China Council for International Cooperation
on Environment and Development

China and International Cooperation
on Trade and Environment

The Working Group on Trade and Environment

Final Report – Phase II

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China Council for International Cooperation on Environment & Development (CCICED), a high level non-governmental advisory body, was established by the State Council of China in 1992. Its stated purpose is "to further strengthen cooperation and exchange between China and the international community in the field of environment and development."

The Council, which meets annually, is composed of 49 Chinese and international members. The members on the Chinese side are of Ministerial or Vice Ministerial rank together with several eminent Chinese experts. The international members are of comparable stature. Members participate as experts in their personal capacities, at the invitation of the Chinese Government. They have been chosen for their expert knowledge and experience and come from different fields of expertise: environment, economics, science, technology, energy policy, agriculture, industry, business, finance, and education. The Chinese members come from Ministries, Agencies and Educational Institutions directly concerned with the central issues of economic development and the environment.

Expert working groups (WG) have been established by the Council, each jointly chaired and staffed by Chinese and international experts. There were six WGs in Phase I of CCICED. In Phase II, some WGs have been retained, some have undergone reorganization and some new groups have been established. There are eight working groups and two task forces in Phase II, working on issues related to energy, pollution control, cleaner production, environmental economics, biodiversity, sustainable agriculture, trade and environment, transportation, economic planning and forestry.

The working groups analyze important problems that China faces in the above areas, propose strategies based on international experience and China's needs, conduct demonstration projects and prepare preliminary recommendations for the Council. The Council then decides what recommendations to forward to the Chinese Government. Council members present these recommendations in person to a senior Chinese leader at the conclusion of their deliberations.

Two Council Secretariats have been established to facilitate the Council's work. The Secretary Headquarters Office is set up in the State Environmental Protection Administration (SEPA) in Beijing. The Canadian Secretariat has been formed at the David See-Chai Lam Centre for International Communication of Simon Fraser University in Vancouver.

Canada's CIDA has been the "lead donor," but the project is structured to encourage the involvement of other international organizations and agencies. To date, direct financial support has been contributed by British DFID, Norwegian NORAD, German GTZ, the Ford Foundation, the Rockefeller Foundation, the Netherlands' MEDC, Japanese GISPRI, the EU, WWF, Shell Oil, etc. In addition, other forms of support and collaboration have been received from the World Bank, UNDP, the Asian Development Bank and other organizations. This serves to reinforce the international character of the Council.

Every year since 1993, the CCICED has approved formal recommendations for presentation to the State Council through the Senior Chinese leader whom Members meet at the conclusion of their annual session. These recommendations are based largely on the expert reports of the working groups. Because of this unique access to the highest levels of decision-making, these recommendations are given priority attention by the various branches of government. As one senior Chinese leader assured the Council: "The Chinese Government will seriously study the Council's recommendations and will implement them where it is appropriate and relevant to China."

The CCICED has created a unique cooperative mechanism for bringing the best Chinese and international advice directly to the attention of the Chinese government. It has been one of major contributors to many Chinese environmental achievements during the past years. For more information on CCICED, visit the Council websites at: www.harbour.sfu.ca/dlam/ and http://svr1-pek.unep.net/cciced/

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Brief History and Description of the WGTE

General

The Working Group on Trade and Environment (WGTE) was established by the China Council for International Cooperation on Environment and Development (CCICED) following the decision at its third meeting in October 1994. An inception meeting was held in early 1995 and the first formal meeting in September 1995. Since then it has convened 11 times, all in China except the fourth meeting which was in Calgary, Canada.

Membership and Chairmanship

The WGTE consists of 11 members, six Chinese and five international members from Canada, Japan, Mexico, the UK and Germany. The Chinese members are from the Ministry of Foreign Trade and Economic Cooperation (MOFTEC), the State Environmental Protection Administration (SEPA), and from trade and environmental research institutes and universities. The majority of the membership has stayed constant during the life of the working group. Ye Ruqiu, Senior Advisor and former Deputy Administrator of the State Environmental Protection Administration of China, and David Runnalls, President of the International Institute for Sustainable Development of Canada, have acted as co-chairs of the group throughout. A list of members is given in Annex 1.

Terms of Reference

The Working Group is a high-level advisory body reporting to the CCICED. It carrys out policy-related research leading to practical recommendations for consideration by the Government of China on the development of trade and environmental policies that promote sustainable development and trade liberalization.

The mandate of the WGTE is to assist China in developing and implementing long-term, comprehensive, and integrated trade and environmental policies and measures that support sustainable development.

The Terms of Reference outline some general subjects for research, including the role of trade in China's Agenda 21; lessons learned from the experience with the trade and environment issue in other countries and regions; the role of multilateral environmental agreements; the potential for the harmonization of national standards and intellectual property rights; the existence of potential "pollution havens" in China and their relation to domestic environmental standards of countries with foreign direct investments in China; future potential effects of green protectionism, green consumerism and the threat of unilateral trade sanctions in the OECD countries; the use of Process and Production Methods (PPMs); and the transfer of environmentally-friendly technology.

Approaches

The WGTE operates through regular meetings, policy-related research and analysis, and issue-specific workshops such as the symposium on the potential for widespread adoption of ISO 14000 in China, and trade and environmental issues associated with China's accession to the WTO. It normally meets twice a year, identifying priority topics, planning work programs and commissioning research and background studies. The results are reviewed and debated at the Working Group meetings, then drafted into formal recommendations to be submitted to the CCICED. It reports its research findings and recommendations at the CCICED annual meeting.

Secretariats

A small Chinese secretariat based at the Policy Research Centre for Environment and Economy in Beijing, and a small international secretariat located in IISD in Winnipeg, organizes and coordinates the research and activities of the Working Group.

Funding

The Canadian International Development Agency has provided basic funding for the Working Group and its activities, covering the costs of meetings, foreign members' travel to attend meetings, the costs of the IISD secretariat and some research projects. During 1998 and 2002, the Working Group received funds from the Norwegian government for research support. The Chinese government also provided a small amount of funding to the Chinese operations of the Working Group.

WGTE and the International Trade and Environment Debate

The Working Group's efforts in the past six years have paralleled the growing international debate over trade and environment. This includes the work done by the WTO Committee on Trade and Environment; the abandonment of negotiations for the Multilateral Agreement on Investment; the evolution of the WTO dispute resolution mechanism's decisions concerning trade and environment; increasing public criticism of the WTO highlighted during the third Ministerial meeting in Seattle; increasing regional activities; and the development of international environmental agreements.

The World Trade Organization established a Committee on Trade and Environment (CTE) when it was launched in 1995. The CTE's main mandates are "to identify the relationship between trade measures and environmental measures, in order to promote sustainable development, and to make appropriate recommendations on whether any modifications of the provisions of the multilateral trading system are required, compatible with the open, equitable and non-discriminatory nature of the system." However, the past few years saw the CTE adopting a very narrow ten-item environmental agenda, with a largely technical focus.

The discussions at the CTE have reached some useful conclusions. They point out that the basic WTO principles of non-discrimination and transparency do not conflict with trade measures needed to protect the environment, including actions taken under the environmental agreements which are the most effective way to deal with international environmental problems. The use of the provisions of an international environmental agreement is always preferable to unilateral actions or activity by a small group of countries, and better policy coordination at the national level between trade and environmental policy-makers can help prevent disputes arising in the WTO.[1]

Although recent years have seen efforts made by the WTO to de-restrict documents and to involve civil society, the CTE has made little progress. Many outstanding issues, such as environmental measures and market access related to PPMs, environmental charges and taxes, and intellectual property rights are still awaiting discussion. Most significantly, the broad mandate of "promoting sustainable development" prescribed in the Preamble remains untouched.

Meanwhile, there have been a number of disputes related to trade and environment which reached the WTO dispute resolution mechanism. The most commonly challenged question is what environmental measures constitute GATT/WTO consistency. These disputes saw a gradual recognition of environmental legitimacy in interpreting GATT Article XX. Moreover, the recent Canada-France asbestos dispute presents a major breakthrough in determining 'like products' based on PPMs, another highly-debated trade and environmental issue. The Appellate Body reversed the original panel's finding that a product's end use rather than its characteristics, including toxicity, was irrelevant in determining its 'likeness' with competing products. This decision recognizes that a 'health risk' constitutes a legitimate factor in determining whether products are 'like.'

The collapse of negotiations for the Multilateral Agreement on Investment (MAI) among the OECD countries in 1999 was caused by its failure to incorporate environmental and other social concerns and by the secrecy of the negotiations. The central problem in MAI was the imbalance between the rights and the obligations of foreign investors. While the rights provided by MAI were clear, the obligations were not clearly defined.

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1 Hakan Nordstrom, and Scott Vaughan, *WTO Special Studies 4: Trade and Environment,* WTO, 1999.

Trade and environmental issues have also become the concern of some regional trade agreements. Since the failure of the WTO Seattle Ministerial Meeting, there have been discussions of trade and environment initiatives outside the WTO at a regional level and even at the bilateral level, including the Mercosur Protocol, EU/Mercosur negotiations, the EU/Mexico negotiations, the US/Jordan agreement, and NAFTA Chapter 11.

The North American Free Trade Agreement was the first regional agreement to have an environmental side agreement to specifically address trade-related environmental issues. Recently, NAFTA's Chapter 11, which allows foreign investors to challenge laws and regulations, including environmental policy in the recipient country, has clearly illustrated the potential dangers of incompatibility between public policy and the trade liberalization agreements.

International environmental agreements have also developed rapidly. Over the past six years, a number of multilateral environmental agreements (MEAs) have been adopted that are particularly relevant to trade regimes. These include the Kyoto Protocol under the Framework Convention on Climate Change (FCCC) adopted in 1997, the Cartagena Protocol on Biosafety to the Convention on Biological Diversity (CBD) adopted in early 2000, and the Rotterdam Convention on the Prior Informed Consent (PIC) Procedure for Certain Hazardous Chemicals and Pesticides in International Trade adopted in December 2000.

The Kyoto Protocol, like the FCCC, does not cover trade measures itself, yet it is very possible that the parties will adopt trade-related policies and measures in implementing their Kyoto obligations.

The Cartagena Protocol to the CBD governs trade in most forms of living genetically-modified organisms (LMOs) and their potential risk to biodiversity. It sets out a decision procedure for countries concerning restriction of imports of LMOs—for the first time ever the precautionary principle has been formulated in a legal text—and also addresses its relationship to WTO rules.

The Rotterdam Convention on the Prior Informed Consent (PIC) Procedure for Certain Hazardous Chemicals and Pesticides in International Trade establishes procedures to ensure that importing countries are properly informed when engaging in international trade in goods which are banned or whose use is limited in the exporting country.

These concurring events illustrate the close relationship between trade and environment and the need to develop workable international rules that protect the environment and promote sustainable development while not unduly restricting trade and development. It also indicates the need to enhance the coordination between the WTO and other international organizations on the implementation of WTO policies, as well as the need for policies and programs to protect the environment and support sustainable development.

The WGTE brings together experts from both developed and developing countries to address trade and environmental concerns and contribute to the international trade and environmental debate in its own way. The working group closely monitors international development in the area of trade and environment, and addresses many important issues in China's context. It also brings together trade and environment officials, and experts to discuss trade and environmental issues that have significance for China.

The WGTE addressed issues of "green barriers" and market access in relation to environmental standards and other voluntary environmental measures in foreign countries, as well as environmental standards and competitiveness, investment and sustainable development, trade and environmental policy coordination, technology transfer, sectoral studies on trade liberalization and sustainability, trade and environmental implications of China's WTO accession.

Major Research and Achievements

Foreign trade and economic cooperation have played a significant role in China's fast-paced economic growth and its integration into the world economy since its economic reform two decades ago. Trade will continue to be a critical factor in China's future development. The Government of China is taking measures to speed up its trade liberalization process both by exploring new ways of expanding its exports and by making serious commitments to WTO accession.

However, the process of trade liberalization in China encounters a two-fold environmental challenge. Firstly, the increasingly stringent foreign environmental standards and various voluntary environmental measures undertaken by China's largest customers may have potential trade implications for Chinese exports. Secondly, serious domestic environmental pollution and ecological deterioration accompany the trade liberalization process.

As China continues its economic reform, trade liberalization and its WTO accession, it needs to address adverse impacts of rapid economic and trade growth on the domestic environment to avoid possible boycotts of Chinese exports by foreign consumers on environmental grounds; to grasp opportunities arising from green consumers of major developed country markets; and to make use of foreign investment to support its sustainable development strategies. To facilitate these efforts, the WGTE undertakes research on those trade and environmental issues that have most significance for China, particularly the following:

"Green Barriers" and Market Access

China, like many developing countries, is concerned about the potential dangers of "green barriers" and market access in relation to increasingly stringent environmental standards (product or non-product standards) and various voluntary environmental measures, such as eco-labeling, organic labeling and ISO 14000, adopted by developed countries. Developing countries feel that these environmental measures are an excuse to protect domestic industries. However, strictly speaking, "green barriers" are only those measures that are used for trade protection under the guise of environmental protection. Environmental standards and measures that are taken to protect human health do not constitute "green protectionism."

With China's economy increasingly integrated into the world's economy, it is foreseeable that environmental measures taken by industrialized countries could become "barriers" to Chinese exports in certain sectors. Indeed, China has experienced a number of occasions where its exports have been affected by environmental-related measures in the past years. For example, Germany banned the import of 118 Azo dyes in 1996 and the US, Canada and European countries imposed a ban on wooden packaging materials in 1998. Meanwhile, voluntary environmental measures are also being increasingly used, particularly by developed countries.

