastructure issues have also been addressed by the Transportation Working Group(TPTWG), the Telecommunication Working Group(TELWG), and the Energy(EWG). These working groups have been pointing to infrastructure insufficiency as the main

bottleneck in developing related fields. In addition, the Agricultural Technical Experts deal with issues related to financing of rural infrastructure requirements.

Another area of concentration for Eco-Tech is harnessing technology for the future. Technology is the main source for productivity gains. APEC is managing policy dialogue and encouraging diffusion of technology within member economies. The Industrial Science and Technology Working Group (ISTWG) has focused on technology transfer as well as the development of new technology. The projects on cooperation in science education and researcher exchanges have been given particular attention. Also, intellectual property rights issues are closely related to the transfer of technology. Specifically, improving the enforcement of intellectual property rights (IPR) is of great importance.

Sector-specific work on improving technology is conducted by the EWG, the TELWG, and the TPTWG. The TELWG is active in promoting projects on the APII (Asia Pacific Information Infrastructure). Meanwhile, the Agricultural Technical Experts are trying to define their activities related to improving and transferring technology.

Technology involves many overlapping issues related to various APEC fora. The APEC Center for Technology Exchange and Training of SMEs is one of resource centers for networking information and organizing SME-targeted activities. The EWG is promoting new technology to connect energy efficiency and environmental performance. The relevant projects address clean production technology issues.

Sustainable development issues were raised in the APEC Leaders Economic Vision Statement at Blake Island in 1993. Since then, sustainable development has become a central APEC objective. The APEC Environment Ministers in Vancouver in 1994 discussed how to

integrate economic and environmental issues. Working level activities are being conducted in the FEEEP project.

All APEC fora have been asked to consider environmental impacts in their regular work, in regards to the environment agenda. The Economic Committee has also launched a project on the use of economic instruments for environmental protection, highlighting best practices. And the HRDWG is developing the human resource capacity to manage sustainable development.

The Marine Resource Conservation Working Group(MRCWG) focuses on the sustainability of the marine environment. The EWG has endorsed 14 non-binding principles for rational energy consumption and adopted an action program to integrate environmental consideration, including clean coal technology and renewable energy. The TWG plans to promote the best models for implementing the concepts of environmental, cultural and social sustainability in tourism development. In addition, The PLGSME is compiling information on policies and practices for sustainable development as guidelines for the SMEs. The HRDWG conducts projects on environmental education, and the Agricultural Technical Cooperation Experts Group carries out projects on the environmentally-friendly agricultural production technology.

In the area of strengthening the dynamism of small and medium enterprises, SMEs face systematic difficulties in accessing to information on markets, technology, finance, and qualified personel. APEC has promoted cooperation for SMEs in order to mitigate the difficulties. The industrial Outlook study is aimed at providing substantial information to SMEs. The survey of member economies' SME policies stay in the same line. The PLGSME is promoting projects to facilitate the use of electronic systems by SMEs. The main objective is to provide a cheaper and more efficient means of acquiring information.

The Franchising Study is aimed to enhance SMEs' understanding of the benefits of business franchise methods. The findings of the study are to resolve SMEs' problems related to capital and technology. In addition, the APEC-Net Home Page provides business information such as trade data, a trade fair directory, and a directory of SME support agencies. Also, a computerized tariff database of special value to SMEs is on the Home Page.

2. The Characteristics of Eco-Tech

Up until now, APEC has promoted a total of 220 Eco-Tech projects. The classification of these projects can be seen in Table 1.

Among the APEC working groups, committees, and other APEC fora, HRDWG has thus far been the most active--promoting 41 projects, 18.6% of the total. Next, ISTWG and CTI have promoted 37 projects(16.8% of the total), and 29 projects(13.2% of the total), respectively. Meanwhile, TIDWG has been the least active, having only 2 projects. HRDWG's active status reflects APEC member economies' concern for human resource development, and likewise ISTWG activities reflect the interest in science and technology development. CTI's fairly large number of projects can be attributed to the fact CTI contains two sub-committees on Standards and Conformance (SC) and Customs Procedure (CP), as well as the Investment Exert Group(IEG). TIDWG does not show much activity because its main job, building a database, has already been completed, only periodic updating.

Among the six priority areas, HC has 75 projects, more than one third of the total projects. TF and ESD have 47 projects(21.4% of the total projects), and 37 projects(16.8% of the total projects), respectively.

**Table 1. Current Status of APEC's Eco-Tech by APEC Fora
and 6 Priority Areas**

6 Priority Areas APEC Fora	1. HC	2. CM	3. EI	4. TF	5. ESD	6. SMEs	Total
1. EWG			3	7	7		17(7.7)
2. FWG	3				1	2	6(2.7)
3. HRDWG	31	2	1	2	2	3	41(18.6)
4. ISTWG	5			18	13	1	37(16.8)
5. MRCWG					4		4(1.9)
6. TELWG	8		5	4	1	4	22(10.0)
7. TWG	1		5		2		8(3.6)
8. TIDWG	1		1				2(0.9)
9. TPWG	1		4			3	8(3.6)
10. TPTWG	2	1	6	6	1		16(7.3)
11. ATC	1		1	3	2	2	9(4.1)
12. CTI	19	1	3	4	1	1	29(13.2)
13. EC	1	1	2	1	2		7(3.2)
14. PLGSME	2			2	1	9	14(6.4)
Total(%)	75(34.1)	5(2.3)	31(14.1)	47(21.4)	37(16.8)	25(11.4)	220(100)

