

# **TRADE AND ENVIRONMENT POLICY ISSUES: IMPLICATIONS FOR THE ASIA-PACIFIC REGION**



Australian Pacific Economic Cooperation Committee

## PACIFIC ECONOMIC COOPERATION COUNCIL

The Pacific Economic Cooperation Council (PECC) is a unique partnership of business, government and research representatives from 22 Asia-Pacific economies who work on practical government and business policy issues to increase, trade investment and economic development in the region.

The governing body, the Standing Committee meets four times a year and comprises of Chairs of PECC Committees in each of the 22 member economies. PECC holds a major working meeting every 18 months when leaders of business, government and research and invited Ministers join to give their assessments of regional economic issues and begin identifying future ones. The substantive work program is carried out by a range of forums, task forces and project groups.

At the regional level, the most important link with government is through APEC. PECC is one of the three observer organisations of APEC and the only non-governmental body to be given that status. PECC representatives attend APEC Ministerial meetings, the Senior Officials meetings and the working group meetings.

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AUSTRALIAN PACIFIC ECONOMIC COOPERATION COMMITTEE



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## PREFACE

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Throughout the Asia Pacific region there has been growing interest in the link between trade liberalisation policies and sustainable development. Consequently in 1994 the PECC Trade Policy Forum accepted trade and environment issues on its agenda.

I am pleased that in response to interest by the Australian business sector AUSPECC undertook to develop an Australian paper on the connection between trade policy and environmental issues. A small group from business, government and academia met on two occasions to discuss input into this paper written by Professor Kym Anderson and Jane Drake-Brockman of the Centre for International Economic Studies at the University of Adelaide. The paper's objective is twofold -firstly, to examine how PECC's unique structure could provide a vehicle for articulating Australian trade policy initiatives, and secondly to foster domestic debate on trade policy in particular reference to the environment.

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In Jakarta on 13 November 1994, the paper was presented to the PECC Trade and Environment Workshop. The paper proved to be an excellent starting point for discussions on links between trade and the environment among other PECC economies, and resulted in some revisions being incorporated into the final paper.

On behalf of AUSPECC I would like to thank all those involved, including the paper writers, as well as the convenor of the working group Bijit Bora and all those from business, government and academia who provided financial support and comments during the drafting workshops in Melbourne and Adelaide.

Russell Fynmore  
Chair AUSPECC

## EXECUTIVE SUMMARY

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Supporters of trade liberalization and of environmental protection share a common goal: to improve social welfare. The two groups, however, differ in an important respect, namely that supporters of liberal world trade have understood its virtues for two centuries and have been active for more than 50 years in building international institutions to help achieve their goal, whereas widespread concerns about the environment are relatively new and supporters of environmental protection have entered as significant players in national and especially international policy arenas only recently. Widespread public interest in environmental issues is now likely to continue to increase and to affect an ever-broader range of Asia-Pacific economies, not least through its effects on foreign trade and investment. Of particular concern to the region is the considerable risk that certain environmental uses of trade policy pose a threat to the liberal multilateral trading system—a system on which the future of small open economies and Asia-Pacific dynamism continues to depend.

## II

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In the spirit of seeking an improved understanding of trade and environment issues and thereby building a foundation for constructive ongoing dialogue between supporters of liberal trade and of the environment, this report addresses six questions: first, what are the key concerns of environmental groups that involve trade policy; second, why do those groups wish to use trade policies; third, what worries supporters of a liberal trading order about the use of trade policy for environmental purposes; fourth, would a more liberal trade and investment regime harm the environment; fifth, how are environmental measures impacting on trade; and sixth, what might Asia-Pacific economies do to contribute constructively to the trade and environment debate and to resolving conflict between environmentalists and supporters of liberal trade?

Implicit in the report is an effort to identify key principles which should govern the design of trade policies and trade-related environmental policies in order to ensure sustainable development. For the purposes of further discussion, a draft set of guiding principles on trade and environment is annexed to the report.

The report concludes that now is opportune for Asia-Pacific countries (a) to seek jointly to have some influence in developments in the GATT/World Trade Organisation's Committee on Trade and Environment, (b) through regional dialogue to reduce environment-related trading friction in the region, and (c) to reduce the risk that trade-related policies adopted in response to environmental concerns may be so far from first-best as to worsen welfare in many countries and even add to, rather than reduce, environmental degradation.

## THE POLICY BACKGROUND

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Supporters of trade liberalization and of environmental protection share a common goal: to improve social welfare. They also share a common problem: the need to foster multilateral cooperation to fully achieve that objective, because in each sphere (the economy, and the environment) there is considerable and increasing interdependence among nations. But the two groups differ in an important respect, namely, that supporters of liberal world trade have understood its virtues for two centuries and have been active for more than 50 years in building institutions to help achieve their goal, whereas widespread concerns about the environment are relatively new and supporters of environmental protection have entered as significant players in national and especially international policy arenas only recently. In addition, there is a tendency among some environmental groups to perceive trade policy merely as a potential instrument for achieving their objectives (as a sweetener to compensate domestic producers for relatively stringent domestic environmental policies, or as a stick to entice other countries also to raise their environmental standards or to sign and abide by an international environmental agreement). A few even perceive trade as part of the problem of global environmental degradation (because they believe trade liberalization accelerates economic growth and development and that this promotes pollutive activities and speeds the depletion of non-renewable resources).