To what extent have these foreign environmental measures affected China's exports? Are these measures used primarily for environmental purposes or as protectionism? What counter-measures should China take to maximize its export opportunities and to minimize the impacts of these measures?

To answer these questions, the WGTE undertook a series of studies to examine the issue of "green barriers" and market access in relation to both mandatory and voluntary environmental measures, including eco-labeling, green food, ISO 14000, the German ban on Azo dyes and the ban imposed by the US, Canada and European countries on wooden packaging.

The eco-labeling study did not find foreign eco-labeling a "green barrier," because of the limited use of eco-labels and the limited market share of eco-labeled products. Nevertheless, eco-label-

ing could have potential impacts if it gains increasing acceptability for products where China has export advantages. The study also examined China's own eco-labeling initiatives, and did not find that the Chinese program had affected China's imports of these goods. It concluded that eco-labeling could create positive trade and environmental impacts, and contribute to domestic environmental management. By actively responding to the challenge of eco-labeling, China could provide more export opportunities. The study did point to the problems caused by the existence of approximately two dozen eco-labeling programs worldwide, and the need for international cooperation in developing criteria for mutual recognition and equivalence.

The ISO has a special relationship with the WTO. The ISO 14000 study found that the widespread adoption of the ISO 14000 series of environmental management system standards could affect China's trade. It may play a role in the procurement policies and practices of governments, multinationals and consumers. ISO standards may have an impact on the design of other environmental policies that can affect trade, such as eco-labeling and initiatives based on life-cycle assessment; and the role that the ISO 14001 EMS standard can play in preparing countries and companies for emerging policies and initiatives directed at sustainable production and consumption may impact trade. The study concludes that ISO 14000 could provide China with an opportunity to enhance its environmental management, maximize economic benefits and lessen possible trade barriers by aggressively adopting the ISO 14000 series of standards in priority sectors, and by working with companies to improve environmental management.

The studies on EU's textile environmental standards, (in particular the German ban on Azo dyes), and the ban imposed by the US, Canada and the EU on wooden packaging materials, found that these environmentally-related measures have affected Chinese exports. After reviewing the WTO rules, the studies found that these measures are legitimate to protect human health and to protect plant health under GATT Article XX, the Agreement on Technical Barriers to Trade (TBT), and the Agreement on Application of Sanitary and Phytosanitary Measures (SPS), and thus are WTO-consistent. However, both studies point out that the ways these countries handled the bans are problematic and inconsistent with some of the basic WTO principles, in particular non-discrimination, avoidance of trade barriers, notification and technical assistance. The studies highlight the need for developing exporting countries to have early access to information and the opportunity to comment on environmental measures as they are being developed in other countries and for them to receive technical assistance to implement the WTO, TBT and SPS agreements. It is also important that developed countries, in formulating their environmental standards, should make the process transparent and implement special and differential treatment provisions, such as technical assistance, to developing countries. The studies recommend measures that the Chinese government should take to strengthen the competitive position of China's textile and packaging industries. These include research and development of substitutes, promoting information exchange with foreign countries, and strengthening environmental management in these sectors (see the next section for detailed recommendations).

Environmental Standards and Competitiveness

In both developed and developing countries there is concern in the environmental community about a "race to the bottom," where investment flows to countries with less stringent environmental standards or enforcement of standards. This phenomenon is also referred to as "pollution havens." The WGTE examined this issue in the context of the control of ozone-depleting substances (ODS).

The ODS study aimed to identify whether ODS production and consumption is being shifted to China because of the longer grace period given to developing countries to phase out ODS. The study does indicate that the growth rate of foreign direct investment (FDI) in the Chinese industries related to production and consumption of ODS (including solvents, refrigeration, air conditioning and foam industries) was very high. The study went on to point out that the Chinese regulations and policies then in existence neglected the importance of the shift of ODS production and consumption to China through FDI, and that the FDI project approval procedures did not include environmental scrutiny. Partly as a result of the Working Group's study, these problems have now been addressed. The study recommended that ODS control should be integrated into current environmental legislation and related trade policies and that an effective coordination mechanism should be established among related governmental agencies and between the central and local governments.

It also indicated that the implementation of an international environmental agreement requires a sound institutional system, including cooperation between trade and environmental departments, between central and local agencies and among various local institutions—including planning, trade, finance, commerce, pricing, industry, customs and environmental protection.

Trade and Environmental Policy Coordination

The rapid growth of the economy and foreign trade has promoted environmental protection in China, but has brought negative impacts on the ecosystem and the environment in some areas. In addition, increasingly stringent environmental standards and consumer preferences for environmentally-friendly products in developed countries may create potential difficulties for Chinese exports. It is important, therefore, that China pay close attention to the relationship between trade development and environmental protection, effectively coordinating trade and environmental policies. The WGTE undertook two studies related to trade and environmental policy coordination—research on the interaction of China's foreign trade and environmental policies, and APEC trade liberalization: integrating trade and sustainable development.

Both studies reviewed China's foreign trade development and the impact of trade liberalization on the environment in general and in the context of APEC. They show the close link between domestic environmental issues and trade development. The severity of the environmental impacts of trade liberalization varies depending on the pollution intensity of the sectors. Trade development of the sectors with more pollution problems, such as textile and leather, tend to add more environmental pressures while liberalization and development of labour-intensive industries, such as toys, do not necessarily lead to environmental deterioration.

The studies indicate that trade liberalization can provide China with an opportunity to transform its labour-intensive products into technology-intensive products and to generate wealth and provide technology to support environmental protection and sustainable development. When trade and environmental policies are well coordinated, trade and investment liberalization can be conducive to saving resources, improving efficiency, restructuring industry, improving the environment and sustaining the growth of China's economy.

The studies recommend that China formulate a national strategy for sustainable foreign trade, adjust its trade policy and strengthen environmental policy to maximize the benefits and minimize the environmental impacts of trade liberalization.

Investment and Sustainable Development

The WGTE carried out two studies related to investment—the Chinese perspective on international rules of investment and sustainable development, and the integration of trade, invest-

ment and sustainable development in selected state-level economic and technological development zones.

Foreign direct investment has become a vital part of many countries' development strategies. Countries that attract significant amounts of foreign investment are more likely to succeed in international trade. Investment can also provide the means to improve sustainable forms of production, as high levels of innovation accompanied by investment create new facilities that are highly efficient and less environmentally harmful. However, environmental benefits associated with new investments do not accrue automatically; they require appropriate policies and measures to ensure real environmental benefits.

Foreign investment has made significant contributions to China's economy. China has been very successful in attracting foreign direct investment and has become the principal recipient of foreign direct investment outside the OECD. It is the second largest recipient of foreign direct investment after the United States.

Foreign capital inflows have resulted in some positive effects on environmental protection and sustainable development in China. Foreign firms bring advanced technology, including environmental technologies, as well as good environmental management skills, and lead in adopting some voluntary environmental measures such as ISO 14000 certification. The majority of enterprises that have obtained ISO 14000 certification and eco-labels are foreign-funded enterprises or joint ventures.

However, the past emphasis on investment—on amounts and on speed—has neglected efficiency, quality, and good management of investment projects. This has provided opportunities for foreign companies to transfer pollution-intensive operations to China. Analysis of the third national industrial census indicates approximately 30% of total foreign-funded enterprises in China, (most of them medium- and small-sized), are involved in pollution-intensive operations. Of these enterprises, 40% are engaged in highly pollution-intensive operations. This reflects the fact that these pollution-intensive industries have greater comparative advantages in China, as many of the polluting industries are those associated with the early stages of industrialization. In some cases, undesirable materials or technology have been shifted to China through FDI.

The studies concluded that the principle of sustainable development should be integrated into China's FDI policies, and the legislation of the environmental management of FDI policies should be strengthened.

The study on international investment rules also pointed out that it is very important to establish international rules on investment that promote sustainable development. It calls for the establishment of an international institution to take responsibility for rules on investment. It also calls for a special agreement on investment that integrates sustainable development with a series of principles requiring foreign investors to bear environmental and social obligations in the recipient countries.

Technology Transfer and the Clean Development Mechanism

Technology transfer has been a research priority since the inception of the Working Group. The WG focuses largely on cleaner coal technology transfer, the role of the AIJ (Activities Implemented Jointly), and the CDM (Clean Development Mechanism) in the promotion of technology transfer.

There is enormous scope for the deployment of cleaner coal technologies throughout the Chinese economy. China's demand for energy is continuing to grow, and the associated envi-

ronmental effects are serious. In developing cleaner coal technologies, it is essential that Chinese companies find ways to improve their skills in the design, manufacture and operation of cleaner coal technologies. The acquisition of both hardware and associated 'software' management and design skills from international sources can significantly aid this process.

Two studies undertaken by the WG on cleaner coal technology transfer found that technology transfer is occurring, but most international effort is focused on the electric power sector, which only accounts for about 40 per cent of China's coal use. The studies also reported that most of the technology transfer is through imports of equipment and does not include wider knowledge, expertise and experience of managing technical change. The imports of hardware on their own are not sufficient for successful technology transfer to occur.

The studies also illustrate that cleaner coal technology transfer and domestic research and development have not been well coordinated. There is a need to enhance domestic research and development capability to adapt and make better use of foreign skill and expertise.

While China has a great potential for cleaner coal technology transfer, there are many factors which impede this transfer. These include foreign firms' monopoly on their technological advantages, the lack of incentives for foreign firms to transfer cleaner technologies to China due to low energy prices, low emission charges and loose environmental regulation and enforcement, and the lack of capacity for Chinese enterprises to adopt advanced technologies and to import cleaner coal technology.

The two studies yield a number of useful recommendations on the promotion of cleaner coal technology transfer, including strengthening international cooperation for wider knowledge transfer to more priority industries, reinforcing environmental legislation and enforcement, and enhancing domestic research and development capability while encouraging transfer of new technology.

The Working Group also undertook two studies on the role of the CDM in promoting foreign investment and technology transfer and in supporting China's sustainable development. The CDM, one of the three flexible mechanisms endorsed by the Kyoto Protocol to the Framework Convention on Climate Change (FCCC), allows Annex I countries (mainly developed countries) to invest in projects designed to reduce greenhouse gas emissions in non-Annex I countries (mainly developing countries). This mechanism provides flexibility to Annex I countries to achieve cost-effective compliance with their Kyoto commitments, and assists developing countries in promoting sustainable development.

At present, there are ample opportunities in China for shifting away from low-efficiency coal technology to high-efficiency technology and renewable sources. China could be a significant potential market for the CDM.

The first study analyzes the long-term and short-term, direct and indirect benefits and impacts of China's participation in the CDM, and indicates that the CDM would offer unique potential opportunities to bring considerable short-term benefits to China, including significant foreign investment and advanced technology equipment, and many other environmental and social benefits. However, there is a potential danger of technology-dependence on foreign suppliers for mitigation equipment over the long run, which may not be good for China in terms of promoting the development of its own mitigation technology.

Nevertheless, as the negotiation process of the CDM is still underway, to insist on a certain position in negotiating the design of the CDM may limit the implementation of the CDM in China and in other developing countries and hinder the achievement of long-term sustainable

development objectives of the CDM. In negotiating the CDM, efforts should be made to ensure that the CDM promotes not only energy efficiency and environmental equipment, but also R&D technology, design and manufacturing of equipment; to allow technologies transferred through the CDM to be diffusible; to affirm non-obligation participation for developing countries; to reaffirm the additional financial and technical assistance; and to ensure that the credits of emission reduction acquired by non-Annex I countries through the CDM can be banked and transferable.

The second CDM study focuses on the possible role of the CDM in promoting sustainable development in China's new great west development. Field studies were undertaken in Sichun and Yunnan provinces and interviews were conducted with some Chinese enterprises. The study confirms that the CDM could play an important role in promoting sustainable development in the implementation of China's western development strategy.

As the result of the negotiations at the resumed session of the Sixth Conference of the Parties to the UNFCCC in Bonn in July this year, the rules for the CDM have been largely set. The Kyoto Protocol will probably enter into force next year. China should act quickly to take advantage of the CDM in promoting its sustainable development, particularly in its western provinces. Early participation in the CDM would secure substantial potential foreign investment and advanced technology transfer to China's western regions to which the government may wish to give priority.

Initial actions to be taken for CDM implementation include: setting up a center for CDM implementation; identifying priority provinces and key sectors and enterprises for CDM projects; and helping Chinese enterprises negotiate with foreign governments or foreign firms for details of CDM projects. Other policy measures that should be taken include: establishing a sound greenhouse gas emissions monitoring system by expanding current daily monitoring activities of conventional pollutants to include GHG emissions; setting up a mechanism to identify technologies that are desirable for transfer to China through CDM projects (priority technologies should be those related to clean energy and air pollution control); creating some incentives for enterprises to participate in CDM projects; and making use of the project-based baseline at the initial stage. Only after Chinese enterprises have developed the capacity to negotiate for technology transfer should the baseline be applied to a sector or multi-projects.

Sectoral Studies on Trade Liberalization and Sustainability

The WGTE undertook several sectoral studies on trade liberalization and sustainability. These include a study on trade liberalization in environmental services, a study on timber trade and sustainable development, and a study on environmental impacts of trade liberalization in the fishery sector.

Environmental Services

The environmental industry, particularly the environmental services sector, is relatively new in China. The annual output value of environmental services in 1997 was only 12% of the total output of the environmental industry with trade in environmental services on an even smaller scale. There were no exports of environmental services according to a 1998 SEPA (State Environmental Protection Administration) survey. Imports of environmental services take place mainly with direct purchasing of foreign environmental technologies and through foreign investment as well as environmental projects financed through international lending institutions such as the World Bank, the Asian Development Bank, and other bilateral financing arrangements.