* Abbreviation

HC: Developing Human Capital

CM: Fostering Safe, Efficient Capital Markets

EI: Strengthening Economic Infrastructure

TF: Harnessing Technologies of the Future

ESD: Promoting Environmentally Sustainable Development

SMEs: Encouraging the Growth of Small and Medium Enterprises

EWG: Energy Working Group

FWG: Fisheries Working Group

HRDWG: Human Resources Development Working Group

ISTWG: Industrial Science and Technology Working Group

MRCWG: Marine Resource Conservation Working Group

TELGW: Telecommunications Working Group

TWG: Tourism Working Group

TIDWG: Trade & Investment Data Review Working Group

TPWG: Trade Promotion Working Group

TPTWG: Transportation Working Group

ATC: Agricultural Technical Cooperation Experts Group

CTI: Committee on Trade and Investment

EC: Economic Committee

PLGSME: Policy Level Group on Small and Medium Enterprises

Meanwhile, there have been only five projects related to CM. This distribution is basically representative of APEC member economies' current interests in Eco-Tech.

HC's active status is partly due to the ease of project promotion, as well as the interest of APEC member economies. The present projects of HC are oriented towards seminars, workshops, and trading courses, all of which are easily supported financially. On the other hand, the low number of projects related to CM does not reflect a lack of interest and concern for CM projects, but rather reflects the difficulties of financing promotion of CM.

Table 2 shows Eco-Tech projects listed by leading economies. In this table, we see that developed economies are heading 135 projects (59.7% of the total), while ANIEs and ASEAN are heading 37 projects, 16.4% of the total, and 25 projects (11.1% of the total), respectively. Again, the figures here do imply a lack of interest in Eco-Tech projects by developing economies, but rather, illustrates the fact that developed economies have a greater capacity for organizing events such as

Table 2. Eco-Tech Projects by Leading Economies^{a)}

Leading Economies	Developed Economies	ANIEs	ASEAN ^{b)}	Others	non leading economies	Total ^{c)}
number of projects	138	34	25	20	9	226

a) Developed Economies consist of the US, Japan, Canada, Australia, and New Zealand. ANIEs consist of Korea, Chinese Taipei, Hong Kong, and Singapore. ASEAN consists of Malaysia, Thailand, Indonesia, the Philippines, and Brunei. Other consists of China, Mexico, Chile, and PNG.

b) Among the ASEAN members in APEC, Singapore is classified as an ANIE.

c) Since 6 projects are led by two economies, the total is 226 rather than 220.

Table 3. Private Sector Participation to Eco-Tech Projects

6 Priority Areas Private Sector Participation	HC	CM	EI	TF	ESD	SME	Total
Yes	19	1	15	18	10	18	81
No	56	4	16	29	27	7	139

conferences, seminars, workshops, etc. Developed economies are thus able to head more Eco-Tech projects.

While developed economies emphasize the role of the private sector in promoting Eco-Tech, developing economies argue that the government should also play a complementary role to the private sector in Eco-Tech matters. However, contradictory to developed economies opinion, Table 3 shows that 63.2% of the total Eco-Tech projects do not have private sector participation. This is mainly because the private sector's participation in Eco-Tech needs more time to develop due to the lack of a solid network between the government and private sector.

From the viewpoint of real progress, 26 projects(11.8% of the total) have been completed, while 194 projects(89.2% of the total), are still in progress. This not only exemplifies the rather short history of Eco-Tech promotion, but also shows that some projects are promoted

Table 4. Classification of Eco-Tech Projects by Content

Content	Governments Action ^{a)}	Event ^{b)}	Information Sharing	Report	others	undeci- -ded	Total
number of projects(%)	32 (14.5)	79 (35.9)	39 (17.7)	59 (26.8)	2 (0.9)	9 (4.1)	220 (100)

a) 15 Projects are promoted by individual governments, while 17 projects are promoted by intergovernmental action.

b) Events include seminars, workshops, conferences, forums, training courses, round tables, exhibitions, and fairs.

continuously in a step-by-step manner.

Table 4 shows the content of Eco-Tech projects. Events such as workshops, conferences, seminars, etc. were the most common projects with 79, or 35.9% of the total, and report and information sharing projects were next, with 59 and 39 projects, respectively. Altogether, 168 projects of this nature were recorded(70.4% of the total), while only 32 projects(14.5% of the total), were related to governmental action. This reflects that present Eco-Tech projects are deficient of substantial cooperation between governments.

III. Challenges to Eco-Tech

1. Duplication of Work: Intra- and Extra-APEC

Although economic and technical cooperation is a very broad concept, economic and technical cooperation in the APEC context is defined by the specific activities that have been grouped under this rubric. The current Eco-Tech activities in APEC fall into the following general categories : policy dialogue, sharing technical expertise and experience, sharing information, harmonization through agreement on common standards and approaches, training, and joint funding for projects.

In terms of institutional lines, APEC's economic and technical cooperation can be divided into some 17 separate agendas ; 13 under part II of Osaka Action Agenda plus the Environment/Sustainable Development, Finance processes, Eco-Tech activities under CTI, and the analytical work of the Economic Committee. Some of the agendas are sector-specific while others are more cross-cutting in nature. The existence of overlapping issues means that there are various points of intersection among the 17 agendas. SME issues, for example, come up in the context of the work on Human Resource Development, Finance, Science and Technology, Market Framework Policies, and of course very prominently in trade and investment. Environment as well comes up virtually across the board in one fashion or another. In the case of SMEs, a specific group has been established within APEC to give impetus to work in that area. In other cases, such as environment, no particular institutional body has been set up; instead, all APEC fora report on how they are taking the environment into consideration in

their work programs, while the Ministerial process propels the overall agenda with officials and experts meeting on an ad hoc basis.