Understandably, liberal traders resent the encroachment of these 'new kids on the block' onto what they perceive as their hard-won territory, especially when they genuinely believe that reducing trade barriers is environmentally friendly, both in the sense that it allows the world to use its resources more efficiently and in the sense that, by promoting rising living standards, it enables higher expenditures on preserving the environment. Equally, some advocates for greater environmental protection are frustrated that an international agreement as important as the GATT and its

recent Uruguay Round can be implemented without being subject to environmental impact assessments or environmental safeguards.

Clearly there is scope for greater understanding and altered strategies on both sides. More than that, there is the distinct possibility that, by working together, both groups' objectives will be further enhanced - a 'win-win' outcome. But such an outcome will require much more than just 'greening' the GATT and its successor from next year, the World Trade Organisation (WTO). In particular, it may also ultimately require a multilateral environmental organisation which could set rules, incorporate existing international environmental agreements and negotiate new ones, and settle disputes over environmental policies - in the same way that GATT has presided over trade policies for the past five decades. The advantage for traders is that such an organisation could redirect environmentalists' attention away from the use of trade measures and towards ensuring the implementation of more appropriate policy instruments for achieving environmental objectives, allowing both sets of policies to more-effectively contribute, in mutually supportive ways, toward the common goals of sustainable development and improvement in the quality of life.

In the spirit of seeking an improved understanding of the issue and thereby building a foundation for constructive ongoing dialogue, this report addresses six questions;

1. what are the key concerns of environmental groups that involve trade policy;
2. why do those groups wish to use trade policies;
3. what worries supporters of a liberal trading order about the use of trade policy for environmental purposes;

4. would a more liberal trade and investment regime harm the environment;
5. how are environmental measures impacting on trade; and
6. what might Asia-Pacific economies do to contribute constructively to the debate and to resolving conflict between environmental and liberal trade supporters.

Implicit in the discussion is an effort to identify key principles which should govern the design of trade policies and trade related environmental policies in order to ensure sustainable development. The report has in mind the Brundtland Commission's definition of sustainable development: of meeting the needs of the current generation without compromising the ability of future generations to satisfy theirs.

Now is the time to address these questions because in recent years there has been a substantial greening of world politics. The list of environmental concerns is growing rapidly and fanning widespread public interest in environmental issues. Resource depletion, species extinction and other environmental damage are increasingly being seen as resulting from the production, consumption or disposal not only of industrial goods but also of primary and service sector products, and some of these activities are believed to be damaging the environment on a global scale (ozone depletion, global warming). Not only is environmentalism now a significant influence on public policy development in a growing number of countries in the Asia-Pacific as elsewhere, but it is likely to continue to grow in importance and to affect an ever-larger range of countries, not least through its effects on foreign trade and investment.

Three significant trade consequences of the greening of world politics have emerged during the past two or three years. In 1992 the world community identified at the United Nations Conference on Environment and Development (UNCED) in Rio

de Janeiro an extensive set of issues, known as Agenda 21, requiring international cooperation in the pursuit of sustainable development. In Chapter 2 of Agenda 21, a work program in relation to trade and the environment was agreed, and this is being pursued in a number of international organizations, notably the OECD, UNCTAD and UNEP in addition to the GATT. Efforts in the OECD culminated in June 1993 in agreement on a set of procedural guidelines for trade and environment, designed to encourage OECD member governments to work towards making national trade and environmental policies more compatible and supportive of each other.

Second, at the conclusion of the Uruguay Round of multilateral trade negotiations at Marrakesh in April 1994, GATT Contracting Parties agreed to establish the World Trade Organisation (WTO) which will supersede the GATT and come into effect following ratification by the required number of parties, hopefully in early 1995. Significantly, the Preamble to the agreement establishing the WTO refers to its objective as:

"expanding the production and trade in goods and services, while allowing for the optimal use of the world's resources in accordance with the objective of sustainable development, seeking both to protect and preserve the environment and enhance the means for doing so in a manner consistent with their respective needs and concerns at different levels of economic development".

A GATT /WTO Committee on Trade and Environment was also established with the explicit task of ensuring that the trade rules are responsive to environmental objectives. It is worth noting that this decision referred to the need to "coordinate policies in the field of trade and environment" but constrained the Committee's mandate to within "the competence of the multilateral trading

system, which is limited to trade policies and those trade-related aspects of environmental policies which may result in significant trade effects".

Third, the signing in September 1993 of an environmental side agreement to the North American Free Trade Agreement (NAFTA) has set an international precedent of considerable significance, not only for the NAFTA member countries but for the world community as a whole. That precedent, combined with the fact that the OECD countries agreed, as part of the OECD Guidelines on trade and environment, to subject trade policies and trade agreements to environmental review, tends to suggest that future trade reforms by NAFTA countries are likely to require some type of policy mechanism by which growing environmental concerns can be managed. Importantly, such concerns are increasingly also being linked with social issues, including labour standards.

These developments mark the beginning of a new chapter in world trade policy. There is no doubt that the greening of world politics has the potential to boost Asia-Pacific and global welfare broadly defined. Economic growth, expansion of foreign trade and investment flows and preservation of the natural environment can and should be compatible with sustainable development. However, there is a serious risk that certain trade restrictive policies adopted in response to environmental concerns could be sufficiently inappropriate as to worsen welfare in many countries by unduly eroding the global trading system. And in the process they may even add to, rather than reduce, environmental degradation. The issue of trade and environment is therefore very important for the Asia-Pacific region, especially since the continuation of the region's prosperity and dynamism depends heavily on the maintenance of open, liberal trade and investment regimes.