As an APEC member, China would have to participate in APEC's early voluntary sectoral liberalization (EVSL) efforts in nine priority sectors, including environmental goods and services. In this and in efforts to gain WTO accession, China is committed to opening its services sector, including environmental services. In its 1995 schedule of specific commitments for liberalizing trade in environmental services, China committed to opening environmental services for all foreign-funded construction projects, and to allow certified environmental services suppliers from other countries to establish joint ventures in China, or provide cross-border consulting services to users in China.

At present, the supply of low-level services in China is in surplus, while there is a great demand for high-level environmental services. APEC trade liberalization and WTO entry could yield tremendous benefits, including financing, development of joint ventures, and adoption of advanced technologies and expertise that other countries can provide in the process of liberalizing this sector.

However, opening up the environmental services sector may also pose risks for the considerable number of small Chinese environmental services providers, and may lead to a loss of consulting services on foreign-funded projects, and a loss of domestic talents.

Nevertheless, from a long-term perspective, the opening of environmental services will not only meet the needs of economic growth and environmental protection, but also accelerate the development of various sectors of environmental services and promote exports of Chinese environmental technologies and services as well as China's participation in international competition in the environmental field.

The Working Group's study on environmental services suggests that China should open this sector gradually. While vigorously developing its environmental services sector, efforts should also be made to remove barriers to trade liberalization in this sector. Meanwhile, further studies should be carried out to identify priority areas to be opened.

Forestry

Forestry plays a vital role in improving the environment, water and soil conservation, and biodiversity protection. Protection of China's forest resources is critical to the sustainable development of China's economy. Major floods occurred on the Yangtze and Yellow rivers in the last few years and resultant losses have made protection of forestry resources a matter of great urgency for China. China is undertaking a major program of reforestation to ensure its future timber supply and to counteract the environmental consequences of deforestation.

Since the logging ban imposed in the late 1990s, China has lost the resource base that supports its traditional forest industry. The study indicates that China's supply will be short by about 80 million to 100 million cubic meters by 2010. It is estimated that 30 million cubic meters could be made up partly by wood substitutes and partly through development of plantation forests and imports. Prior to 2010, China is expected to increase its imports of timber and wood products, which will help it to gain a "buffer" period for the protection and development of its forest resources.

In the process of APEC trade liberalization and the negotiations of China's WTO entry, China has committed itself to reducing trade tariffs and non-tariff barriers. At present, the tariff for forest products, including logs and sawn wood, etc., is very low and at times nothing. China's accession to the WTO will make the system more open to forest imports. As such, China's WTO accession is conducive to attaining a balance between consumption and growth of for-

est resources, given that the growth of forests is a slow process. Increased imports of timber and wood products will facilitate China's domestic efforts to protect and develop forest resources.

Meanwhile, the likely increase of imported timber and wood products (at least in the interim before 2010) may raise the issue of environmental impacts on forests of countries that practice unsustainable logging. China needs to be aware of environmental challenges in these exporting countries.

The study recommends that, in the short-term, China should continue to improve its trade structure by importing some timber and processed wood products and exporting wood products that have a competitive advantage. In the long-term, China should concentrate its efforts on the development of man-made forests and forest farms for its supply of industrial woodland and on the improvement of forest quality to ensure more permanent domestic supplies to meet domestic demands. Meanwhile, China should take necessary measures to encourage sustainable and discourage unsustainable forms of production in exporting countries. These measures may include supporting the use of the Forest Stewardship label to encourage sustainable forest management systems.

Fisheries

Fisheries are also playing an increasingly important role in China's economy. The industry has achieved marked growth in production and supply since China adopted its reform and opened to the outside world in 1978. Since then, China has been the largest producer of aquatic products, accounting for 1/3 of the world's total production. Its aquaculture industry yields 2/3 of the world's fishery products each year, making China the only country worldwide with its annual aquaculture production exceeding its total amount of fishing. China has become the fourth largest exporter of aquatic products in the world. Its domestic per capita consumption of fishery products reaches 31.35 kilograms, much more than the world average of 20 kilograms.

Despite remarkable success, the fishery industry faces several serious problems. Speedy growth in production and fundamental market change have turned a previous shortage into a surplus. Price decreases of aquatic goods in both domestic and overseas markets, as a result of oversupply, has seriously affected local fishermens' living standards and the economy of the industry as a whole. Meanwhile, over-fishing and disorderly aquatic development have led to worsening environmental constraints, such as resource degradation, marine resource exhaustion, heavily polluted coastal waters, red tides, and frequent outbreaks of epidemic diseases.

Based on the analysis of market restraints and environmental constraints, the study concludes that China's fishery industry should shift from its development priority to a resource conservation and management priority. As WTO membership will provide more opportunities for export and further stimulate local fishing resource development, China needs to undertake a series of policies and measures to minimize threats to the environment while accelerating the growth of its fishing industry.

Concrete policy measures to be taken include: developing the industry plan for production (fishing and aquaculture); assuring that distribution and trade conform to the principle of sustainable development; placing equal emphasis on ecological conservation and marine fishing development; strengthening water pollution control and control of epidemic diseases; adopting new rules and regulations for sustainable development of the industry; enhancing capacity and providing scientific support to the industry's decision-making process; and exploring opportunities for expanding fishery and aquacultural products by sustainable forms of production through sustainable certification and labeling.

China's WTO Accession

China's WTO accession will open the world's largest market wider and provide greater international market access to Chinese products. Changes in the structure and volume of trade will lead to tremendous changes in China's economic structure. This structural change will have substantial environmental impacts, both positive and negative, including impacts on industrial pollution, on the environment itself, on environmental management and on environmental industries.

In addition to domestic environmental impacts, China's WTO membership will also have some environment-related trade implications and other trade-related environmental implications. The WGTE has undertaken some initial study of the trade and environmental implications of China's WTO accession. The preliminary analysis indicates that Chinese exports that already enjoy substantial competitive advantages, such as textiles, toys and leather, are most likely to encounter green consumer challenges in international markets which will need to be addressed.

China's WTO membership will attract more foreign direct investment to China. These investments need to be guided and rationally used in support of China's long-term national goals of environment and sustainable development.

With WTO membership, China is likely to substantially increase imports of natural resource-based products. China must be aware of the environmental challenges in natural resources in exporting countries and avoid playing a role in deforestation and unsustainable exploitation of natural resources in those countries.

It will require adjusting relevant trade and environmental policies, including integrating environmental concerns into national investment, import and export policies. It would also require the establishment of a regulatory system for protection of human health, plant and animal health, natural resources and the environment. Efforts should also be made to comparably upgrade its environmental laws and regulations to those in other countries, and to make its laws and regulations much more transparent.

WTO membership will bring China opportunities as well as challenges. It will have positive and negative impacts on China's environment, therefore, the Chinese government needs to pay sufficient attention to trade and the environmental implications of WTO accession and use the WTO dispute settlement mechanism to protect its trade and environmental interests and play an active role in the trade and environmental debate in the WTO. The WGTE study on international experience in integrated environmental assessment of trade agreements suggested that China undertake an integrated assessment of the environmental consequences of China's WTO accession. This will help China to understand environmental impacts and define policies and measures to maximize benefits and minimize adverse impacts of joining the world trade system. In the long-term, environmental assessment of trade agreements and trade policies should be integrated into China's overall national legal and institutional system of strategic environmental assessment which is now under consideration within the National People's Congress.

Important Recommendations

The WGTE puts forward the following seven recommendations related to trade and environment:

Recommendation 1: "Green Barriers" and Market Access in Response to Foreign Environmental Standards and Measures

The international market is changing rapidly, often in response to environmental pressures and consumers' environmental preference. Some foreign environmental standards and requirements, although purely for the purpose of protecting human health and the environment, cause trade difficulties for Chinese exports. China has already faced a ban on 118 Azo dyes to the EU countries for human health reasons and a ban on the importation of wooden packaging materials to North America because of fears of longhorn beetle infestation. The increasing use of voluntary environmental measures such as eco-labeling and ISO 14000 could also have potential trade implications. China's WTO accession will provide China with tremendous opportunities to expand its exports, but some of its major exporting sectors such as textiles, toys, leathers and other light-industry products may likely face challenges from green consumers in developed countries.

To minimize impacts of foreign environmental regulations, standards and other voluntary environmental measures, the WGTE recommends that the central government will need to strengthen environmental regulations and standards in China's major exporting sectors, bringing them in line with internationally accepted standards.

Efforts should also be made to help enterprises enhance their competitive position in the international market, including research and development of more environmentally-friendly products, substitutes for banned materials, and the creation of economic incentives to encourage such products. Active promotion of clean production and strong environmental management and the wide application of various voluntary environmental measures—including ISO 14000 standards and eco-labeling—are also necessary. Efforts should also be made to engage in international cooperation on mutual recognition of technical standards, ISO 14000 certification and eco-labeling.

As well, the WGTE recommends establishing an information exchange mechanism within China and with foreign countries regarding environmental standards and requirements. Meanwhile, China should encourage developed countries to implement provisions regarding proper notification and special and differentiated treatments to developing countries including the "avoidance" of trade barriers and technical assistance.

Recommendation 2: Pollution Havens and ODS Control

The Montreal Protocol on Control of Substances that Deplete the Ozone Layer sets out a timetable for developed countries to phase out the production and consumption of ODS. Because it provides a ten-year grace period for developing countries, there has been an increase in the number of foreign-funded enterprises related to ODS production and consumption in the past few years. This indicates some implementation problems with the Montreal Protocol and the Multilateral Fund, and with China's policy and institutional coordination.

The WGTE recommends that the implementation of the Montreal Protocol and the control of ODS should be integrated into existing environmental legislation and policies. Meanwhile, China's ODS control and phase-out plan should also be integrated into its related trade poli-

cies, e.g., FDI policies should prohibit FDI projects related to production and consumption of ODS (this policy has been adopted in the 1997 new investment guiding principles).

It recommends establishing an effective coordination mechanism among governmental agencies and between the central and local governments, and the creation of a country-wide management system. The control of ODS should be included in the approval process for foreign investment projects. The implementation of an international environmental agreement (such as the Montreal Protocol) needs a sound institutional structure, including cooperation between trade, customs and environmental departments as well as between central and local institutions, including planning, trade, finance, commerce, pricing, industry, and environmental protection.

Efforts should be made to provide enterprises with information and technical support for substitution technologies that are mature and applicable in China.

The WGTE also recommends that China should work closely with other countries to further improve the Montreal Protocol, to include measures to prevent ODS production and consumption from being transferred from non-Article 5 countries to Article 5 countries through FDI.

Recommendation 3: Trade and Environmental Policy Coordination

The development of foreign trade and its impacts on the environment in China shows that trade development is closely related to environmental protection and sustainable development. The integration and mutual reinforcement of trade policies and environmental policies require the close and continuing attention of Chinese policy-makers.

The WGTE recommends the formulation of national strategies for sustainable foreign trade and economic cooperation. These strategies should include:

- a sustainable export strategy that contains measures to vigorously develop products with high technological content, green products, and optimizes the export structure competing for new opportunities in the international market; and
- a sustainable import strategy considering expanding imports of resource-based products such as oil, gas, timber and agricultural goods in order to protect its insufficient resources, banning imports that damage the environment, and encouraging environmentally-friendly technology and equipment.

The WGTE also recommends that environmental policies and laws should be strengthened to deal with environmental impacts caused by inadequate trade policies, to include obligations of international environmental agreements and to begin to internalize environmental costs. Reinforced environmental policies and laws should provide incentives to encourage the development of green products and technologies and their trade, and make use of various "green measures" such as ISO 14000, eco-labeling, green packaging and to strengthen the environmental management systems of exporting enterprises.

Efforts should also be made to strengthen foreign investment policies and management to support environmental protection and sustainable development (see detailed recommendations below).

The WGTE also recommends establishing an effective coordination mechanism between trade and environmental departments, such as establishing an advisory committee comprising trade, investment, environment and other relevant agencies.

Recommendation 4: Investment and Sustainable Development

Environmental considerations have gradually been integrated into Chinese policy and laws governing foreign direct investment. Chinese environmental policy and laws have also considered environmental problems that may be caused by foreign-funded projects by imposing various rules and measures to control environmental pollution that may arise from these activities. However, some remaining problems indicate room for improvement in coordinating the relationship between China's foreign investment utilization and sustainable development.

The WGTE recommends that China formulate and implement a strategy for sustainable investment. In formulating preferential investment policies to attract foreign investment, it is important for China to establish certain criteria to attract the right kind of foreign investment. The Chinese authorities responsible for development planning and foreign trade, science and technology, and environmental protection should work together to develop integrated investment policies that support sustainable development in China. The WGTE also recommends the establishment of a mechanism to facilitate effective cooperation between departments responsible for trade and investment and those in charge of environmental protection. To strengthen environmental management of foreign direct investment, environmental protection authorities should be involved in approving foreign-invested projects.

Efforts should be made to strengthen environmental policy and laws to create incentives (such as tax exemption and reduction) for foreign investors to attract value-added, research oriented, cleaner industries, as well as disincentives to prevent or discourage pollution-intensive industries and the production of products that have been banned by investors' home countries or prohibited by international environmental agreements.

Measures should also be taken to encourage multinational corporations to follow the most stringent applicable standards, such as their home country standards; to use environmentally-friendly technologies; to adopt ISO 14000 environmental standards and eco-labeling; and to practice cleaner production.