The range of important overlapping issues creates the need for coordination to avoid duplication, and also creates opportunities for integration of efforts. Coordination takes place at the senior official level as well as through the initiative of Working Group Lead Shepherds and Chairs of the Committees and Ad hoc fora. However, coordination efforts are not very satisfactory. APEC needs an integrated management tool for the Senior Officials to provide feed back to the various fora. At the same time, overview of APEC's work in various fora should be regularly supplied to identify the possibilities for greater collaboration and to avoid duplication.

One more possible network of collaboration and coordination is international organizations such as OECD, UN, IMF, and World Bank. These international fora have extended histories, experience, and expertise in the field of economic and technical cooperation. Therefore, APEC can utilize much of work already accomplished by these international organizations. The efforts to collaborate, coordinate, and take advantage of these international foras' expertise and experience is not very active. APEC does not have to duplicate the work already done by other international fora.

2. Passive Attitude of Governments toward Eco-Tech

The current status of Eco-Tech projects show that their impact has been somewhat low, despite the great volume. Further, it is questionable whether or not holding events like seminars or conferences actually promotes substantial cooperation. Many such

projects are one-time events and do not have any follow-up actions. In many cases, reports are simple references that are not influential to policy making. As a result, information sharing or distribution projects have limited meaning and effectiveness. It is true that we should not expect a huge impact from Eco-Tech projects considering that many of them are in their primitive stages. Still, unless general improvements are made, the current status of these projects foreshadows a not-so-bright future for Eco-Tech.

The problem arises because of two main reasons. One is the financial limitation. Eco-Tech programs such as vocational training and technology transfer require money and are difficult to handle in their implementation. Therefore, economies tend to prefer holding seminars and conferences or writing reports. Second, some governments, mainly those of advanced economies, tend to put the Eco-Tech responsibility on the private sector, mostly universities and institutes which are naturally inclined to writing reports or holding seminars and conferences. This limits the horizon of economic and technical cooperation in APEC.

3. Limitation of Project Designs

Another reason for this gloomy future is the limitation of project designs. Basically, project designs have been limited due to the insufficient supply of capital and technology for Eco-Tech. Related to this, participation by developing economies has been limited due to their reserved attitude toward present Eco-Tech projects. Since current projects are oriented too much towards seminars, workshops, training courses, etc., results from Eco-Tech projects have not been satisfying

for developing economies. Developing economies think more action and tangible results are needed; i.e. a substantial inflow of capital and technology from the governments of developed economies. Most projects seem to be designed and chosen based on ease of promotion, rather than the real needs of the beneficiaries. As a result, many of the projects have been divergent from developing economies' actual requests.

4. Growing Number of Fora

As APEC progresses, more fora and sub-fora are newly established and many more government officials and scholars are attending the various meetings and fora in APEC. This reflects the expanding coverage of and interest in economic and technical cooperation activities. However, some fora which were initially tentatively set up tend to continue their lives by the inertia of an organization. A certain forum, which has little contribution to Eco-Tech efforts or is outdated, exists because of the lack of restructuring efforts from the member economies. Therefore, there exists much room to economize and make the APEC's Eco-Tech process efficient.

IV. Conclusion: How to Strengthen Eco-Tech

It is clear that the perception of Eco-Tech needs to change, not only for the economic growth of developing economies, but also for developed economies. If developing economies achieve a certain level of economic growth, this will stimulate the demand for imports, resulting in the expansion of exports of other economies, including developed economies. In this sense, Eco-Tech is a useful means for promoting liberalization. Eco-Tech does not imply that there will only be a unilateral benefit such as aid from developed economies to developing economies. Eco-Tech will provide mutual benefit to both developed and developing economies.

Korea is a good example of this. Currently, Korea is still under much pressure from various economies to open its market because it is now regarded as an important and consistently growing market. If Korea remained a poor economy of only several hundred dollars of per capita GNP, other economies, especially developed economies, would not have exercised such pressure to open Korean markets.

In order to achieve successful Eco-Tech, market mechanisms in capital and technology flows need to be watched closely. This is because capital and technology flow most efficiently through the market mechanism. Thus, beneficiaries should attract capital and technology from their potential sources, mainly developed economies, by improving their economic circumstances. One of the major actions by governments of member economies to this end would be deregulation.

Efforts to avoid the duplication of work is exerted rather

systematically. The screening is mainly carried out by Lead Shepherds and Chairs of the Committee and Ad hoc fora, including SOM and BAC. However, the screening requires a certain level of expertise on the issues and problems proposed in the projects. Therefore, the current system has limitations. APEC needs more expert-oriented screening mechanism to avoid duplication, and, not to sacrifice a valuable project because of improper duplication avoidance efforts.

Developed economies suggest that Eco-Tech be led by the private sector rather than by the government. This suggestion is justifiable in cases where the private sector works more efficiently or where governments do not have specific means for Eco-Tech implementation. But even in these cases, the government should play a complementary role for effective Eco-Tech. There are a few other cases where the government should play a leading role. Examples are Eco-Tech projects that need a lot of financial support or projects involved with intergovernmental actions. Therefore, governments of developed economies have to play a more active role in Eco-Tech, rather than just argue over whether the governments leading role is appropriate for Eco-Tech or not.