## KEY CONCERNS OF ENVIRONMENTAL GROUPS THAT INVOLVE TRADE POLICY

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Environmental groups are increasingly worried about numerous processes and production methods which are perceived as being environmentally damaging. Examples with international dimensions include the use of CFCs damaging to the ozone layer, the emission of CO<sub>2</sub> which may contribute to global warming, the emission of SO<sub>2</sub> which can lead to acid rain, extensive shrimp aquaculture which damages coastal mangroves, and clearcut logging which reduces boreal and tropical forests areas. Enhanced communications mean growing numbers of people are concerned about resource depletion, species extinction and also animal rights at the global level, regardless of national boundaries. Ongoing globalization and integration of the world economy is also bringing with it new health and safety concerns by consumers of imported products.

One reason for this heightened concern for the environment and for product safety is that, even though uncertainties remain, the scientific basis for many of these concerns is perceived to be much more solid now than was the case twenty years ago. Another is that both the world's population and real per capita income continue to increase at very high rates by historical standards. Both population and income have increased by about 40 per cent since 1970, and the annual volume of aggregate output and consumption has doubled in that period. In the absence of policy intervention, these increases will add continually to the demand for environmental resources. These include essentials for human health such as clean air, potable water, filtered sunlight and natural medicines; raw materials available from mining, hunting and gathering, logging and fishing; and the capacity of the eco-system to absorb wastes and to generate aesthetic and recreational services such as those obtained from unspoilt wilderness areas with a diverse abundance of plant and animal species.

Unfortunately, the supplies of many of these environmental goods and services are not unlimited, property rights are often ill-defined, and markets are incomplete or yet to form. Formulating appropriate policies for the pricing of environmental assets is therefore not easy. Moreover everyone values the environment differently, according to various factors including, importantly, personal income levels. We also have different degrees of knowledge about how different activities affect the environment. Views between countries therefore differ markedly on what are perceived to be optimal national and global environmental policies.

The more advanced economies have established various institutional structures to help arrive at a social consensus on what are appropriate national environmental policies for that society. This is less true in the more recently industrializing economies where often such institutions have yet to develop. And at the international and global levels, co-operative intergovernmental mechanisms in the environmental area have only recently begun to be formed and will take some time before they become very effective or coherent.

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So, with sufficient fora yet to be developed for international and especially global environmental dialogue, and with the problems increasingly being perceived as urgent, there is growing interest among environmentalists, especially in the more advanced economies, in turning to one of the few policy instruments apparently considered to be feasible, namely trade restrictions and other border measures, to influence environmental outcomes both at home and abroad.

Quite apart from the fact that the use of such measures inevitably generates trading frictions, disputes and sometimes retaliation, such policy measures are generally highly inefficient. Trade restrictions do not attack the underlying root causes of environmental problems and provide no positive incentives for

sustained improvement. Better solutions are likely to be found in the use of domestic incentive-based instruments and regulations designed to internalize the by-product environmental costs associated with production and/or consumption. More constructive international solutions are likely to be identified if governments refrain from unnecessary use of restrictive trade measures and instead put joint effort into finding policies which more directly achieve the environmental objectives involved.

## THE ATTRACTION OF TRADE POLICY INSTRUMENTS FOR ENVIRONMENTALISTS

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In the absence of multilateral environmental institutions, some environmentalists view the GATT as a substitute body with teeth and longstanding reputé which in their opinion should be able to settle disputes and establish useful new rules in the trade and environment arena. Environmental groups tend to perceive trade policy as a means both of raising environmental process standards at home and abroad and also of inducing countries to become signatories to and abide by international environmental agreements.

Regarding the first, there is a tendency for some environmental groups to join forces with industry groups seeking compensation for declining competitiveness resulting from costs imposed by increases in domestic environmental standards. Since the loss of competitiveness can be offset by import restrictions on products from lower-standard countries, such restrictions can at the same time remove opposition by local firms to higher standards at home and increase the incentive for foreign firms and their governments to adopt higher standards abroad. Not surprisingly, those features make trade policy seemingly very attractive to environmentalists. The problem is that such use of trade policy is inherently, and sometimes deliberately, protectionist in both impact and intent, and is encouraging and rewarding the least efficient domestic firms.

With respect to international environmental agreements designed to protect the global commons, a major attraction of trade measures is that they can be used as big sticks for enforcement purposes because they are relatively easy to use and are immediate in their impact. Even the threat of trade sanctions can have a rapid and persuasive effect in encouraging a country to join an international environmental agreement and subsequently to abide by its rules. For example, the Montreal Protocol aimed at phasing out the use of CFCs which damage the ozone layer used trade provisions both to reward signatories and to penalize others. Specifically, signatories could continue to produce and trade in the products concerned during the phase-out period, whereas non-signatories were denied not only export markets but also import sources of both the product and also the inputs and technology needed to produce CFCs themselves. Trade restrictions represented only one part of the Montreal Protocol package, along with complementary provisions such as transfers of funds to developing country signatories, but in that case they appear to have been used to good effect.

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## WHY LIBERAL TRADERS WORRY ABOUT ENVIRONMENTAL USES OF TRADE POLICY

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Supporters of liberal trade worry on several grounds about the prospect of trade policy increasingly being used in pursuit of environmental objectives. One vital concern is that such use is inherently discriminatory, thus violating one of the fundamental principles of the GATT. If countries differ in their domestic standards, then any duties imposed to counter so-called 'eco-dumping' necessarily would vary by country of origin of the imports.

A related concern is that where the standards apply not to a product but rather to a process of production, then all imports of that product can end up being restricted rather than just those using the environmentally unfriendly process. The best-known

example of such action concerns US imports of tuna from Mexico and elsewhere, the dispute being over whether the tuna were caught in nets that are hazardous to dolphin. Since it is not possible to tell from observing the final product whether or not dolphin-unfriendly nets were used, all tuna imports from Mexico were banned.