Recommendation 5: Cleaner Coal Technology Transfer and CDM

There is a real need for China to introduce advanced cleaner coal technology due to its high coal consumption, low energy efficiency, and severe pollution. The potential for trade in cleaner coal technology with foreign companies and countries is enormous.

At present, most of the international efforts to transfer cleaner technologies to China are focused on the electric power sector. While encouraging continuous international efforts in this sector, Chinese policy-makers should also turn their attention to the acquisition of non-power sector cleaner coal technologies. These sectors account for up to 60% of China's overall coal usage.

While it is important for Chinese enterprise to acquire cleaner coal hardware, it is even more important to transfer wider knowledge of technology—comprehensive learning about the design, manufacture and operation of equipment. In most cases, joint ventures and licensing arrangements with foreign firms appear to be the best way to get wider knowledge of technology through access to training, technological knowledge and new management skills. In the past years, cleaner coal technology transfer occurred mainly through the imports of equipment, while acquisition through licensing arrangements and direct foreign investment were neglected. In the future, emphasis should be placed on license trade and foreign direct investment. The government needs to strengthen macro-control of cleaner coal technology transfer and provide necessary support to enterprise in its efforts to acquire cleaner coal technology.

The new Chinese environmental regulations, particularly for power stations, which came into force in 1997, are nearly as strict as those in some OECD countries. While these regulations are important to encourage foreign investment and technology transfer, China needs to further strengthen its environmental laws, their enforcement and intellectual property rights protection. Policies and measures (such as economic incentives that address externalities) should be taken to accelerate diffusion and market penetration of imported new technologies.

Meanwhile, China should strengthen the development of its own cleaner coal technology research and innovative capacity. Foreign technology adaptation and transfer within the country should be enhanced. Better links between the various institutions in the innovation system could facilitate this. By working together, Chinese manufacturing companies, design institutes and research institutes can enhance their collective capabilities and make better use of foreign skills and expertise.

The WGTE also sees the role of international environmental agreements in promoting cleaner coal technology transfer. The Clean Development Mechanism (CDM) under the Kyoto Protocol to the United Nationals Framework Convention on Climate Change could be an important source of finance for China's acquisition of cleaner coal technologies. It could play an important role in promoting sustainable development in the implementation of China's western development strategy.

As the result of the negotiations at the resumed session of the Sixth Conference of the Parties to the UNFCCC in Bonn in July this year, the rules for the CDM have been largely set. The Kyoto Protocol will probably enter into force next year. China should act quickly to take advantage of the CDM in promoting sustainable development, particularly in its western provinces. Early participation in the CDM would secure substantial potential foreign investment and advanced technology transfer to China's western regions to which the government may wish to give priority.

Initial actions to be taken for CDM implementation include: setting up a center for CDM implementation; identifying priority provinces and key sectors and enterprises for CDM projects; and helping Chinese enterprises negotiate with foreign governments or foreign firms for details of CDM projects. Other policy measures that should be taken include: establishing a sound greenhouse gas emissions monitoring system by expanding current daily monitoring activities of conventional pollutants to include GHG emissions; setting up a mechanism to identify technologies that are desirable for transfer to China through CDM projects (priority technologies should be those related to clean energy and air pollution control); creating some incentives for enterprises to participate in CDM projects; and making use of the project-based baseline at the initial stage. Only after Chinese enterprises have developed the capacity to negotiate for technology transfer should the baseline be applied to a sector or multi-projects.

Recommendation 6: Sectoral Trade Liberalization and Sustainability

Environmental Services

The environmental services sector is relatively new in China and trade liberalization means opening this sector to international competition. Although international competition poses challenges to this sector, competition may stimulate environmental services leading to improved environmental quality. China needs to open this sector gradually, to make environmental services in China mature and developed as soon as possible, to meet China's increasing environmental protection needs.

The Chinese government should consider measures combining government actions (including environmental legislation and enforcement), technology progress and market mechanisms to

promote development and trade in environmental services. Departments responsible for environmental protection and trade should formulate a strategy for the development of the environmental sector and the promotion of trade in this sector, adopt management rules regarding foreign and joint-venture companies providing environmental services in China, and strengthen trade, environmental and financial policies relevant to environmental services. The present "polluters treat pollution" principle should be revised to reflect the "polluters pay" principle to stimulate the environmental service market, and current preferential tax policies towards foreign companies should be adjusted to make them consistent with the WTO national treatment principle, and to foster fair competition between foreign and domestic service providers.

Forestry

Forestry plays a vital role in the improvement of the ecological environment, water and soil conservation, and biodiversity protection. Protection of China's forest resources is critical to the sustainable development of China's economy. China is undertaking a major program of reforestation both to ensure its future timber supply and to counteract environmental consequences of deforestation. China's accession to the WTO will make its trade system more open to imports of forest products, be conducive to attaining a balance between consumption and growth of forest resources, and facilitate China's domestic efforts to protect and develop its forest resources.

In the short-term, China should adopt an open trade strategy to substitute its export-oriented strategy by importing large quantities of forest resources through multiple channels in order to restructure and optimize the forest industry and utilize exiting production capacities. To optimize its trade structure, China should encourage importing timber and certain processed wood products and exporting wood products that have a competitive advantage in the international market.

In the long-term, China should concentrate on developing man-made forests and forest farms for industrial supply and the improvement of forest quality to ensure more permanent domestic supplies to meet domestic demands. Meanwhile, China should take necessary measures to encourage sustainable and discourage unsustainable forms of forest production in exporting countries. These measures may include supporting the use of the Forest Stewardship label to encourage sustainable forest management systems.

Fisheries

Fisheries are also playing an increasingly important role in China's economy. Speedy growth in production and fundamental market change in the fishery industry over the past two decades has turned a shortage into a surplus. Meanwhile, over-fishing and disorderly aquatic development have led to worsening environmental constraints, such as resource degradation, marine resource exhaustion, heavily polluted coastal waters, red tides, and frequent outbreaks of epidemic diseases. As WTO membership will provide more opportunities for export and further stimulate local fishing resources development, China needs to adopt a series of policies and measures to minimize threats to the environment while accelerating the growth of its fishing industry attributable to trade liberalization. The government should shift its priority of resource development to resource conservation and management. Concrete policy measures to be taken include: developing the industry plan for production (fishing and aquaculture); assuring that distribution and trade conform to the principle of sustainable development; placing equal emphasis on ecological conservation and marine fishing development; strengthening water pollution control and control of epidemic diseases; adopting new rules and regulations for sus-

tainable development of the industry; enhancing capacity and providing scientific support to the industry's decision-making process; and exploring opportunities for expanding fishery and aquacultural products by sustainable forms of production through sustainable certification and labeling.

Recommendation 7: China's WTO Accession

China's WTO accession will bring about fundamental structural changes to all aspects of China's economy and may lead to significant economic, social and environmental consequences. It is important that an integrated assessment of environmental consequences of WTO accession be undertaken, which will help identify major environmental consequences of economic changes, and define policies and measures to maximize benefits and minimize adverse impacts of joining the world trade system. It will help China to further implement its national sustainable development strategy and to participate with a clear perspective and position in future WTO negotiations on issues that interface between trade and the environment.

There is a need to set up an integrated program to address environmental challenges brought about by China's accession to the WTO. The opportunity of China's WTO accession to address environmental problems through structural adjustment, which will result from accession, must not be missed. A detailed plan needs to be formulated that integrates eco-environment protection into the economic system as soon as possible to minimize negative environmental impacts.

A strong need exists to integrate environmental concerns in relevant trade policies to address environmental challenges both at home and abroad. These include adjusting China's national investment policies; altering import and export policies for goods and services in order to strengthen its sanitary and phytosanitary measures; adopting other technical standards and regulations; and establishing a transparent publication system for trade laws and regulations. This also requires close cooperation among departments responsible for trade, environment, technical standards, etc. It is desirable to establish an advisory committee, under the auspices of the Ministry of Foreign Trade and Economic Cooperation (MOFTEC), comprised of representatives from all relevant departments. This committee should meet regularly to advise on appropriate policies to address trade and environment issues. There is also a need to study "green" measures in foreign countries, to help enterprise meet the green challenge in international markets.

China needs to develop a forward and positive position and play an active role in the trade and environment debate in the WTO. China may wish to bring relevant governmental officials and academic professionals together to develop a set of principles to help address trade and environmental issues.

Looking to the Future

Negotiations for China's accession to the WTO have been successfully completed, China will soon become a member, and trade and environmental issues will become even more important. China will need to address the full range of trade and environmental issues on the WTO agenda. If a new round of trade negotiations is undertaken, many issues will likely have a trade and environment interface. Even in the absence of such a Round, there is a significant "built-in" agenda at the WTO, as well as China's participation in major multilateral environmental agreements and in regional trade arrangements, that will require China's attention to trade and environmental issues.

While WTO membership will likely provide China with greater international market access, certain Chinese exports may be vulnerable to more stringent environmental regulations and other voluntary environmental measures in response to green consumers' choice in these countries.

To meet these challenges requires considerable work by the Government of China. China needs to be well prepared to negotiate and discuss issues that interface between trade and the environment; to formulate integrated policies and measures to protect its environment and support sustainable development; and to help its exporters compete successfully in the international market, in particular, the developed country markets where the consumers are the most environmentally conscious.

Continuous work on trade and environmental issues, in particular in the context of China's WTO membership, will be required during the third phase of the CCICED.

Annex 1 — List of Members of the WGTE

Chinese Members:

YE Ruqiu (Co-Chair), Senior Advisor and former Deputy Administrator, State Environmental Protection Administration of China (SEPA)

CAO Fengzhong (1995-2000), former Director, Policy Research Center for Environment and Economy (PRCEE), SEPA

JIN Yunhui, Professor, Guanghua School of Management, Peking University (GSM/PU)

LI Enhen (1997), Deputy Director General, Department of International Trade and Economic Affairs, Ministry of Foreign Trade and Economic Cooperation (MOFTEC)

LIU Hu (1995-1996), Deputy Director General, Department of Science and Technology, MOFTEC

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International Members:

David Runnalls (Co-Chair), President, International Institute for Sustainable Development, Canada

Victor Lichtinger, Minister, the Department of Environmental and Natural Resources, Mexico, and former Executive Director, North American Commission for Environmental Cooperation

Bill Long (1998-1999), former Director of Environmental Directorate, OECD

Geoffrey Oldham, Professor, University of Sussex, UK

Tadashi Omiya (1998-), Executive Officer, Mitsubishi Motors Corporation

Katsuo Seiki (1995-1997), former Executive Director of Global Industrial and Social Progress Research Institute, Japan

Konrad von Moltke, Professor, Free University of Amsterdam in the Netherlands and Senior Research Fellow of WWF, US

Rubens Ricupero (Honourary Member), Secretary-General of UNCTAD

In addition, the following people have assisted the Working Group in its research: CHENG Lulian, SHEN Xiaoyue, ZHOU Xin and GUO Dongmei of PRCEE, LI Yongjiang, YANG Jijian, ZHAO Yumin and ZHANG Xiaoyu of CAITEC, LIU Xue of GSM/PU, LIU Xiaowei, WANG Yan and CHEN Xiaodong of MOFTEC, and XIA Youfu and DONG Hong of UIBE. The coordinator from the international side is YANG Wanhua, International Institute for Sustainable Development.

Annex 2 — List of Meetings and Workshops of the WGTE

Inception meeting	January 15–16, 1995	Beijing, China
First meeting	September 11–13, 1995	Beijing, China
Second meeting	May 6–8, 1996	Wuyishan, China
Third meeting	September 18–20, 1996	Beijing, China
ISO 14000 workshop	November, 1996	Beijing, China
Fourth meeting	April 21–23, 1997	Calgary, Canada
Fifth meeting	April 20–23, 1998	Huangshan, China
Sixth meeting	November 12–14, 1998	Beijing, China
Seventh meeting	April 16–17, 1999	Beijing, China
Eighth meeting	October 22–23, 1999	Beijing, China
Ninth meeting	May 8–9, 2000	Wuxi, China
First WTO workshop	May 10–11, 2000	Wuxi, China
Tenth meeting (informal)	November 3, 2000	Beijing, China
Eleventh meeting	May 22–23, 2001	Harbin, China
Second WTO workshop	May 24, 2001	Harbin, China
WTO policy design workshop	August 29–September 1, 2001	Beijing, China

Annex 3 — List of Research Studies Completed by the WGTE

"Green barriers" and market access in relation to environmental standards and measures

- Eco-labeling and its implications for China (1996)
- China's "green food" development and environmental protection (1996)
- ISO 14000 standards and China: a trade and sustainable development perspective (1996)
- Impacts of environmental standards/requirements in the EU countries on China's textile exports (1999)
- Improving outer packaging of export goods for sustainable growth of China's foreign trade (2000)

Environmental standards and competitiveness (pollution havens)

- Pollution havens and ozone-depleting substances control in China (1997)

Trade and environmental policy coordination

- Policy research on the interaction of China's foreign trade and environmental policies (1999)
- APEC trade liberalization: integrating trade and sustainable development in China (2000)

Investment and sustainable development

- International investment rules and sustainable development: China's perspective (1999)
- Integrating trade, investment and sustainable development in selected state-level economic and technological development zones (2000)

Technology transfer

- Clean coal technology transfer: present situation, obstacles, opportunities and strategies for China (1998)
- Strategies for China's implementation of Activities Implemented Jointly (1997)
- International perspective on clean coal technology transfer to China (2000)
- Prospects of Clean Development Mechanism for accelerating technology transfer and foreign investment in China (2000)
- Cleaner technology transfer to China's western provinces and the Clean Development Mechanism (2001)