It is necessary to find proper financial resources in order to strengthen Eco-Tech. In particular, developing technology and building infrastructure requires huge financial support. Therefore, how to finance such development needs to be considered in a coherent and concrete manner.

Some possible sources for financing Eco-Tech projects are: the private sector, the existing international financing institution, and a new international financing institution. Of these, establishing a new international financing institution seems to be the most difficult, though discussions about this issue have been made in APEC Economic

Ministers Meetings and PECC Financial Market Development(FMD) Meetings. The difficulty arises from the lack of enthusiasm of the major financial suppliers, namely developed economies. Thus, the establishment of a new institution should be considered a long term project. However, the private sector and existing international financial institutions still remain as available options for Eco-Tech financing. In order to attract financing from these groups, though, governments will need to play a more active and substantial role. More specifically, governments should make guaranteed stable pay-back arrangements with the related financiers in order to reduce their risks.

Technology transfer is also an important component of Eco-Tech that has not been implemented actively. This inactivity is mainly derived from developed economies' worry about the boomerang effect. That is, developed economies do not want to lose their monopoly on advanced technology. In order to alleviate such concern, proper compensation schemes for technology transfer should be established. The schemes should be based on a market-determined "price". In other words, the demander of the technology(mainly developing economies) should pay the proper, market-determined price to the supplier mainly developed economies. Although appropriate payment is necessary, it is sometimes difficult for developing economies to find financial sources for payment. Thus, it would be better if technology transfers were accompanied by foreign direct investment. In this case, the suppliers of technology would be able to find compensation in the form of a return-to-the-investment.

Eco-Tech projects should be designed with consideration of the beneficiary's needs. To this end, a user-driven process should be introduced into project designs. During the initial designing stage, surveys and discussions on demanders' needs should be thoroughly

made. In addition, the projects should be modified, following the changing economic situations of the demanders. This flexibility will provide more substantial benefits to rapidly changing developing economies.

APEC is growing and expanding in its functions as a organization. APEC's interest and coverage of Eco-Tech is widening and deepening as the more groups and fora are established. However, more groups and fora implicates more difficulty in coordination and collaboration. Therefore, APEC need to introduce better ways of managing and harmonizing all the activities. Furthermore, some groups or fora, which have accomplished their purposes or are outdated, should discontinue. Fora that have little activities may be closed down or unified to other fora. These kinds of ongoing restructuring efforts will make APEC a more efficient and streamlined entity.

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Annex: Description of Eco-Tech Projects

No	subject of project	APEC fora	priority area(1-6)	content	status	private sector participation	leading economy	expected outcome
1	risks and costs of investment in power infrastructure	1	3	workshop	ongoing	Y	Australia	Energy Ministers will consider recommendations of the final report
2	coal trade and investment	1	3	workshop	ongoing	Y	Australia	First seminar to be held in Indonesia in August 1997
3	energy security through improved access to international fuel markets	1	3	workshop	ongoing	N	Australia	Workshop planned for late 1997
4	clean fossil energy technologies	1	4	seminar	seminar series starting from 1993	Y	US	The proceedings of the 1996 seminar will be available 1997
5	new and renewable energy technologies	1	4	report	ongoing	Y	Philippines	The report will be available in the second half of 1997
6	high value regional renewable energy applications focusing on energy efficiency	1	4	report	in preparation	Y	US	The report should be available in the end of 1997
7	renewable energy retrofit options	1	4	report	in preparation	N	US	The final report will be available in 1998
8	high value regional renewable energy applications focusing on technologies	1	4	report	in preparation	Y	US	The report should be available in the end of 1997
9	utilization of coal mines gas	1	4	demonstration	in preparation	N	US	The data generated will be the resource information
10	energy R&D and technology transfer	1	4	seminar	done	Y	Japan	The proceedings will be available in 1997

No	subject of project	APEC fora	priority area(1-6)	content	status	private sector participation	leading economy	expected outcome
11	linked databases on mining	1	5	database	ongoing	Y	Chile	Both government and private sector will benefit from the database
12	atmospheric emissions regulation at coal fired plants	1	5	report	done	N	US	Formulation of integrated energy and environmental policies
13	energy benchmark system	1	5	report	ongoing	Y	US	Publication in Nov-December 1997
14	energy database	1	5	database	ongoing	Y	Japan	Publication in October 1997
15	review of renewable resource potential	1	5	report	ongoing	Y	US	The final report to be completed in late 1997
16	facilitation of rural electrification	1	5	workshop	done	N	Japan	A second workshop in Japan in June
17	reducing costs through energy standards	1	5	government action	ongoing	N	Canada	Energy Ministers will consider the direction of the project in August 1997
18	quality and safety of fishery products	2	1	technical conference	in preparation	N	Thailand	Upgrading competence of fish industry
19	fish inspection system of CER	2	1	workshop	in preparation	N	Thailand	Promoting transparency of fish inspection system
20	improving seafood inspection regimes	2	1	government action	ongoing	Y	US	Technical cooperation and skill transfers
21	destructive fishing techniques: cyanide fishing	2	5	technical workshop	done	N	US	Sustainable use of coral reef fisheries
22	air shipped live and fresh food fish	2	6	manual	in preparation	Y	US	Seafood traders will benefit from the manual
23	inventory of fishery administration and organizations	2	6	survey	ongoing	N	China	Providing easy reference