Even more worrying to liberal traders is the threatened or actual use of import restrictions on unrelated products. Examples include threats to restrict developing country access to textile and other markets in industrial countries unless logging of tropical timber is stopped or managed on a more sustainable basis in those developing countries. Such action could violate previously negotiated trade agreements, leading potentially to retaliatory and counter-retaliatory trade skirmishes.

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A further concern, already discussed above, is that as the use of trade policy for environmental purposes increases, firms will perceive this as an additional way to justify their demands for protection from import competition. Not surprisingly, there is often considerable political pressure to assist domestic producers who are seen to be "doing the right thing" environmentally by implementing costly new standards. Typically, however, it is far more difficult to measure the extent of any 'eco-dumping' than of standard economic dumping, not least because the claim results from allegedly inadequate environmental standards in the exporting country rather than from simply selling abroad below the measurable private cost of production. Allowing such action would open a Pandora's box of potential dumping cases - cases that are made all the more complicated because the motive for this kind of trade policy action is usually a mixture of national competitiveness concerns and concerns in wealthier countries for the global commons and for animal welfare, concerns typically not shared to the same extent by developing countries. Inevitably a North-South dimension is then introduced, making the issue even more difficult to resolve amidst claims of eco-imperialism.

In any case, trade restrictions imposed to bolster domestic producers facing higher costs because of environmental policies tend to be counterproductive, from both an economic and an environmental perspective. This is because they do not directly affect the underlying root cause of the environmental problem, and they benefit the less-efficient producers. That is, the use of trade restrictions, in place of more efficient instruments impacting directly on production or consumption rather than trade, will unnecessarily reduce the level and growth of global economic welfare and may even add to, rather than reduce, global environmental damage and resource depletion.

The ban on ivory trade, under the International Convention on Trade in Endangered Species (CITES), provides a relevant well documented example. By lowering the value of elephant products, this ban reduces the incentive for rural Africans to tolerate elephants trampling their crops. As a result it ultimately means fewer rather than more elephants in some areas. In other areas, the value of the animal has fallen so much that it is no longer profitable to cull the herd. An unfortunate consequence is that bushland in national parks is being decimated by the increased number of elephants, which in turn is endangering other animal and plant species.

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Even the *threat* of trade restrictions can be environmentally counterproductive. The talk of European import bans on tropical hardwood logs, together, with frustrations over higher tariffs abroad on processed products than on logs, has encouraged Indonesia to ban log exports. But since felling has been allowed to continue, this policy has lowered the domestic price of logs and thereby raised effective assistance to Indonesia's furniture and other timber-using industries to very high levels. At that lower timber price, one would expect less of each tree to be used and the rate of felling trees to be not necessarily reduced much. This threatened trade ban is therefore a very blunt instrument for achieving the environmental objective involved.

Another clear example of where the use of trade restrictive instruments can prove harmful to nature is the Australian ban on exports of native birds. That ban has led people to smuggle live birds out of the country with only a small proportion of those birds arriving at their destination alive. A more environmentally friendly approach would be simply to legalize breeding of native birds, thereby reducing the price and hence the incentive for people to smuggle birds caught in the wild.

The recently agreed non-binding decision of parties to the Basel Convention to ban exports of "hazardous" recyclables from OECD to non-OECD countries provides another example of a trade-restrictive environmental policy that may well have some negative environmental consequences in addition to being unnecessarily costly. Under the OECD's 'green, amber and red light' definitions, "hazardous" recyclables could include certain plastics, paper and glass and could also include some scrap metal and metal concentrates. This ban therefore increases uncertainty with respect to trade, which may be adversely affected, in a range of recyclables used as feedstocks in recycling industries in developing countries. Although the regulating authority in the exporting country can only provide, under the Basel Convention, an export permit if it is satisfied that the recycling or other production method involved in the importing country is environmentally sustainable, the recently agreed ban does not allow for trade to continue between consenting parties. The outright ban would therefore seem unnecessarily restrictive of some environmentally-friendly trade.

These various examples suggest that considerable caution should be exercised in relation to any use of trade policy instruments for environmental purposes, especially to ensure that the kind of measure used is actually necessary vis-a-vis other available options, and effective in achieving overall environmental protection.

## WHY TRADE AND INVESTMENT LIBERALIZATION IS ENVIRONMENTALLY FRIENDLY

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Countries' trading patterns have been affected by their relative endowments of resources but also by the pattern of government policies. Developing countries have tended to discriminate against their primary and labour-intensive export manufacturing sectors in which they are competitive and to favour their import-competing industrial sector, while in advanced economies those industries losing competitiveness that are significant employers (agriculture, coal mining, textiles, cars) are the ones assisted most by government policies, especially via protection from import competition.

Supporters of liberal trade are confident that economic policy reform, and particularly trade liberalization, would lead to international relocation of production and consumption and higher incomes in both sets of countries. But some in the environmental movement believe that such freeing up of markets would be detrimental to the environment. They argue, for example, that because trade liberalization stimulates economic growth and leads to increased incomes and consumption, it also leads to greater environmental degradation and depletion of natural resources. Some environmentalists also argue that trade liberalization increases transportation activity, both land and sea, and therefore leads to greater energy usage, higher costs and, in some cases, more environmental damage along the transport route.

It is certainly true that per capita demands for raw materials and for the waste absorptive capacity of the natural environment will tend to be greater with higher levels of consumption. But account must also be taken of the fact that income growth brings with it at least three pertinent changes in behaviour patterns.