China's WTO accession

- Trade and environmental issues in the WTO: China's perspective (2001)
- Environmental and trade implications of China's WTO accession—a preliminary analysis (2000)
- Integrated assessment of environmental consequences of trade liberalization: literature review of international and domestic experience and their application to China (2001)

Sectoral studies

- Strategies for trade liberalization in environmental services in China (2000)
- Timber trade and protection of forest resources in China
- Liberalization in China's fishery trade: an environmental perspective

中国环境与发展国际合作委员会

贸易与环境：中国与国际的合作

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第二阶段工作报告

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中国环境与发展国际合作委员会

中国环境与发展国际合作委员会是由中国国务院于
构。其目的是向中国政府就如何协调环境与发展提出建议，协助中国政府制订全面一致的可持续发展政策，并致力于加强中国与国际社会在环境与发展领域的合作。

委员会现有 49 名委员，其中中方委员 27 名，外方委员 22 名。中方委员大多是国务院各部委的部长或副部长，另外也有部分著名科学家。外方委员是在国际上有很高知名度的环发领域专家，或是国际组织和某些国家环境机构的代表。委员们通过中国政府的邀请，以个人身份参加委员会的工作。这些专家来自各行各业，具有丰富的专业知识，包括环境、经济、科学技术、能源政策、农业、工业、商业、金融和教育等。

委员会下设专家工作组，各专家工作组均由中外方高级专家联合组成。第一界委员会共设有六个专家工作组。第二界委员会保留了一些工作组，对一些工作组进行了改组，另增设了一些新的工作组。第二界共有八个工作组和两个课题组，分别为污染控制工作组、能源战略与技术工作组、环境经济工作组、生物多样性工作组、可持续农业工作组、环境与贸易工作组、清洁生产工作组、交通工作组以及环境保护与经济计划课题组和林草课题组。分别就各自领域内的重大课题开展科学研究和项目示范，并提出政策建议提交给一年一度的委员会会议。

委员会每年举行一次会议，在听取并讨论各专家组工作报告的基础上提出给中国政府的建议。每次委员会会议结束时，委员会委员都接受一位中国最高领导人的会见，并当面呈交给中国政府的建议。

委员会现任主席为国务院副总理温家宝，副主席为全国人民代表大会环境与资源委员会主任委员曲格平、国家发展计划委员会副主任刘江、国家环境保护总局局长解振华以及加拿大国际开发署署长古德。

自委员会于 1992 年成立以来，由于全体委员和专家组的共同努力，委员会向中国政府提出了许多有价值的建议。这些建议得到了中国政府的高度重视，其中有的已经得到实施，有的正在被有关部门研究。这些建议对于推进中国实施可持续发展战略，促进环境与发展领域的科学决策起了很大作用。

中国环境与发展国际合作委员会是中国在环境与发展领域进行国际合作的一次成功尝试。委员会在国际上有较高的知名度，它对于宣传中国环境保护的方针政策，树立中国重视环境保护的良好形象起到了积极的作用。

中国环境与发展国际合作委员会所需经费主要由国际社会捐赠。其中，加拿大一直是委员会最大的捐赠者。另外，英国、德国、挪威、欧盟、日本、荷兰、美国等国家和国际组织及基金会也都为委员会提供了资助。中国政府为委员会提供部分配套资金。

中国环境与发展国际合作委员会秘书处负责处理委员会的日常事务，为委员会各专家工作组和课题组提供支持和服务，并准备一年一度的委员会会议。秘书处的总部设在国家环保总局。为方便与外方委员和专家的联系以及管理部分国际捐赠款项，委员会在加拿大温哥华设立了加拿大秘书处，为秘书处总部提供支持。

若想更多地了解委员会的情况，委员会的网址为：www.harbour.sfu.ca/dlam/ 和 http://svr1-pek.unep.net/cciced/

1992 年成立的一个高层次咨询机

目　录

贸易与环境工作组简介

概述

1994 年 10 月召开的第一届中国环境与发展国际合作委员会（简称国际合作委员会）第三次会议上决定成立贸易与环境工作组。贸易与环境工作组于 1995 年正式成立，1995 年 9 月召开了第一次工作会议。到目前为止的六年间，工作组共举行了 11 次会议。其中 10 次会议在中国召开，只有一次会议即第四次会议在加拿大卡尔加里市召开。

工作组的组成

工作组由 11 名中外方成员组成，其中有中方成员 6 名和外方成员 5 名。外方成员来自加拿大、日本、墨西哥、英国和德国。中方成员分别来自对外贸易经济合作部、国家环保总局以及贸易与环境方面的研究机构和大专院校。在工作组六年来的工作中，大部分中外方专家一直参与了工作组的工作，其中有少数人员变动和调整。

国家环保总局前副局长、现任国务院参事及国家环保总局高级顾问的叶汝求先生和加拿大国际可持续发展研究院院长大卫·鲁诺斯先生六年来一直分别担任工作组的中外方组长。工作组其他成员名单见附录 1。

工作组工作大纲

贸易与环境工作组是一个高级咨询机构，其主要任务是通过开展相关政策研究，向国际合作委员会提出报告，为中国政府制定促进可持续发展和贸易自由化的贸易与环境政策提出实用性建议。

工作组的宗旨是“帮助中国制定和实施长期、综合的并促进可持续发展的贸易和环境政策及措施”。

工作组成立之初就确立了工作大纲，明确了总的研究方向，其中包括：贸易在中国 21 世纪议程中的作用；其它国家和地区在贸易与环境问题上的经验和教训；多边环境保护协定的作用；协调各国国家环境标准并使之趋于一致及知识产权保护；“污染避风港”在中国存在的潜在性及其与在华投资企业所在国国内环境标准的关系；OECD 国家的绿色保护主义、绿色消费以及单方面贸易制裁威胁对中国出口的可能影响；生产工艺过程及方法问题的发展及环境技术转让。

工作组工作方式

工作组的工作方式主要包括每年定期召开工作会议、开展相关政策研究和分析、向国际合作委员会汇报以及组织举办专题研讨会等。工作组一般每年举行两次工作会议，主要是确定优先研究领域、制定工作方案并委托进行项目研究和背景调研。研究成果均经工作组会议讨论和评议，然后再形成正式建议提交中国环境与发展国际合作委员会。工作组每年在国际合作委员会年会上报告本年度的研究成果和建议。

工作组还组织召开专题研讨会，例如在中国推行 ISO14000 专题研讨会、中国加入 WTO 与贸易和环境有关的问题研讨会等。

工作组秘书处

工作组在国内和国外设立了两个小型秘书处，中外秘书处密切合作，负责组织和协调工作组的研究项目和其他各项活动。中方秘书处设在国家环保总局环境与经济政策研究中心，外方秘书处设在加拿大国际可持续发展研究院。

工作组的经费

加拿大国际开发署（CIDA）向工作组提供了基本活动经费，包括会议费、外方专家出席会议的差旅费、国外秘书处的开支以及一些研究项目经费等。1998-2002 年度，工作组还从挪威政府申请到一笔经费，支持了工作组的部分研究工作。中国政府每年为工作组提供一定的经费，主要支持工作组中方的工作。

贸易与环境工作组与国际上对贸易与环境问题的讨论

在过去六年中，工作组的工作是与国际上展开的越来越多的贸易与环境问题讨论同步进行的。此间，国际上发生的与贸易与环境有关的事件包括：世界贸易组织（WTO）贸易与环境委员会(CTE)开展的工作，多边投资协议谈判的崩溃；WTO 争端解决机制对贸易与环境争端的裁决新发展；公众对 WTO 越来越多的批评， 以致于在 2000 年在美国西雅图召开的 WTO 第三次部长级会议期间达到了高潮；地区性的环境与贸易活动不断增加；以及国际环境保护条约的不断发展。

世界贸易组织于 1995 年建立时设立了贸易与环境委员会。其主要宗旨是“明确贸易措施与环境措施之间的关系以促进可持续发展；对多边贸易体系条款是否需要修改提出适当建议，这些建议必须与多边贸易体系的公开、公正、非歧视性原则相一致”。然而，在过去几年中，贸易与环境委员会仅制定了一个包括十项内容狭窄的环境议程，并且所讨论的问题只限于在技术的层面上。

贸易与环境委员会的讨论得出了一些有益的结论。它指出，WTO 非歧视性和透明性基本原则与那些用于保护环境的贸易政策措施并不矛盾。这些贸易措施包括环境保护条约中规定的贸易措施。它们是解决国际环境问题最有效的方法。任何时候都应该优先适用国际环境保护条约，而不应该由一个国家或一小部分国家采取单方面的行动。贸易与环境委员会所得出的另一个重要结论是：在国家层次上，贸易与环境部门的决策者之间应更好地进行政策协调，这样能够有助于防止争端的发生，并诉到 WTO[1]。

尽管近年来 WTO 在解除文件限制、吸收民间团体参与方面作出一些努力，但贸易与环境委员会的工作实质性进展不大。许多重要问题，如与 PPM 有关的环境措施和市场准入、环境费和税、知识产权等问题尚有待进一步讨论。更为重要的是，在建立世界贸易组织导言中所确定的“促进可持续发展”的任务尚未涉及。

在 WTO 贸易与环境委员会对环境于贸易问题进行讨论的同时，许多与环境有关贸易争端被诉到 WTO 的争端解决机构。其中最普遍受争议的问题是：各国采取什么样的环境措施符合 GATT/WTO 的原则？从这些争端的解决来看，WTO 的争端解决机构对 GATT 第二十条的环境合法性已逐渐加以认可。最近，在加拿大和法国有关石棉的争端中，WTO 的争端解决机构在根据生产工艺过程及方法（PPM）来确定“类似产品”方面取得了重要突破。PPM 是另一个最具争议的贸易与环境问题。上诉机构否定了的争端解决小组最初的结论。争端解决小组认为产品的最终用途，而不是其特性，包括毒性在内，才是确定该产品是否与其竞争产品“类似”的相关因素。而上诉机构的决定则认为，在确定产品是否“类似”时，“健康风险”也可以成为确定产品“类似性”的一个合法因素。

1999 年 OECD 国家就多边投资协议谈判彻底失败的原因之一是没有考虑环境和其它有关社会问题，也由于谈判过程中非透明性原因所致。但多边投资协议存在的最主要问题是其条款对外国投资者的权利和义务规定不平衡。多边投资协议对外国投资者的权利规定得很明确，但对其义务的规定却不太清楚。

一些地区性贸易协议已开始关注贸易与环境问题。自从西雅图 WTO 部长级会议失败以来，在 WTO 之外的地区范围内，甚至在双边层次上，开展的贸易与环境问题的讨论不断增多，其中包括南美各国签订的《南方共同市场议定书》、欧盟与南方共同市场进行的谈

[1] Hakan Nordstrom 和 Scott Vau 《WTO 专题研究之四:贸易与环境》, WTO, 1999

判、欧盟与墨西哥间的谈判、美国与约旦的贸易协议谈判以及对《北美自由贸易协议》（NAFTA）第 11 章的讨论等。

《北美自由贸易协议》是第一个附带有环境协议的地区性贸易协议，其目的主要是为了处理与贸易相关的环境问题。最近发现，《北美自由贸易协议》的第 11 章允许外国投资者对引资国的法律、规章包括环境政策及法规提出质疑。这清楚地表明了 NAFTA 第 11 章在公共政策与贸易自由化协议之间的不协调和不一致性，它具有潜在的危险性。

近年来，国际环境保护条约也有很大的发展。在过去六年中，达成了多项与贸易体系密切相关的多边环境条约，其中包括 1997 年达成的《联合国气候变化框架公约》(FCCC)下的《京都议定书》、2000 年初在《生物多样性公约》(CBD)下达成的《卡塔赫纳生物安全议定书》以及 2000 年 12 月达成的关于在国际贸易中对某些危险化学品和 农药事先知情同意（PIC）程序的《鹿特丹公约》。

象《联合国气候变化框架公约》一样，《京都议定书》本身并没有贸易措施，但缔约方很可能在履行其承诺和义务时采取与贸易相关的政策措施。《生物多样性公约》下的《卡塔赫议定书》主要涉及转基因生物活体(LMO)贸易及其可能对生物多样性的风险问题。该议定书制定了各国决定是否限制转基因生物活体进口的程序，预防原则首次形成法律条文。同时，该议定书还涉及与 WTO 规则的关系。《鹿特丹公约》制定了相关程序来保证在开展化学品国际贸易中，出口国有责任将在其国内禁止或限制使用产品的情况通知进口国。

所有这些引人关注的问题都表明，贸易与环境关系十分密切，需要制定切实可行的国际规则保护环境，促进可持续发展，但同时也不应该过多地限制贸易和发展。还需要指出，在实施 WTO 政策以及实施保护环境和促进可持续发展的政策上，应加强 WTO 与其它国际组织间的协调。

贸易与环境工作组的组成方式非常独特，它由发达国家和发展中国家贸易部门、环保部门的官员和专家共同组成，工作组密切监视贸易与环境领域的国际发展动向，针对国际贸易与环境领域的焦点问题，特别是与中国贸易与可持续发展密切相关的一些重要问题开展研究和讨论，为中国政府提出了有益的建议。

贸易与环境工作组涉及的很多问题都与国际热点问题相一致，如工作组研究了与国外环境标准及其它自愿性环境措施相关的“绿色壁垒”和市场准入问题、环境标准与国际竞争力问题、投资与可持续发展问题、贸易政策与环境政策的协调问题以及技术转让、环境服务领域的贸易自由化和中国加入 WTO 环境影响等问题。