32 APEC's Eco-Tech: Prospects and Issues

No	subject of project	APEC fora	priority area(1-6)	content	status	private sector participation	leading economy	expected outcome
24	understanding of cultures	3	1	report	ongoing	N	Australia	Member profiles to be developed Scheduled in Nov-December 1997
25	vocational and technical education curriculum	3	1	symposium	ongoing	N	Chinese Taipei	Publishing APEC HRD Outlook in 1997/1998
26	labor market information (LMI) framework	3	1	informal meeting	ongoing	N	Australia	Scheduled completion December 1997
27	forecasting regional labor market	3	1	report	ongoing	N	Australia	A report including case studies will be disseminated in September 1997
28	business management of joint implementation	3	1	report	ongoing	N	Canada	Completed in 1998
29	chief human resources officer (CHRO) network	3	1	database	ongoing	Y	Canada	Providing employment information
30	Japan-APEC partnership for education and training (JAPET)	3	1	government action	ongoing	N	Japan	
31	lifelong learning project	3	1	conference	ongoing	N	Canada	Scheduled to be held late 1997
32	the school-based indicators of effectiveness	3	1	conference	ongoing	N	China	-
33	measuring the quality of educational	3	1	information bank	ongoing	N	US	-
34	mutual recognition of skills qualifications	3	1	report	ongoing	N	Australia	Promoting bilateral agreement for mutual recognition
35	cross-crediting in engineering	3	1	report	ongoing	Y	Philippines	Enhancing mutual recognition of skills qualification
37	electronical communication on education	3	1	home page	ongoing	N	US	Access to information on study abroad

No	subject of project	APEC fora	priority area(1-6)	content	status	private sector participation	leading economy	expected outcome
38	human resource management policies and practices	3	1	report	ongoing	N	Australia	Information in a single source
39	multimedia distance learning	3	1	-	in preparation	N	US	Innovation in traditional education
40	public sector reform	3	1	conference	ongoing	N	Australia	-
41	cooperation in education and training	3	1	report	in preparation	N	Australia	-
42	APEC Study Centers	3	1	recommendation	ongoing	Y	-	Established in 15 member economies
43	APEC Scholars program	3	1	government action	ongoing	N	Australia	-
44	business volunteer program	3	1	government action	ongoing	Y	Thailand	Information on experts in member economies
45	APEC Education Foundation (APECEF)	3	1	-	ongoing	Y	Us Korea	Developing a financial resource
46	education statistics	3	1	report	ongoing	N	Australia	Publication of expanded data planned for 1997
47	international quality assurance system	3	1	workshop	ongoing	N	Japan	Scheduled to be completed in December 1998
48	cross-cultural technology transfer	3	1	report	done	N	Japan	Minimizing the recurrence of problems
49	HRD symposium	3	1	symposium	ongoing	Y	Japan	From 1996 onwards for five years
50	vocational training in cooperation with enterprises	3	1	government action	ongoing	Y	Japan	From 1996 onwards
51	vocational training program	3	1	government action	done	N	Korea	Training in Korea annually
52	HRD in the food industry	3	1	conference	ongoing	N	US	Planned for Nov/Dec 1997 in Thailand

34 APEC's Eco-Tech: Prospects and Issues

No	subject of project	APEC fora	priority area(1-6)	content	status	private sector participation	leading economy	expected outcome
53	information literacy	3	1	conference	ongoing	N	Japan	Promoting the understanding of the importance of information literacy
54	management and executive development	3	1	report	ongoing	N	Canada	Scheduled to complete in Oct/Nov 1997
55	insurance training program	3	1	workshop	ongoing	Y	China	Scheduled to be held in Dec 1997
56	cross-cultural management of trade dispute resolution	3	1	seminar	ongoing	N	Canada	Course delivery in Fall, 1997
57	HRD of key basic industries	3	1	symposium	ongoing	N	China	Sound forecating of trends and needs in HRD
58	network of industrial technology practice firms	3	1	seminar	in preparation	Y	Australia	Increasing productivity of SMEs
59	computer network systems for school education	3	1	report	ongoing	N	Korea	Publishing studies of best practices
60	sustainable development network	3	5	network	done	N	US	Training and information network
61	human resources for sustainable development	3	5	network	ongoing	N	Australia	Academic collabration on sustainable development education
62	enhancement of SME productivity	3	6	training program	done	N	Philippines	Increasing productivity of SMEs
63	APEC Center for Technology Exchange and Training for SME	3	6	government action	ongoing	Y	Philippines	Performing the role of resource center
64	cross-cultural training for SMEs	3	6	CD-ROM	ongoing	Y	Australia	Making available a multimedia training tool