The first is that as economies open up and incomes rise, more stringent environmental policies are usually put in place. Empirical evidence shows that as per capita income rises, individuals tend to demand better environmental quality, at least after a threshold (upper-middle) income level is reached. It also follows that more resources are available to spend on improving the environment as incomes rise. As well, the political cost of implementing such policies tends to fall with opening up because of increased opportunities for businesses to meet stricter standards by acquiring more and cheaper environmentally benign production processes and products from abroad. Foreign investment and technical cooperation agreements can and often have assisted this process.

Second, higher incomes in developing countries have been shown to lead in time to lower population growth rates. This, along with the increased employment opportunities resulting from trade liberalization, is likely to have a major effect in reducing the rate of environmental degradation attributable to population pressures in developing countries. In rural areas it means fewer people denuding hillsides to eke out a subsistence income, while in urban areas it means fewer un- or under-employed squatters in shanty towns with poor sanitation and water.

And third, as employment increases, the increased value of poor people's time in developing countries will raise the relative price of wood and charcoal as sources of household fuel. Since around three quarters of the timber harvested in developing countries is used as household fuel, this alone could have a major beneficial impact in reducing deforestation and hence CO<sub>2</sub> levels.

Environmental groups also express concerns about the environmental impact of trade and foreign investment liberalization through its effects on the international location and pattern of production and consumption. Their assumption is that trade and investment liberalization will allow and encourage

highly polluting industries to shift to locations where environmental regulations are less stringent, potentially undermining environmental standards in wealthier countries and encouraging a competitive 'race to the bottom', reducing environmental standards to the lowest common denominator. This argument needs to be addressed seriously with relevant analytical and empirical case study work, but studies available to date already effectively challenge the above assumption.

On the investment front, empirical studies have failed to find much evidence of relocation of pollutive industries to countries with lax environmental standards — so-called "pollution havens" -solely to save on abatement costs. Investment location is influenced largely by proximity either to supply of raw materials or end markets. Where relocation has occurred, firms still tend to use the same environmentally friendly techniques as the parent company. This is largely because multinationals find it too costly to vary their production process and capital equipment to take advantage of variations in environmental standards. There are also considerable sunk costs associated with retro-fitting plant and equipment which act to induce firms, in their choice of capital equipment and production process, to anticipate increasing environmental standards and tougher environmental regulation in developing countries.

Despite the lack of survey evidence of relocation to pollution havens, the NAFTA agreement, for example, explicitly imposes some environment-related conditions on capital inflows. One is that foreign projects are to be treated no differently from domestic ones in terms of environmental standards; another is that foreign investment is not to be encouraged by relaxing environment-related requirements on projects. There is scope for further work in PECC and PBEC on the potential relevance of applying principles such as these to liberalization of foreign investment regimes in the Asia-Pacific region.

Similarly, on the trade front, studies have already been undertaken which bring into question the assumption that trade liberalization would have negative environmental impact. Take as examples three of the world's most distorted markets for traded goods, those for coal, food and cars. Both coal and food tend to be priced well above international levels in advanced economies and well below them in developing countries (particularly the former centrally planned economies). It has been demonstrated that in both these cases, liberalising trade is more likely to improve than to worsen the global environment, especially if complementary environmental policies are in place. In the case of cars, quantitative trade restrictions are commonly used. By restricting the right to trade, the license to import is made more valuable. Maximising that value involves importing the highest value vehicles, which are typically less efficient in the use of fuel. The evidence is clear in the case of United States imports of Japanese cars in the early 1980s when voluntary export restraints were first imposed. Imports of small cars declined, whereas imports of large Japanese cars flourished. By keeping up the price of cars, import restrictions also cause the average age of the fleet to rise. And since older cars tend to be more pollutive and less fuel efficient as well as less safe, that adds to both environmental and safety concerns.

The point needs to be continually stressed that environmental problems arise primarily from activities of production and consumption, not from the exchange of goods and services. Indeed, if environmental and other resources are priced appropriately, trade can enhance environmental quality by bringing about increased efficiency in the use of resources. Trade liberalization can therefore be an important contributor to sustainable development, especially when implemented in conjunction with complementary environmental policies. More policy effort must therefore be focussed on the critical resource pricing issues.

It has been argued by environmental groups that cost internalization is an inadequate approach for dealing with certain environmental problems such as species extinction or irreparable damage to the regenerative capacity of renewable resources such as fisheries or forests. For example, export-oriented tropical timber logging or extensive shrimp aquaculture industries, based on a "slash and burn" approach to forest or coastal mangrove management, have flourished in one Asian country after another, leaving behind a trail of denuded countryside and coastline. But trade restrictions in overseas markets do not offer an appropriate or effective solution to such environmental problems. The solution lies in the development of sustainable management practices (process standards) and the transfer of information and technology through both commercial and governmental channels to facilitate those practices. In the case of tropical deforestation, a solution might also lie in debt relief for nature swaps or other foreign aid arrangements which would compensate developing countries for not felling.

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The latter example suggests there is a further positive contribution that liberalization of controls on foreign investment and international capital and technology flows can make. Direct foreign investment in the developing countries can be a force for improved environmental standards by facilitating access to environmental technology — including that embodied in capital equipment and production processes, since in many cases the technology has been developed in industrial countries to meet stricter environmental standards.

There is, on balance, a strong case for believing that trade and investment liberalization and economic development can be consistent with conserving natural resources and enhancing the environment. Governments should orient their trade, development and environmental policies to promoting greater efficiency of resource use. In particular, governments should give priority to trade and other economic policy reforms, including

reducing resource subsidies, where this will also have net environmental benefits, taking complementary environmental policy action in parallel with economic reform when required.