主要研究工作和成果

改革开放二十多年来，中国经济快速发展，逐步融入世界经济大潮。中国对外贸易发展迅速，在国民经济中正发挥着越来越大的作用。中国即将加入 WTO，中国要履行自己的庄严承诺，积极采取措施加快贸易自由化进程，同时也要积极探索新的途径，努力扩大出口。

中国加入 WTO 将面临着双重环境挑战，一方面，中国主要贸易对象国日趋严格的环境标准和各种自愿性环境措施将给中国贸易出口造成潜在影响；另一方面，如不采取有效措施，贸易自由化进程有可能会加剧国内的环境污染和生态破坏。因此，中国应重视快速经济发展和贸易增长给国内环境带来的不利影响，避免环境因素造成我国出口产品国际竞争力下降和在国际贸易中受阻。中国应当抓住全球，特别是发达国家市场兴起的绿色消费趋势带来的机遇，充分利用国外投资，支持中国的可持续发展战略。为了推进这方面的工作，贸易与环境工作组针对一些对中国有重要意义的贸易与环境问题开展了研究，主要研究工作包括如下内容：

绿色壁垒”与市场准入

随着国外政府环境管理力度的加大以及公众环境意识的提高，中国开始认识到国外不断提高的环境标准以及各类自愿性环境措施形成的绿色壁垒和市场准入会对中国对外贸易造成潜在威胁，各类自愿性环境要求和措施主要包括环境标志、有机食品标志以及 ISO14000 等。贸易与环境工作组对这些问题给予了关注，开展了相关的研究。

一些发展中国家把强制性环境标准（包括产品和非产品标准）和自愿性环境标准（如环境标志、包装的环境要求和 ISO14000 环境管理体系标准等）都称为“绿色壁垒”。他们认为发达国家是以保护环境为借口，保护其自己国内的产业。然而，从严格意义上讲，只有那些真正假借环境保护之名行贸易保护之实的环境措施才可以称为是“绿色保护主义”，而以保护人类和动植物健康为目的的环境标准和措施不应当与“绿色保护主义”相混淆。

随着中国参与经济全球化进程的不断加快，可以预见，发达国家采用的这些环境措施可能会对国内某些行业的对外贸易构成“壁垒”。事实上，在过去几年中，中国一些行业的对外贸易已经受到国外有关环境措施的影响。例如，1996 年德国颁布的有关 118 种偶氮染料的禁令以及 1998 年美国、加拿大和欧洲国家对中国木材包装材料实施的禁令都对中国出口贸易产生了影响。同时，国外特别是发达国家越来越多地采用自愿性环境措施也对中国一些行业的对外贸易产生了一定的影响。

国外环境措施到底给中国出口造成了什么影响？国外采用这些环境措施的初衷是什么，是真正出于保护环境的目的，还是贸易保护措施？中国应采取什么样的对策来尽量增加出口的机遇，使这些环境措施的不利影响降至最低？为了回答这些问题，贸易与环境工作组开展了一系列有关强制性和自愿性环境标准和措施的“绿色壁垒”和市场准入方面的研究。研究内容包括：环境标志、绿色食品、ISO14000、德国有关偶氮染料禁令对中国纺织行业对外贸易影响以及美国、加拿大和欧洲有关木材包装禁令对中国产品外包装业的影响等。

有关环境标志的研究表明，由于环境标志的使用比较有限，环境标志产品的市场份额较少，因此还没有发现国外环境标志对中国对外贸易构成重要的“绿色壁垒”。但是，研究也表明，如果对中国优势出口产品增加环境标志认证的话，环境标志将会产生较大的潜在影响。研究分析了中国环境标志体系及存在的问题，认为中国环境标志也尚未对其产品

的出口造成明显的影响。研究结果还表明，环境标志能够对贸易和环境保护产生积极影响，推进企业环境管理。应积极应对国外环境标志的挑战，给出口创造更多的机会。研究强调指出了全球范围内大约二十多项环境标志可能造成的问题，需要开展国际合作，建立不同国家环境标志标准的相互认可和等同标准。

对 ISO14000 的研究认为，广泛采纳 ISO14000 系列环境管理体系标准会对中国贸易产生影响。国际标准化组织（ISO）与 WTO 有一种特殊关系，ISO14000 认证会影响政府部门和跨国公司的采购政策和消费者的消费行为。ISO14000 标准也会影响到那些对贸易会产生影响的有关环境政策，如环境标志和生命周期评价等产生影响。ISO14001 环境管理体系标准能够帮助国家或企业对实施可持续生产和消费的政策和技术创新做好准备，这将对贸易产生影响。研究结果表明，在中国实施 ISO14000 为强化中国的环境管理提供了真正的机遇，通过在一些重点领域和部门实施 ISO14000 系列标准，加强部门环境管理，可以促进这些部门的经济发展，减少可能面临的贸易壁垒的影响。

有关欧盟纺织品环境标准（特别是德国关于偶氮染料的禁令）以及美国、加拿大和欧盟对中国木材包装材料禁令的两项研究发现，这些与环境有关的措施对中国出口造成了一定的影响。研究回顾了 WTO 的基本原则，认为根据 GATT 第二十条规定、技术性贸易壁垒协议（TBT）以及实施动植物卫生检疫措施协议（SPS），这些环境措施是以保护人类和动植物健康为出发点的合理环境要求。然而，这两项研究均指出，这些国家在制定和实施有关禁令的方式上存在问题，违反了 WTO 的有关基本原则，尤其是在非歧视性、避免贸易壁垒以及预先通告和提供技术援助方面有违 WTO 的基本原则。研究强调，根据 WTO TBT 协议和 SPS 协议，发展中国家的出口部门应能尽早获得环境措施的有关信息，有机会对这些环境措施的实施发表意见，并且应能获得相应的技术援助。发达国家在制定环境标准时应保证过程的透明性，并给予发展中国家特殊和有差别的待遇，如避免贸易限制和给予相应的技术援助等。研究建议，中国政府应采取措施提高中国纺织和包装工业的国际竞争力，加强对替代产品的开发和研究，促进与国外有关机构的信息交流，强化这些行业的环境管理（具体建议见建议部分）。

环境标准和竞争力

无论在发达国家，还是在发展中国家都对“水往低处流”的现象有所担心，担心投资会流向环境标准较低、环境执法较松的国家。这种现象被称为“污染避风港”。贸易与环境工作组在研究“污染避风港”的问题时，是在讨论消耗臭氧层物质（ODS）控制问题的背景下进行的。

根据《蒙特利尔议定书》，发达国家要在规定的期限内淘汰和停止使用 ODS，而发展中国家则有较长的期限来实施 ODS 的淘汰和最终使用。因此，贸易与环境工作组开展了 ODS 研究，旨在确定国外 ODS 的生产和消费是否随投资向中国进行转移。研究指出，在与 ODS 生产和消费有关行业中，在华外国直接投资（FDI）的增长率很高，这些行业主要包括溶剂、冰箱、空调和发泡行业。研究指出,中国现行的一些法规和政策忽视了通过外国直接投资向中国转移 ODS 产品和消费的问题，在对外国直接投资项目审批的过程中没有包括对环境影响的审查。研究建议对 ODS 的控制应当纳入现行的环境法规和相关的贸易政策中，并且应当在相关政府部门以及中央和地方政府间建立一种有效的协调机制。

研究还指出，履行国际环保公约需要建立一种健全的制度，需要贸易与环境部门之间、中央及地方政府之间以及各类地方部门如计划、贸易、财政、商业、物价、产业、海关和环保等之间的通力合作。

贸易与环境政策的协调

对外经济和贸易的快速发展一方面促进了中国的环境保护工作，但另一方面在某些领域也给生态环境带来了不利影响。此外，发达国家日益严格的环境标准和消费者对环境友好产品的选择已经给中国出口产品进入国际市场造成了潜在的困难。因此，中国应密切关注贸易发展和环境保护之间的关系，使贸易政策和环境政策有效协调。贸易与环境工作组开展了两项有关贸易和环境政策协调的研究项目—中国对外贸易和环境政策协调研究和APEC 贸易自由化过程中如何协调贸易与可持续发展的关系。

这两项研究回顾了中国对外贸易发展以及 APEC 贸易自由化对环境的总体影响。研究认为，国内环境问题和贸易发展有着密切的联系。贸易自由化对环境影响的严重程度取决于这些行业的污染强度。这就意味着污染问题比较严重的行业的贸易发展面临着更大的环境压力，例如纺织业和皮革业，而象玩具业这样的劳动密集型行业的发展和贸易自由化不一定会导致环境退化。

研究指出，贸易自由化将给中国提供一个从劳动密集型产品向技术密集型产品转化的机会，并且从技术和物质上支持环境保护和可持续发展。在有效地协调贸易政策和环境政策的前提下，贸易和投资自由化将有益于节约资源和提高效率，有益于工业结构调整，有益于中国环境改善和可持续发展。

研究建议，中国应制定可持续对外贸易国家战略，调整贸易政策和强化环境政策，使贸易自由化获得最大的收益，同时使贸易自由化对环境的影响降至最低。

投资与可持续发展

贸易与环境工作组开展了两项有关投资问题的研究，即中国如何看待国际投资规则与可持续发展，和在若干国家级经济技术开发区协调贸易、投资与可持续发展之间的关系。

外商直接投资已成为许多国家发展战略的重要组成部分。通常情况下，投资大多数都投向出口行业，因此那些能引入大量外资的国家在其对外贸易发展方面也比其他国家要快。同时，投资还可以促使生产工艺采取更加可持续的发展方式，因为那些具有高创新和投资水平的行业往往都采用先进的、对环境损害小的设备。然而，环境效益的取得与外资的增加并非是简单的正相关关系，只有采取适当的环境政策和措施，才能保证获取真正的环境效益。

近年来，中国在吸引外商直接投资方面获得了很大成功，已经成为 OECD 国家之外主要吸收外商直接投资的国家，是继美国之后的世界第二大引资国。外商投资企业对中国经济的发展作出了巨大贡献。

然而，过去强调的只是投资的数量和速度，忽视了效益、质量和投资项目的良好管理，这给外商公司向中国转移污染密集型生产提供了机会。第三次全国工业普查分析指出，中国外商投资企业总数的约 30％（大部分是中小型企业）涉及污染密集产业。这反映了这样一个事实，在这期间，这些污染密集产业在中国有相对的优势。这与大多数污染企业都存在于工业化的初期阶段有关。中国的一些实例表明，在投资国国内不受欢迎的材料或技术曾被通过外商直接投资转移到了中国。

从另一个角度看，外商投资对中国的环境保护和可持续发展也产生了积极影响。一些外商公司，特别是跨国公司，引进了先进的技术和污染控制设施，并且实施先进的环境管理制度。它们采用了一些自愿性环境措施，例如 ISO 14000 认证。已经获得 ISO 14000 认证和生态标志的大多数企业是外商投资企业或合资企业。

研究结论表明，应将可持续发展原则纳入中国有关外商直接投资的政策中去，并强化有关外商直接投资政策的环境管理立法。

对国际投资规则的研究指出，建立促进可持续发展的国际投资规则是非常重要的。研究建议建立一个国际投资组织负责有关投资规则的谈判和制定，呼吁制定一项专门的投资协议，将可持续发展纳入其中，并提出了一系列外国投资者应当在引资国承担的环境和社会责任原则。

技术转让和清洁发展机制

工作组成立之初，技术转让问题就被列为优先研究领域。工作组在这方面的工作主要包括洁净煤技术转让、AIJ（共同实施活动）在促进技术转让中的作用和利用清洁发展机制（CDM）促进技术转让。

在中国经济的各个领域都存在着利用洁净煤技术的巨大潜力和机会。随着中国对能源需求量的不断增长，与能源相关的环境问题也日益突出。为了有效地开发洁净煤技术，中国企业有必要通过各种方式，提高其在洁净煤技术设计、制造和运行方面的能力。在引进硬件设备的同时，引进管理、设计技能等相关的“软件”对中国洁净煤技术的发展和提高中国自己的设计与运行能力是至关重要的。

工作组开展的两项有关洁净煤技术转让的研究表明，中国在洁净煤技术转让方面开展了很多工作，目前大多数洁净煤技术转让的国际合作都集中在电力部门，而该行业仅占中国用煤量的约40％。大多数技术转让主要是设备进口，并不包括知识、专业技术和管理经验的转让。要成功地完成技术转让，单纯进口硬件设备是不够的。研究还强调，目前中国的洁净煤技术引进与国内的研究与开发没有很好地协调起来。有必要提高国内的研究与开发能力，以更好地吸收和利用国外技术和经验。

中国具有洁净煤技术引进的巨大需求和潜力，但同时也存在许多洁净煤技术引进的障碍，这些障碍包括外国厂商对其技术优势的垄断；缺乏鼓励外国公司向中国转让洁净煤技术的激励机制；中国能源价格低廉、排污收费低和环境法规不严等不利于促进企业采用洁净煤技术的因素；此外，企业还缺乏引进和采用先进技术的能力。

研究建议，应该在更多的优先领域开展洁净煤技术转让方面的国际合作、强化环境法规和加大执法力度以及提高国内的研究和开发能力，鼓励新技术的转让。

工作组还开展了两项关于清洁发展机制在促进外商投资和技术转让并支持中国可持续发展方面的研究。清洁发展机制(CDM)是由气候变化框架公约(FCCC)京都议定书提出的三个灵活机制之一，它允许附件 I 的国家（主要是发达国家）在非附件 I 国家（主要是发展中国家）投资于温室气体减排项目。这个机制给予附件 I 国家一些灵活性，允许他们以成本最有效的方式履行其在《京都议定书》承诺的义务，同时协助发展中国家，促进其可持续发展。