No	subject of project	APEC fora	priority area(1-6)	content	status	private sector participation	leading economy	expected outcome
65	APEC Center of Excellence	4	1	government action	in preparation	N	Australia	Practical options to be discussed in the ISTWG in Singapore in Oct 1997
66	public awareness activities for science and technology (S&T)	4	1	government action	ongoing	N	Japan	Improving public awareness in S&T
67	public understanding on S&T	4	1	symposium	done	N	Japan	Complementing project 66
68	research manpower training program	4	1	seminar	ongoing	N	Korea	Improving research manpower and activities
69	gender in S&T	4	1	seminar	in preparation	N	Canada	-
70	S&T information flow	4	4	web	ongoing	N	Australia	Distribution of CD-ROM in 1997
71	utilization of EDI	4	4	network	ongoing	N	China	Enhancing trade links
72	high tech product catalogue	4	4	catalogue	ongoing	Y	China	Linkage between users and suppliers
73	roundtable meetings in selected sectors	4	4	roundtable	ongoing	N	Japan	Joint business activities and production know-how
74	CALS/EC conference	4	4	conference	in preparation	Y	Korea	Understanding of the CALS/EC
75	S&T information service system	4	4	government action	in preparation	N	Korea	-
76	technomart II	4	4	exhibition	in preparation	Y	Chinese Taipei	Holding the Technomart II in 1998
77	earthquake loss estimation methodology	4	4	report	ongoing	N	US	-

No	subject of project	APEC fora	priority area(1-6)	content	status	private sector participation	leading economy	expected outcome
78	advanced S&T network	4	4	network	ongoing	N	Korea	Full operation in June 1998
79	Tau Charm Factory: high energy physics	4	4	government action	ongoing	N	China	Research facility
80	large sky area spectroscopy	4	4	government action	ongoing	N	China	Basic science research work
81	joint research guideline	4	4	report	done	N	Japan	Facilitation of joint research activities
82	disaster prevention	4	4	workshop	ongoing	N	Japan	Planned to be held in 1997
83	mutual utilization of research facilities	4	4	home page	ongoing	N	Japan	Sharing information of research facilities
84	industrial measurement system	4	4	government action	ongoing	N	Japan	Multicoordinate measurement technology
85	research linkage in S&T	4	4	report	ongoing	N	Australia	Final report by March 1998
86	APEC Center for technology foresight	4	4	report	ongoing	N	Thailand	Launch of the Center in Jan 1998
87	S&T Policy Research Center	4	4	government action	ongoing	N	Chinese Taipei	-
88	clean coal technology information	4	5	network	ongoing	N	China	-
89	herbal and wild medicine	4	5	government action	ongoing	N	China	Benefit of the health care
90	major crop pests	4	5	report	ongoing	N	China	Reducing pesticide spray in field
91	crop yield forewarning system	4	5	report	ongoing	N	China	Academic exchange in 1998
92	acid rain monitoring system	4	5	report	ongoing	N	Japan	On-site advanced system
93	research cooperation on environmental issues	4	5	workshop	ongoing	N	Japan	To be held in Nov 1997
94	environmental protection	4	5	symposium	ongoing	N	Japan	Establishment of environmental researchers network

No	subject of project	APEC fora	priority area(1-6)	content	status	private sector participation	leading economy	expected outcome
95	environmental technology exchange	4	5	network	ongoing	N	Japan	S&T cooperation in environment
96	bio-diversity and bio conversion	4	5	report	ongoing	N	Korea	To be completed in Dec 1998
97	good clinical practice	4	5	seminar	ongoing	N	Singapore	Series of seminars completed by 2000
98	environmental technology initiative	4	5	government action	in preparation	N	US	-
99	efficiency and environmental sustainability	4	5	symposium	in preparation	Y	US	International networks
100	cleaner production strategy	4	5	report	in preparation	Y	US	Reduction of pollution
101	technology exchange for SMEs	4	6	seminar	ongoing	N	Philippines	Technology transfer for SMEs
102	red tide and algal blooms	5	5	government action	ongoing	N	Canada	5 year program starting from 1996
103	cean model and information system	5	5	government action	ongoing	N	Chinese Taipei	5 year program starting from 1997
104	destructive fishing practice	5	5	workshop	ongoing	N	Hong Kong	Tentatively scheduled for Dec 1997
105	integrated costal zone management	5	5	report	ongoing		Canada	The report is available by the end of 1997
106	distance learning	6	1	seminar	ongoing	N	Canada	Virtual APEC distance learning network
107	resource and information sharing	6	1	network	in preparation	N	Korea	To be completed in 1999
108	APII test-bed	6	1	workshop	ongoing	Y	Thailand	Implementation of the APII principles
109	multimedia HRD system	6	1	report	ongoing	Y	Japan	To be completed in 1998

No	subject of project	APEC fora	priority area(1-6)	content	status	private sector participation	leading economy	expected outcome
110	regulatory reform	6	1	seminar	ongoing	N	US	A conceptual framework
111	telecommunication HRD	6	1	symposium	ongoing	Y	China	Implementation of APII
112	APII Technology Center	6	1	government action	ongoing	Y	Korea	5 year program
113	APII Technology Center	6	1	government action	ongoing	Y	Japan	5 year program (1996 - 2000)
114	APII Cooperation Center	6	3	government action	ongoing	Y	Korea	5 year program (1996 - 2000)
115	interconnectivity and interoperability	6	3	government action	ongoing	Y	Japan	5 year program (1996 - 2000)
116	private investment in telecommunication	6	3	report	ongoing	Y	Japan	To be completed in 1998
117	development and financial resources	6	3	catalog	ongoing	Y	US	Transparency regarding funding sources
118	spectrum policy and management	6	3	database	in preparation	Y	US	Information sharing for the APII
119	interconnection	6	4	report	ongoing	Y	US	To be completed in 1997
120	equipment certification requirements and conformance assessment procedures	6	4	government action	ongoing	Y	Canada	Probing MRA by the end of 1997
121	interactive medical curriculum	6	4	government action	in preparation	Y	Australia	To be completed in 1998
122	information sector	6	4	seminar	ongoing	Y	US	To be held in Sep 1997, in NZ
123	harmonized electromagnetic compatibility	6	5	report	ongoing	N	Australia	To be completed in 1997
124	SME electronic commerce survey	6	6	report	ongoing	Y	Canada	To be completed in 1998