## TYPES OF ENVIRONMENTAL MEASURES AFFECTING TRADE

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Before considering what Asia-Pacific economies might do in response to the above developments, it is worth reviewing also the ways in which environmental policy instruments themselves are impacting on trade — not least because it helps expose important principles worth adopting to reduce trade and environmental conflicts. Some international environmental agreements have significant trade provisions, in addition to which there are numerous domestic environmental regulations and charges that affect trade; the matters covered below are confined to the core issues on the OECD and GATT/WTO agendas.

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### *(a) Trade restrictions in international environmental agreements*

Where countries can agree that they have a common objective in reducing transboundary pollution, or in conserving shared living resources or preserving the global commons, then inter-governmental cooperation and negotiation will be the best procedure through which to achieve mutual agreement on an appropriate joint course of action. One policy solution when there are international environmental spillovers, especially in relation to process and production method issues, is to negotiate international environmental agreements. Consistent with the principle of subsidiarity, such solutions should only be sought where this is more appropriate or more effective than, or a necessary addition to, policy action at the individual country level.

There has been increasing interest on the part of international environmental negotiators in the potential use of discriminatory trade restrictions as enforcement mechanisms within international environment agreements. The Montreal Protocol, for example, has discriminatory trade provisions designed to limit the relocation from signatory to non-signatory countries of industries using or producing CFCs. When such trade provisions are designed to protect environmental resources which do not fall within the national jurisdiction of the parties involved, and when they discriminate between parties and non-parties to the agreement, they might well be thought to conflict with the GATT's Most-Favoured Nation principle. This matter has never been tested in the GATT, because to date no country has complained. Nonetheless, the potential for confrontation is a matter of increasing concern and uncertainty for governments, which is why this matter figures importantly on the agenda of the new GATT/WTO Committee on Trade and Environment. Discussions so far in the GATT have centred around the idea of providing waivers on a case-by-case basis or, alternatively, of providing an "environmental window" within the GATT Exceptions Clause for international environmental agreements.

The trade policy community clearly needs to be involved in the negotiating of international environmental agreements that are likely to include trade provisions, and to develop criteria by which the GATT/WTO Contracting Parties could assess in advance the extent to which trade restrictions within such agreements are acceptable. Some of the relevant criteria were enunciated at UNCED. It is important, first, to ensure that trade provisions are strictly necessary and effective in achieving the environmental objectives involved. For the reasons outlined earlier, there will often be an alternative, more effective instrument than trade restrictions. Where trade instruments are required as a last resort, they should be proportional to the size of the associated environmental problem and should preferably be the least trade restrictive measure available. The measures ought

to be transparent and not be protectionist in impact, and where possible be consistent with both the GATT principles of non-discrimination and national treatment and the key environmental principles such as the polluter pays and the precautionary principles and lifecycle management of products.

***(b) Harmonization/mutual recognition of standards***

Another possible solution to trans-boundary environmental problems is to seek to implement common or similar environmental product and process standards. Differences in environmental product standards, like health and safety standards, can represent important technical barriers to trade. Harmonization and establishment of minimum product standards can be useful both in facilitating trade and in raising the overall level of environmental protection.

In the case of process and production method standards, however, harmonization will not necessarily be appropriate, especially in a region as diverse as the Asia-Pacific. This is because of vast differences among local ecosystems and because of significant economic and developmental differences between the economies of the region. Differences in per capita incomes and level of development imply differences in the valuation of and capacity to pay for the conservation of environmental resources. But, even without those differences, ongoing ecological diversity would suggest a plurality of environmental policies is appropriate for this region more than most. What would be appropriate, though, is to explore the scope that may exist in the region for convergence and mutual recognition of environmental goals and standards, along with harmonization of standards setting criteria and methodologies, and then to negotiate mutual courses of action for mediating and resolving trade-related disputes arising from remaining differences in standards.

### *(c) Environmental taxes and charges*

Another major area of trade and environment debate and ongoing work in the GATT and OECD relates to how various environmental taxes and charges (designed to internalize environmental costs) affect trade and competitiveness. Environmentalists are concerned, for example, that governments are delaying the levying of environmental taxes for fear that if they act alone their firms' products will become less competitive on the international market. This is seen by some as a significant factor delaying implementation of the proposed European Union tax on carbon emissions. Environmentalists therefore consider it important to support policies of tax adjustments on imported goods in cases where the importing country has imposed a higher environmental tax than the supplying country. The GATT allows for border tax adjustments on products, but does not currently provide scope for a country to levy taxes and regulations on processes and production methods (for example, energy usage) associated with imported products. A case could be made though for restricting imports of a product which, as a result of the production process employed, is itself an environmental problem, as for example with certain types of timber preserved with dangerous chemicals. In such cases the environmental problem associated with the production process is effectively imported with the product and there would be solid grounds for border restrictions, so long as they were non-discriminatory.

A related issue is the extent to which rebates or exemptions from domestic process-related taxes (for example, carbon taxes) should be allowable for exported products. The GATT rules, as revised in the Uruguay Round, allow for rebates/exemptions of indirect taxes on inputs used in the production process, including fuel and other energy sources. A carbon tax on fuel consumed in the production process could therefore be rebated upon export - which may or may not be in the interests of the environment, depending on the carbon emissions in providing energy for the alternative supplier. GATT rules on the rebate/exemption of

taxes on fuel used in transportation during the production chain remain unclear. Countries in the Asia-Pacific and elsewhere will need to assess their trading interests in these various matters. There is considerable scope for joint analytical work, for example under PECC auspices, on the impact of energy taxes on both energy trade and trade in energy intensive products in the region.