目前，中国在用高效燃煤技术替代低效燃煤技术以及向其他可再生能源转换过程中会为温室气体减排创造巨大的潜力，这意味着中国将会成为一个具有巨大潜力的 CDM 市场。

工作组的第一项 CDM 研究分析了中国参与 CDM 将会带来的长期和短期、直接和间接利益及其影响，指出，参与 CDM 可以为中国带来明显的短期利益，如可观的外商投资和先进的技术设备引进，以及其它很多的环境和社会利益。但是，从长远的角度看，则存在中国将有可能长期依赖外国减排技术的潜在危险性，这对促进中国自己的减排技术的发展将会产生不利。

然而，有关 CDM 的谈判还在进行，通过在 CDM 机制设计谈判中坚持某些立场，可以消除在中国和其他发展中国家实施 CDM 的不确定性，并且能保证实现 CDM 所预期的促进可持续发展的长远目标。在 CDM 的谈判中，应努力保证 CDM 不仅促进提高能源效率的和环境设备的转让，而且还应确保技术接受国的技术研究与开发、设计和制造的能力提高；允许通过 CDM 引进的技术得到推广；坚持发展中国家在不承担减排义务的条件下参与 CDM；发达国家必须为发展中国家提供额外的资金和技术援助；并且确保非附件 I 国家通过实施 CDM 所获得的减排信用可以储蓄或转让。

第二项研究的重点是分析中国西部开发中 CDM 在促进西部可持续发展的作用。研究基于四川和云南，对一些企业进行了访谈调研。研究结果表明，CDM 能够在中国西部大开发中，为促进西部的可持续发展发挥重要作用。

今年七月在波恩举行的联合国气候变化框架公约(UNFCCC)第六次缔约方会议续会谈判结果表明，CDM 的规则已经基本确立，京都议定书有望从明年起生效。中国应尽快采取行动，充分利用 CDM 来促进可持续发展。

尽早参与 CDM 可以确保中国西部省份获得潜在的国际投资和先进技术。在 CDM 项目审批中，政府应优先考虑西部省份。中国应为参与和实施 CDM 做好必要的准备，为此应当：成立 CDM 实施中心；确定实施 CDM 项目的优先省份以及重点行业和企业；帮助企业与国外机构和企业进行具体的 CDM 项目谈判。此外，还应采取如下措施：建立完善的温室气体监测体系，在环保部门的日常监测范围内加入对二氧化碳的监测；鉴别适合中国并能利用 CDM 机制转让的技术，优先考虑的技术应是各类洁净能源技术和大气污染控制技术；建立激励机制，鼓励企业参与 CDM 项目；在初始阶段，可以采取以单项目为基础的基准线，中长期，当企业技术引进能力和谈判能力增强后，可考虑采用以行业或多项目为基础的基准线。

行业贸易自由化与可持续发展

贸易与环境工作组就贸易自由化与可持续发展问题进行了一些行业研究，其中包括环境服务领域的贸易自由化研究、木材贸易与可持续发展研究以及贸易自由化对渔业的环境影响研究。

环境服务业

环保产业，特别是环保服务业在中国是一个新兴领域。1997 年环境服务业的产值仅占中国环保产业总产值的 12%。环境服务业的贸易量则更小，根据 1998 年国家环保总局的统计中国环境服务的出口额几乎为零。环境服务的进口主要是直接购买国外环保技术以及通过外国投资引进一些国外环境服务。另外，通过利用国际资金的环境项目，特别是通过一些国际金融机构，例如世界银行、亚洲发展银行和其它双边合作机构引进了一些环境服务。

作为 APEC 成员，中国已承诺参与包括环境产品和服务在内的九个优先实施行业贸易自由化的计划。同时，中国在参与 APEC 的过程中和在争取加入 WTO 的努力中，也已承诺开放包括环境服务在内的服务行业。在 1995 年的环境服务贸易自由化减让表中，中国承诺对一切外资环境建设项目开放环境服务，允许国外具有一定资格的环境服务提供者在中国建立各种环境服务合资公司，从事环境服务业或跨境向中国境内客户提供咨询服务。

目前，中国低水平的环境服务过剩，而高水平的环境服务则供不应求。参与 APEC 贸易自由化和加入 WTO 将为中国环境服务发展带来很多利益，在贸易自由化进程中，国外企业

和投资者将带来充足的资金来源、先进的技术和管理经验以及促进中外合资企业的发展等。

然而，中国环境服务领域对外开放也将面临很大的风险，如许多中小型企业会在竞争中失败，优秀人材会流失等。但从长远来看，中国环境服务领域对外开放不仅能满足中国经济发展和环境保护的需要，而且还能促进环境服务各领域的发展，促进中国环境技术和服务的出口，提高中国环境业的国际竞争能力。

贸易与环境工作组的这项研究建议，中国应逐步开放环境服务领域，在开放过程中，应尽可能地消除那些不利于该行业贸易自由化的障碍，同时要认真研究开放的步骤，确定开放的优先领域。

林业

林业对于环境保护、水土保持及生物多样性保护起关键作用，森林资源保护对于中国经济的可持续发展至关重要。1998 年长江、黄河发生特大洪水后，中国政府把林业资源保护提到了急待解决的重要位置上来。中国正在开展一系列植树造林计划，一方面保护木材供给，同时也使生态环境得以恢复。

九十年代后期，中国实施天然林禁伐后，支撑传统林业产业体系的资源基础已不存在。研究表明，预计到 2010 年，中国木材供需缺口大致在 8000-10000 万立方米，其中可以通过发展木材代用品来弥补的约 3000 万立方米，其余的则需要通过发展人工林和进口来加以解决。

在中国加入 WTO 和 APEC 贸易自由化的谈判中，中国承诺降低关降和非关税贸易壁垒。目前原木和锯材等林业产品的关税非常低，甚至已为零关税。加入 WTO 将使中国林业更加开放，将有更多的林产品进口。由于目前林地增长缓慢，中国加入 WTO 有助于使森林资源的消长达到平衡，从而进一步促进森林资源的保护与发展。

2010 年前，中国仍将继续进口一部分木材及其制品，这可能会加大这些出口国家不可持续森林采伐活动的环境影响。中国应关注这些木材出口国家的环境问题。

研究建议，在短期内，中国应通过进口木材及其部分加工产品，进一步改善贸易结构，出口有竞争力的林副产品。从长期来讲，中国应通过加速培育人工林和工业用材林基地建设，提高森林质量，为国内用材提供永久性的原料保障。同时，中国应采取必要措施，鼓励木材出口国采取可持续性生产方式。可采取的措施包括：支持使用森林管理标志，鼓励实施可持续森林管理体系。

渔业

渔业在中国经济中发挥着越来越重要的作用。自 1978 年改革开放以来，渔业生产和消费不断增长。中国已成为最大的水产品生产国，占世界总产量的 1/3，水产养殖量占世界总量的 2/3，是世界上唯一养殖量超过捕捞量的国家。目前中国的人均水产品占有量达到 31.3 千克，超过了世界 20 千克的平均水平，并且已成为世界第四水产品出口大国。

尽管如此，中国渔业仍面临着许多严峻的问题。由于生产的快速增长，市场结构发生了根本的变化，产品从供不应求转到了供应相对过剩，其结果不论在国内市场还是在出口市场，水产品价格出现持续下跌，严重影响了渔业的经济效益和渔民生活水平的稳定和提高。与此同时，中国渔业发展面临着日益严重的环境制约：由于过度捕捞，海洋资源濒临枯竭，由于养殖业的无序发展，导致水域严重污染，赤潮、病害频繁发生，资源退化。

不论从市场制约还是从环境制约来分析，其结论都应归为：中国渔业的发展应当从重视资源的开发，转移到对资源的保护和管理，即按照可持续性的原则来规划渔业的生产、流通和管理。加入 WTO 将为中国水产品扩大出口提供新的机会，这无疑会进一步刺激对资源的开发。为了在加快发展的同时避免或尽量降低对环境的危害，应实施一套旨在强化管理的政策措施。

政府应把重点从渔业资源开发转移到对资源的保护和管理上，制定与可持续发展原则相一致的渔业和水产业生产、销售和贸易规划，将生态保护与海洋渔业发展放在同等重要的位置上；加强对水体污染和病源的预防和控制；采取新的法规和条例促进中国渔业可持续发展；加强能力建设，为决策提供科学依据；加强渔业基础设施和支持系统的建设；探索出口机会，通过实施可持续性的认证和标志，扩大可持续生产方式下渔业和水产品的出口。

中国加入 WTO 的对贸易与环境的潜在影响

中国加入 WTO 意味着世界上最大、最广阔的市场将向世界开放，并为中国的出口产品提供更大国际市场准入。贸易量和贸易结构的变化将导致中国经济结构发生巨大变化，而经济结构的变化将对中国环境产生正面和负面的影响，这包括对行业污染的影响、对生态环境本身的影响、对环境管理的影响和对环保产业的影响。

除了对国内环境产生影响外，中国加入 WTO 还将产生一些与贸易有关的环境影响和与环境有关的贸易影响。贸易与环境工作组就中国加入 WTO 贸易与环境影响开展了一些初步的研究工作。初步研究表明，中国一些具有国际竞争优势的出口产品，如纺织品、玩具和皮革等将很可能在国际市场上遇到绿色消费的挑战，中国需要认真应对国际市场的环境挑战。

加入 WTO 能使中国引进更多的外资，但是，新的外资必须要有适当的引导和合理利用，从而支持中国长期的环境保护和可持续发展目标。

随着加入 WTO，中国可能会扩大资源型产品的出口，因此，有必要对其它自然资源出口国的环境影响予以必要的重视。

中国加入 WTO 将要求中国对其贸易和环境政策进行必要的调整，包括要把环境问题纳入国家的投资政策和进出口政策，建立和健全保护人类健康、动植物健康以及自然资源和环境的管理体制。中国需要加强和提高其环境法律和法规，使之与其它国家的标准逐步接轨，并增加贸易和环境法律法规的透明度。

中国将可以利用 WTO 的争端解决机制保护其贸易和环境的合法权益，并在 WTO 贸易和环境讨论中发挥积极作用。

加入 WTO 对中国来说，既是机遇又是挑战。从环境角度来看，加入 WTO 会产生积极影响，也会产生不利影响。因此，中国政府应该对中国加入 WTO 将产生的潜在的贸易和环境影响予以充分重视。工作组开展的有关贸易协议环境影响综合评价的国外经验研究建议，中国应综合评价加入 WTO 对环境的影响，这将有助于全面了解加入 WTO 会对中国的环境影响，并在此基础了确定政策措施，以最大限度地利用贸易机会获取利益，同时尽量避免在融入世界贸易体系中将会受到不利影响。全国人民代表大会目前正在审议环境影响评价法，从长远来看，贸易协议和贸易政策的环境评价应该纳入到全国统一的法律和法规体系中。

重要建议

贸易与环境工作组提出了以下七项有关贸易与环境的重要建议：

建议1：与国外环境标准及措施有关的“绿色壁垒”与市场准入

为了应对环境压力，满足消费者的环境需要，国际市场正发生着迅速变化。尽管一些国外环境标准和要求是以保护人体健康和环境为目的，但却给中国的贸易出口造成了一些困难。中国过去已经受到过国外环境标准和措施的影响：如欧盟国家以保护人体健康为目的颁布了 118 种偶氮染料禁令；北美由于对亚洲天牛虫害传播的担心对中国出口的木材包装材料加以的限制。此外，越来越多地使用一些自愿性的环境措施如生态标志和 ISO14000 环境标准，也对贸易造成了潜在的影响。中国加入 WTO 将为扩大出口带来极大的机遇，但其一些主要出口行业，如纺织、皮革及其它轻工行业的产品将可能面临来自于发达国家绿色消费的挑战。

为了使国外环境法规、标准和一些环境措施对贸易的影响降至最低，贸易与环境工作组建议政府应当提高主要出口部门的环境法规和标准，使中国环境标准与国际标准接轨。应该努力帮助企业提高其产品在国际市场上的竞争力，研究和开发更多的环境友好技术、建立经济激励机制、促进替代产品的研究与开发、推进清洁生产和强化环境管理，大力推广和采用 ISO14000 环境管理体系标准和生态标志等自愿性环境措施。贸易与环境工作组还建议，中国应与国外建立有关环境标准及措施的信息交流机制，努力开展 ISO14000 环境管理体系标准认证和生态标志等技术标准的国际互认。

同时，中国应该敦促发达国家在制定环境标准时严格实施适时通知，并遵守 WTO 关于给予发展中国家特殊和有差别待遇的条款，其中包括避免造成贸易壁垒和为发展中国家提供技术援助。

建议2： 污染避风港与消耗臭氧层物质（ODS）控制

《关于控制消耗臭氧层物质的蒙特利尔议定书》规定了发达国家逐步淘汰 ODS 生产和消耗的时间表，并为发展中国家提供了十年的宽限期。正是因为有了这个宽限期，在过去几年中，生产和消耗 ODS 的外商投资企业的数量有所增加。这表明在实施《蒙特利尔议定书》和多边基金以及中国政策中和体制协调方面存在一些问题。

贸易与环境工作组建议《蒙特利尔议定书》的实施和 ODS 物质的控制应纳入现行环境法规和其它环境政策中，同时中国的 ODS 控制和逐步淘汰计划应与相关的贸易政策结合，例如：中国外国直接投资（FDI）使用的导向性政策应该禁止与 ODS 的生产和消费相关的 FDI 项目（这项政策已被 1997 年新的外商投资指导原则所采纳）。