No	subject of project	APEC fora	priority area(1-6)	content	status	private sector participation	leading economy	expected outcome
125	EDI/Internet	6	6	government action	ongoing	Y	Japan	To be completed in 1998
126	electronic commerce	6	6	seminar	ongoing	Y	Japan, Australia	Series of seminars (1996-1998)
127	integrated next generation electronics	6	6	government action	ongoing	Y	Japan	To reveal the legal and technical issues
128	HRD in tourism	7	1	-	in preparation	N	Indonesia	To be completed in 1998
129	impediments to tourism growth	7	3	report	ongoing	Y	Australia	To be completed in 1997
130	economic impact of the tourism sector	7	3	report	ongoing	Y	Australia	To be completed in 1997
131	economic importance of tourism	7	3	-	in preparation	Y	-	To commence 1997-1999
132	core statistical information	7	3	database	in preparation	N	Australia	To commence in 1997
133	cooperation with private institutions	7	3	-	in preparation	Y	-	To commence in 1997
134	best practice modes for sustainable development	7	5	report	ongoing	Y	NZ	To be completed in 1997
135	culture and history	7	5	symposium	in preparation	N	Philippines	To commence in 1997
136	training workshops on TIDDB	8	1	workshop	ongoing	N	-	Technical expertise regarding TIDDB
137	TIDDB	8	3	database	ongoing	N	Australia, US	Updating and developing the system
138	trade skills and training	9	1	catalogue	ongoing	N	Korea	To be completed in 1997
139	trade promotion and poverty alleviation	9	3	report	ongoing	N	China	To be completed in 1997
140	trade show information	9	3	home page	ongoing	N	Australia	Information sharing

40 APEC's Eco-Tech: Prospects and Issues

No	subject of project	APEC fora	priority area(1-6)	content	status	private sector participation	leading economy	expected outcome
141	trade-friendly environment	9	3	report	ongoing	N	Japan	To be completed in 1997
142	APEC Net	9	3	home page	ongoing	N	Singapore	Linking APEC related home pages
143	Strategic alliances	9	6	report	ongoing	Y	Chinese Taipei	To be completed in 1997
144	trade promotion organizations annual meeting	9	6	conference	ongoing	Y	Japan	Inter-regional linkages
145	2nd APEC international trade fair	9	6	fair	done	Y	China	Enhancing trade opportunities
146	seafarers training	10	1	seminar	ongoing	Y	Indonesia	Near completion
147	transportation research and education	10	1	report	in preparation	N	US	-
148	privatization of infrastructure projects	10	2	report	in preparation	N	Indonesia	-
149	congestion points study	10	3	report	done	Y	US	Best practices manual
150	integrated regional transportation infrastructure	10	3	report	ongoing	N	-	Information sharing
151	Urban transport forum	10	3	forum	ongoing	Y	Chinese Taipei	To be completed in 1997
152	road transportation harmonization	10	3	seminar	ongoing	N	Australia	Mutual recognition arrangements for road vehicles
153	competitive air services	10	3	conference	done	N	Singapore	Options to be considered
154	aviation personnel licensing requirements	10	3	report	done	N	Australia	Facilitating the supply of skilled personnel trainers
155	electronic data interchange	10	3	seminar	done	Y	Indonesia	Using EDI in the transport sector
156	aviation safety	10	4	conference	done	N	Canada	Improving aviation safety

No	subject of project	APEC fora	priority area(1-6)	content	status	private sector participation	leading economy	expected outcome
157	aviation safety and security	10	4	report	ongoing	N	Canada	To be completed in 1997
158	maritime safety	10	4	conference	ongoing	N	-	To start in 1997
159	technical transport exchange	10	4	report	ongoing	N	Us	Information on exchange programs, funding, expertise
160	transport data and information	10	4	database	ongoing	N	US	Facilitating transportation technology research
161	oil spills management	10	5	report	ongoing	N	Philippines	Dissemination of a complete inventory
162	agricultural technology transfer and training	11	1	database	ongoing	N	Indonesia	To be completed in 1998
163	marketing processing and distribution of agricultural products	11	3	report	ongoing	Y	US	Reduction of costs for growers and processors
164	agricultural biotechnology	11	4	report	ongoing	N	Australia	Commercialization of biotechnology
165	food processing technology	11	4	report	ongoing	N	US	Improving efficiency in the handling of perishable crops and processed food
166	agricultural finance system	11	4	database	ongoing	N	Japan, Chinese Taipei	Information network to be completed by 2000
167	conservation of plant and animal genetic resources	11	5	workshop	done	N	Chinese Taipei	network for exchange of genetic resources information
168	sustainable agriculture	11	5	network	in preparation	N	-	Information network
169	agricultural standards	11	6	government action	ongoing	Y	U.S.	Harmonization work to commence in 1999
170	plant and animal quarantine and pest management	11	6	seminar	in preparation	N	U.S.	Assisting members to comply with WTO obligations