***(d) Packaging, labelling and recycling requirements***

New instruments of environmental regulation are being devised, such as environmental packaging, labelling and recycling requirements, geared to inducing internalization of environmental costs and encouraging lifecycle (cradle to grave) management of products, including traded goods. Regulations are being introduced, for example, to prescribe the lifecycle management of packaging materials, including their recovery, reuse, recycling and disposal. A wide range of measures is being used which includes deposit refund schemes, taxes and charges, and fees for accessing waste-handling systems in the country of destination.

While the use of instruments of these kinds is preferable to the use of blunter trade policy measures, considerable potential nevertheless exists with some of these schemes for local bias and the provision (inadvertent or otherwise) of protection from imports. Export suppliers do not necessarily have effective access, for example, to overseas labelling and certification schemes, nor to the bureaucratic processes entailed in the wording of labels. A recently introduced German certification scheme, for example, has certified over 99 per cent of German produce as environmentally friendly! Trade-related problems of various kinds are increasingly likely to arise also in relation to differing requirements across countries. There may, therefore, be a need for trading partners to work towards harmonization or mutual recognition of criteria used both in deciding on whether eco-labels are to be used and in the designing and awarding of eco-labels themselves.

Eco-labelling schemes increasingly relate not just to the standard of the product but also to the process involved in producing it (e.g. tuna caught in dolphin-friendly nets) and indeed to all its lifecycle aspects. An example of the kind of problems emerging is the requirement introduced by Austria in 1992 that products containing tropical wood carry a label to that effect. (Austria also imposed a 70% tax on tropical wood and wood products.) These requirements were rescinded in 1993 when ASEAN countries threatened retaliatory trade sanctions against Austria. The Netherlands has since announced that, effective from 1995, it intends to ban the import of tropical hardwoods from regions whose forests are not managed on what it deems to be a sustainable basis.

An interesting example of how both economic and environmental costs can be associated with the imposition of recycling standards is provided by the case of United States provincial regulations specifying minimum recycled fibre content in newsprint. These regulations are forcing the import of old newspapers and magazines from the United States for blending by Canadian pulp and paper mills which tend, currently, to be located in isolated forest communities. These regulations are expected over time to encourage relocation of pulp and paper mills from Canada to municipal locations in the United States with abundant supplies of recoverable old newspapers. Meanwhile, there is evidence that the environmental impact of these recycled content regulations is to add to rather than reduce the total volume of North American solid wastes; recyclable paper is being diverted from the municipal waste stream in North America but even larger volumes of newsprint sludge, the by-product from recycling, are ending up in municipal dump sites in Canada. Better and less trade-distorting ways of encouraging the diversion of recyclable paper from the municipal waste stream would appear to lie in shifting the policy focus from recycled content standards for products to overall waste recovery rates.

## IMPLICATIONS AND OPPORTUNITIES FOR ASIA-PACIFIC ECONOMIES

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Growth in the Asia-Pacific region has been predicated on ongoing liberalization of the multilateral trading system and of the trade and investment regimes of member countries. The push internationally for greater environmental protection, combined with increasing policy interest in the environmental implications of trade liberalization, is therefore especially worthy of close attention at this time when national governments in the region are moving towards enhanced political commitments to more liberalization. This is because of the increasing risk that environment-related trade disputes will erupt. Unless that risk is well managed, such eruptions could undermine the rules-based global trading system and thereby jeopardize the dynamism and growing integration of the Asia-Pacific region and the world economy generally.

There is currently a valuable opportunity facing Asia-Pacific countries to explore trade and environment issues further in PECC and PBEC circles as they are simultaneously taken up on a comprehensive basis in the WTO's Committee on Trade and Environment and elsewhere in the OECD and United Nations. Outward-looking Asian countries risk losing out if they fail to take an active interest in the trade and environment debate going on in multilateral fora. On the other hand, collaborative regional work could help to strengthen their voice in this debate and heighten the overall priority given to developmental concerns. Joint work on these issues could be especially constructive within the Asia-Pacific region because of the wide range but relatively small number of economies involved. The twin challenges will be (a) to limit the current tendency toward greater use of discriminatory trade measures for environmental purposes, in order to avoid undue erosion of the global trading system, and (b) to find more effective alternative ways of handling regional

and international environmental problems. In the process, governments will also need to deepen environmental and scientific dialogue and information exchange in the region.

Real opportunities also exist for national governments to adopt good models of behaviour within the region. Examples include agreeing not to use trade measures unnecessarily for environmental purposes, including in the context of international environment agreements, and not using the environment as an excuse to raise new protectionist import barriers. If that protectionist element can be reined in, governments will more successfully be able to arrive at imaginative and more-effective solutions to international environmental problems (for example, controlling the production rather than export of tropical timber, avoiding potential trade restrictions on tuna by adopting consumer-oriented measures such as harmonized dolphin-friendly labelling measures, or jointly monitoring regional fishing practices).

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Even more obviously, the opportunity exists to set an example by giving high priority to liberalising trade and investment and deregulating and reducing resource subsidies in sectors where this will have positive environmental effects in addition to conventional economic benefits, demonstrating through such actions that trade liberalization, economic progress and environmental protection can indeed be mutually reinforcing and result in more sustainable development.

Regional institutions such as PECC clearly have a role to play in encouraging both regional environmental dialogue and greater exchange of information between business, trade and environmental communities. Because scientific understanding of ecological processes is central to appropriate cost internalization measures, it will also be critical to encourage increased exchange of relevant scientific knowledge. Then as environmental policies develop and appropriate methodologies are found for

environmental cost internalization, there should be greater understanding of and hence fewer concerns about the environmental repercussions of trade and development policies.

If national governments of the region plus PECC, and ultimately APEC, were formally to embrace the issue of trade and environment as worthy of further analytical and policy work, considerable benefits would result. The work could include joint economic and ecological assessment both of steps already taken and of possible future steps that might be taken towards trade liberalization in the region. It could be useful, for example, to assess the extent to which certain import barriers in the wealthier countries, including tariffs that rise with the degree of processing and therefore discourage local processing of raw materials, are making poverty alleviation more difficult for the primary-exporting developing countries in the region which may be causing them to accelerate rates of natural resource exploitation. In addition, appropriate working groups, for example in PECC, could be tasked with enhancing the exchange of information, including scientific data and analysis on shared environmental problems and related policy approaches in the Asia-Pacific region.

Second, governments of the region could usefully explore, in the context of their joint work on conformance of standards, the scope for some upward convergence and mutual recognition of environmental standards and standards-setting criteria, including in relation to production and process standards. It needs to be borne in mind, though, that the scope for harmonization will be limited by vast differences in the level of development between Asia-Pacific countries as well as by the high degree of climatic and ecological diversity in the region. Third, governments could focus on establishing new cooperative mechanisms through which growing environmental concerns in the region can be managed. In that respect it would be helpful if non-government stakeholders such as business groups and

environmental groups were given greater opportunities for consultation with the various government policy bodies involved.

Fourth, governments could consider agreeing on a mutual course of action for mediating potential disputes over trade-related environmental measures in the region. And finally, they could reduce the probability of regional environment-related trade disputes and at the same time contribute to the multilateral work underway on this subject in the United Nations, the OECD and the GATT/WTO by agreeing on a set of principles to guide government action in this area. To that end, a set of guiding principles on trade and environment needs to be developed. The Annex offers a draft list of items that might form the basis for further discussion of such principles.

In summary, this report has identified a series of trade and environment issues which can be expected increasingly to confront policy makers in the Asia-Pacific region. The report urges active engagement in the issues both by national governments and by regional institutions such as PECC. The report suggests there is a need for vigilance against the disguised protectionism and resulting trading friction in this arena; it also calls for greater openness to enhanced environmental dialogue. Determination in these two directions will help ensure that, on both the trade front and the environment front, Asia-Pacific economies continue to make progress toward sustainable development.

## ANNEX -GUIDING PRINCIPLES ON TRADE AND ENVIRONMENT

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1. As is implicit in the goal of sustainable development, trade and development policies should respect and help maintain the **environmental integrity** of regional and global ecosystems.
2. Trade, development and environmental policies should promote **efficient resource use**, not least so as to ensure that trade liberalization and economic development are consistent with conserving natural resources and enhancing the environment.
3. Governments should implement and **enforce appropriate domestic environmental policies** that deal with the root causes of environmental problems, particularly through **internalising environmental costs** wherever possible.
4. Priority should be given to trade reforms and other economic policy reforms, such as **reducing subsidies**, where this will have net environmental in addition to standard economic benefits. In some cases complementary environmental policy action will need to be taken in parallel with economic reform.
5. Governments should **refrain from unnecessary use of trade measures for environmental purposes**. Trade measures are generally not the most effective ways of meeting specific environmental objectives and should not substitute for appropriate environmental policy. When trade measures are deemed necessary for environmental purposes they should pass the tests of **transparency, not protectionist in impact, non-discriminatory, proportional to the benefits and least trade restrictive**.

6. Governments should establish appropriate mechanisms for **inter-governmental cooperation** in the environmental arena. Consistent with the **principle of subsidiarity**, international environmental agreements should be sought in cases of transboundary and global environmental problems where cooperative action is more appropriate or more effective than, or a necessary addition to, policy action at the individual country level. As with national policies, such international agreements should refrain from unnecessary use of trade measures but, if trade measures are deemed necessary as sticks or carrots, they should be transparent.
7. Governments should work together towards **mutual recognition of environmental goals, standards and/or standards setting-criteria**, including with respect to process and production method standards, bearing in mind that the scope for harmonization is constrained by economic circumstances, ecological diversity, and developmental differences between countries.
8. Governments should utilize **dispute mediation mechanisms** to help diffuse frictions that may arise among countries with respect to trade-related environmental problems.
9. Consideration should be given to the establishment, for example in PECC, of an **Environmental Policy and Science Group** to facilitate the exchange of relevant scientific and environmental (including trade- and development-related) policy information among countries.

## GLOSSARY

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AGENDA 21	The United Nations Program of Action from Rio UN Conference on Environment and Development
APEC	Asia-Pacific Economic Cooperation
ASEAN	Association of South East Asian Nations
BASEL CONVENTION	Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal
CO2	Carbon Dioxide
CITES	International Convention on Trade in Endangered Species
CFCs	Chlorofluoro carbons
GATT	General Agreement on Tariffs and Trade
MFN	Most Favoured Nation principle of the GATT
MONTREAL PROTOCOL	Montreal Protocol on Substances that Deplete the Ozone Layer
NAFTA	North American Free Trade Agreement
OECD	Organization for Economic Cooperation and Development
PBEC	Pacific Basin Economic Council
PECC	Pacific Economic Cooperation Council
S02	Sulfur Dioxide
UNCED	United Nations Conference on Environment and Development
UNCTAD	United Nations Conference on Trade and Development
UNEP	United Nations Environment Programme
WTO	World Trade Organisation

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