42 APEC's Eco-Tech: Prospects and Issues

No	subject of project	APEC fora	priority area(1-6)	content	status	private sector participation	leading economy	expected outcome
171	competition policy training course	12	1	seminar	done	N	Thailand	Better trained officials
172	competition law and policy enforcement	12	1	seminar	ongoing	N	Korea	to be held in Sep 1997
173	standards and conformity	12	1	seminar	done	N	Japan	HRD in S&C
174	industrial property rights	12	1	seminar	ongoing	N	Japan	5 year program starting in 1997
175	government procurement	12	1	seminar	done	N	U.S.	Better trained officials
176	government procurement remedy system and bid challenge procedures	12	1	seminar	done	Y	Chinese Taipei	Better trained officials
177	government procurement training course	12	1	seminar	ongoing	Y	China	Better trained officials
178	SCCP program for WTO valuation agreement	12	1	-	in preparation	N	Japan	To commence in 1998
179	advance classification ruling systems	12	1	-	in preparation	N	NZ	To commence in 1997
180	Kyoto convention	12	1	Seminar	in preparation	N	NZ	To commence in 1997
181	UN/EDIFACT electronic message standards	12	1	seminar	in preparation	Y	Australia	To commence in 1997
182	WTO TRIPs	12	1	seminar	in preparation	N	U.S.	To commence in 1997
183	HS of classification	12	1	seminar	in preparation	N	Japan	Better trained customs personnel
184	clear appeal provisions	12	1	seminar	in preparation	N	Canada	Developing a training program

No	subject of project	APEC fora	priority area(1-6)	content	status	private sector participation	leading economy	expected outcome
185	risk management	12	1	-	in preparation	N	Australia	A systematic approach to risk management
186	access to customs information	12	1	handbook	in preparation	N	Hong Kong	Information dissemination
187	facilities for temporary importation	12	1	seminar	in preparation	N	Chinese Taipei, U.S.	Harmonized customs procedures
188	WTO dispute settlement understanding	12	1	seminar	done	Y	Australia	Better understanding of WTO DSU
189	dispute mediation	12	1	guidebook	ongoing	N	Canada	To be completed in Dec 1997
190	guidebook	12	2	guidebook	ongoing	N	Australia	The transparency of APEC investment regimes
191	accreditation for standards	12	3	report	ongoing	N	Philippines	To be completed in 1998
192	MRA in the regulated sector	12	3	government action	ongoing	N	-	To begin in 1997
193	guidelines for technical regulations	12	3	government action	ongoing	N	NZ	To be submitted in 1997
194	contact points of IPR	12	4	home page	ongoing	Y	Australia	Dissemination of relevant information
195	tariff database in internet	12	4	home page	ongoing	Y	Australia	Facilitating the access by the public
196	harmonization of trade data elements	12	4	-	in preparation	N	Canada	Enhancing customs clearance procedures
197	international standards	12	4	-	in preparation	N	-	To begin in 1997
198	environmental management standards	12	5	seminar	done	Y	Singapore	Information dissemination

44 APEC's Eco-Tech: Prospects and Issues

No	subject of project	APEC fora	priority area(1-6)	content	status	private sector participation	leading economy	expected outcome
198	environmental management standards	12	5	seminar	done	Y	Singapore	Information dissemination
199	alignment with international standards	13	6	report	ongoing	N	Japan	Implementation phase to begin in 1997
200	HRD for infrastructure improvement	13	1	-	in preparation	N	Canada	To commence in 1997
201	applications of creditworthiness support	13	2	workshop	ongoing	N	Japan	A dialogue between export credit agencies
202	overall infrastructure environment	13	3	report	ongoing	N	Indonesia	Identification of priority areas
203	information and sound practices for infrastructure improvement	13	3	seminar	ongoing	Y	Indonesia	Public-business sector dialogue on infrastructure
204	information society	13	4	report	ongoing	N	Canada, Korea	To be completed in 1997
205	FEEEP	13	5	report	ongoing	Y	Canada	1997 report to be submitted to Leaders
206	economic instruments for environmental protection	13	5	survey	ongoing	N	Canada	To be completed in 1997
207	bench marking database for SMEs	14	1	database	in preparation	Y	Canada	Better understanding of specific improvement
208	enterprise development	14	1	training	in preparation	N	Philippines	Training of trainers for SMEs
209	SME techno forum	14	4	forum	in preparation	N	Chinese Taipei	To be held in Sep 1997
210	technological extension for SMEs	14	4	report	in preparation	Y	Chile	Best practices manual

No	subject of project	APEC fora	priority area(1-6)	content	status	private sector participation	leading economy	expected outcome
211	Eco-efficiency in SMEs	14	5	survey	in preparation	Y	Mexico	Best practices manual on Eco-Efficiency
212	SME indicators	14	6	report	ongoing	N	Philippines	Introducing comparable indicators
213	Public policies for SMEs	14	6	forum	done	Y	Chile	Information sharing
214	Market development	14	6	seminar	in preparation	Y	Chinese Taipei	To be held in Aug 1997
215	franchising within APEC	14	6	seminar	in preparation	N	US	A guide to franchising practices
216	Capital markets for international	14	6	seminar	in preparation	Y	Chinese Taipei	Improving SMEs financing
217	SME business forum	14	6	forum	ongoing	Y	Canada	To be held in Ottawa in Sep 1997
218	entrepreneurship	14	6	forum	ongoing	Y	Thailand	To be held in Bangkok in August 1997
219	strategic alliances between SMEs and large firms	14	6	report	done	N	Indonesia	Facilitation of alliance building
220	financing survey	14	6	survey	ongoing	Y	US	Due Sep 1997

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