贸易与环境工作组还建议有关的政府部门以及中央和地方政府之间应当建立一种有效的协调机制，并在全国建立有效的 ODS 管理体系。应当把 ODS 物质的控制纳入到外商投资项目的审批过程中。履行国际环境保护协议（如《蒙特利尔议定书》）需要一个完善的制度，需要贸易与环境部门之间， 中央及地方政府之间以及各类地方部门如计划、贸易、财政、商业、物价、产业、海关和环保等之间进行协调和通力合作。

还应该努力为企业提供成熟的适用于中国的替代技术信息，并为替代 ODS 提供技术支持。

贸易与环境工作组还建议，中国应该与其他国家密切合作进一步完善《蒙特利尔议定书》，包括采取措施禁止非第五条款缔约国向第五条款缔约国转移 ODS 的生产和消耗。

建议3： 贸易与环境政策的协调

中国对外贸易的发展及环境保护的相互影响表明了贸易发展，环境保护和可持续发展之间的密切关系。政府决策部门应长期密切关注贸易政策和环境政策的相互促进和协调。

贸易与环境工作组建议制定国家对外贸易可持续发展战略。这些战略应包括：

- 制定可持续出口战略，包括采取措施发展高科技含量产品和绿色产品，优化出口结构，在国际市场的新领域开展竞争。
- 制定可持续进口战略，应该扩大资源型产品的进口，例如石油、天然气、木材以及农产品，以保护国内并不充裕的资源，禁止危害环境的产品进口，鼓励进口环境友好技术和设备。

应当强化环境政策法规，防止和消除由于不恰当的贸易政策所造成的环境影响，应体现我国在国际环境保护协议中所承诺的国际义务，并考虑环境成本内部化问题。在加强环境政策及法规的同时，应建立鼓励有利于环境的产品和技术的生产，促进绿色产品和技术的开发和贸易，积极推行“绿色措施”，如 IS014000 认证、环境标志和绿色包装，加强对出口企业的环境管理。

应该努力加强外商投资政策和管理，以支持中国的环境保护和可持续发展（具体参见下面的建议）。

贸易与环境工作组建议在中国贸易和环境部门之间建立一种有效的协调机制，以便处理贸易和环境问题，如建立一个包括贸易、投资、环境和其他相关部门在内的顾问委员会。

建议4： 投资与可持续发展

环境考虑已经逐步纳入中国外商直接投资的管理政策和法规中。中国环境政策法规也考虑到了外资投资项目可能造成的环境问题，并通过制定各种法规和措施控制这些投资活动可能造成的环境污染。尽管如此，中国在利用外资和实施可持续发展方面仍存在一些问题，需要进一步协调和改进。

贸易与环境工作组建议中国应制定和实施可持续投资战略。在制定吸引外资的优惠投资政策时，应建立有关标准来吸引适当的外商投资。中国主管发展计划、对外贸易、科技及环保等部门应当加强协调和配合，共同制定促进我国可持续发展的综合投资政策。应建立贸易、投资和环保部门间灵活有效的合作机制，加强对外商投资的环境管理，环保部门应当参与引资项目审批工作。

应当强化环境政策法规，建立激励机制例如税务减免等，鼓励外国投资者从事高附加值产品的生产和开发，投资于清洁产业，防止其本国或国际环保协议禁止的污染密集型产业和产品进入中国。

应当采取措施鼓励跨国公司采用比中国标准更严格的环境标准，例如采用其母国的标准，使用环境友好技术，实施 IS014000 环境管理标准和环境标志，实行清洁生产等。

建议5：洁净煤技术转让及清洁发展机制（CDM）

中国煤炭储量丰富，价格低廉，因此在未来发展中煤炭仍是中国的基本能源。然而能源效率低及污染严重已成为中国煤炭使用中的突出问题。因此，国外先进的洁净煤技术在中国有较大的需求，中国洁净煤技术贸易具有巨大的潜力。

目前，大多数洁净煤技术转让的国际合作都集中在电力部门。在继续鼓励该部门进行国际合作的同时，中国也应当注意到其他非电力部门对洁净煤技术的需求。这些部门的用煤量高达中国煤炭消耗的60%。

对中国企业而言，获取先进的洁净煤设备很重要，但同时获得更广泛技术知识，全面学习掌握硬件设备的设计、制造和操作则更为重要。在多数情况下，合资企业和许可证贸易可能是技术转让的最佳途径，因为通过培训、掌握技术知识和新的管理技能，可以获得更广泛技术知识。在过去的几年中，我国洁净煤技术转让主要是通过设备进口，而对通过许可证贸易和外国直接投资方式引进技术的重视不够，今后应当在这些方面予以加强。政府应当加强对洁净煤技术转让的宏观调控，并对引进洁净煤技术的企业提供必要的支持。

中国 1997 年颁布的有关电厂的环境法规几乎与 OECD 国家一样严格，这些法规对于鼓励外国投资及技术转让非常重要。中国还应该加强环境执法及对知识产权的保护，采取相应的政策和措施，如利用经济激励和环境成本内在化的手段来加快这些新技术的推广和商品化。

同时，中国应加强本国的洁净煤技术研究，提高自主创新的能力，并提高国外技术本土化和国内转让的能力。中国技术革新的研究机构间应建立良好的关系，这将有助于实现上述目标。通过紧密的合作，中国洁净煤技术的制造企业，设计院和研究院可以提高整体能力，更好的利用国外技术。

国际环境保护公约在促进洁净煤技术转让方面发挥着重要作用。《联合国气候变化框架公约》下的《京都议定书》提出的清洁发展机制可以为中国获取洁净煤技术提供重要的经费来源。

波恩《联合国气候变化框架公约》(UNFCCC)第六次缔约国会议续会的谈判结果表明 CDM 的规则已经基本确立。京都议定书将有望从明年起生效。中国应尽快采取行动，充分利用 CDM 促进可持续发展。

尽早参与 CDM 可以确保中国西部省份获得潜在的国际投资和先进技术的引进。在 CDM 项目审批中，政府应优先考虑西部省份。中国应为参与和实施 CDM 做好必要的准备，为此应当：成立 CDM 实施中心；确定实施 CDM 项目的优先省份以及重点行业和企业；帮助企业与国外企业进行具体的 CDM 项目谈判。此外，还应采取如下措施：建立完善的温室气体监测体系，在环保部门的日常监测范围内加入对二氧化碳的监测；对适合中国的并可以利用 CDM 机制转让的技术进行界定，初步限制在各类能源洁净技术和大气污染控制技术上；建立激励机制，鼓励企业参与 CDM 项目；在初始阶段，可以采取以单项目为基础的基准线，中长期，当企业技术引进能力和谈判能力增强后，可考虑采用以行业或多项目为基础的基准线。

建议6： 行业贸易自由化与可持续发展

环境服务

环境服务在中国是一个新兴的领域。开放中国环境服务领域，实施贸易自由化意味着中国环境服务将向世界开放，参与国际竞争。这将给中国环境服务业带来挑战，但同时还为其发展带来新的机遇。对外开放将使中国环保服务业能够快速发展，满足中国环境保护日益增长的需要。

中国政府应采取加强环境立法及执法、促进技术进步和建立市场机制相结合的措施促进环境服务业的贸易和发展。环保和贸易主管部门应当加强协调和合作，制定促进环境服务业发展和对外开放的总体战略；制定“三资”企业在华从事环境服务的管理章程；修订

并完善与环境服务有关的外贸、环保和财税等方面的政策；探索将现行的“谁污染谁治理”原则改为“谁污染谁付费”的实施机制，以激励环境服务市场；调整并改进有关外资企业的优惠税收政策，使之与 WTO 国民待遇原则相符合，有利于中外环保服务企业进行公平竞争。

林业

林业对于环境保护、水土保持及生物多样性保护起关键作用，森林资源保护对于中国经济的可持续发展至关重要。中国正在开展一系列植树造林计划，一方面保护木材供给，同时也使生态环境得以恢复。中国加入 WTO 将有利于目前林地增长缓慢的情况下，使森林资源的消长达到平衡，从而进一步促进森林资源的保护与发展。

在短期内，中国应采取贸易开放、替代出口的战略，通过多种渠道进口森林资源，重新调整和优化中国森林工业的结构，并充分利用现有的生产能力。中国应进一步改善贸易结构，出口有竞争力的林副产品。从长期来讲，中国应通过加速培育人工林和加强工业用材林基地的建设，提高森林质量，为国内用材提供永久性的原料保障。同时，中国应采取必要措施，鼓励木材出口国家采取可持续性生产方式。这些措施包括：支持使用森林管理标志，鼓励实施可持续森林管理体系。

渔业

渔业在中国经济中发挥着越来越重要的作用。在过去二十年中，中国渔业生产和供应能力显著增加，由于生产快速增长，市场结构发生了根本变化，从产品从供不应求转到了供应相对过剩。同时，中国渔业发展面临着日益严重的环境制约：由于过度捕捞，海洋资源濒临枯竭；由于养殖业的无序发展，导致水域严重污染，赤潮、病害频繁发生，资源退化。加入 WTO 将为中国水产品扩大出口提供新的机遇，这无疑会进一步刺激国内水产资源的开发。为了在加快发展的同时避免或尽量减少对环境的危害，应实施一套旨在强化管理的政策措施。政府应把重点从渔业资源开发转移到对渔业资源的保护和管理上，应采取以下具体措施：制定与可持续发展原则相一致的渔业和水产业生产、销售和贸易规划；将生态保护与海洋渔业发展放在同等重要的位置上；加强对水体污染和病源的预防和控制。采取新的法规和条例促进中国渔业可持续发展；加强能力建设，为决策提供科学依据；加强渔业基础设施和支持系统的建设；探索出口机会，扩大可持续生产方式下渔业和水产品的出口。

建议 7:　中国加入WTO的贸易与环境影响

加入 WTO 将给中国经济结构带来全方位的影响，并将导致重大的社会、经济和环境影响。对加入 WTO 环境影响进行综合评价非常重要，它将有助于明确经济变化产生的环境后果，有助于明确应采取的政策措施，使中国进入世界贸易体系后可以获得最大利益，尽量减少不利影响，同时可促进中国进一步实施可持续发展战略，以及在今后参与 WTO 谈判时对贸易与环境问题确定明确的立场和观点。

因此，有必要对中国加入 WTO 的综合环境影响作进一步的深入评估，以便对中国加入 WTO 将产生的环境影响和与环境有关的贸易影响有一个清楚的认识，从而制定适当的政策和措施，减少其不利的影响。

有必要建立一个综合解决加入 WTO 可能产生的环境问题的规划。抓住加入 WTO 提供的利用结构调整来解决环境问题的机遇，尽快制定一个将生态环境融入经济系统的详细计划，以积极主动的姿态参与经济战场，确保将环境的负面影响减至最小。

同时有必要把环境问题纳入有关的贸易政策，以解决加入 WTO 可能对国内外所产生的环境影响和挑战，这包括调整中国的国家投资政策、商品和服务进出口政策，加强卫生和动植物检疫措施和其它技术标准和法规，并建立起具有透明度的贸易法律法规的发布体制。有必要在对外贸易经济合作部的牵头下，成立一个由各有关部门参与的顾问委员会。该委员会应当定期召开会议，为制定解决贸易与环境问题的决策提供建议。还应当积极研究国外的“绿色”措施，帮助企业解决将在国际市场上遇到的“绿色”挑战。

中国有必要在 WTO 的贸易、环境和可持续发展问题的讨论中持一种积极的态度，并发挥积极作用。应当组织有关政府官员和学者共同制定一系列原则，为解决贸易与环境问题提供指南。

展望未来

中国入世的法律文件已经获得通过，这意味着中国入世谈判到了终点。中国即将成为 WTO 的一员。中国加入 WTO 后，贸易和环境问题将更加突出和重要。中国将面临 WTO 议程上各种各样涉及环境的贸易问题。如果 WTO 开展新一轮的谈判，有很多问题都将涉及到贸易与环境。即使没有新一轮的谈判，贸易与环境问题也依然会包含在 WTO 现有的议事日程中，同时中国在参与多边环境保护协议和地区贸易活动中也需要重视贸易和环境的问题。

中国加入 WTO 将使中国有更多的机会进入国际市场，但是在外国绿色消费趋势下，中国一些出口产品将会受到国外日益严格的环境法规以及其它自愿性环境措施的影响，如不采取必要和有效的措施，中国出口行业可能会处于被动局面。

中国各方面应当做好充分准备迎接挑战。中国应做好参与贸易与环境问题讨论和谈判的准备，应采取加强环境保护，促进可持续发展，努力帮助企业提高其产品在国际市场上的竞争力，尤其是要提高向环境意识较高的发达国家出口的产品的竞争力。

中国加入 WTO 以后，贸易与环境问题仍是一个需要长期研究的问题，第三届中国环境与发展国际合作委员会仍应开展这方面的工作。

附录 1　贸易与环境工作组成员

中方成员:

叶汝求(中方组长)	国家环保总局前副局长，现为国家环保总局高级顾问
曹凤中 (1995-2000)	国家环保总局环境与经济政策研究中心前副主任
靳云汇	北京大学光华管理学院教授
李恩恒 (1997)	对外贸易经济合作部国际贸易经济司副司长
刘湖 (1995-1996)	对外贸易经济合作部科技司副司长
施用海 (1995-1998)	对外贸易经济合作部国际贸易经济合作研究院前院长
孙维炎	对外贸易经济大学前校长, 教授
夏光 (2000-)	国家环保总局环境与经济政策研究中心副主任
易小准 (1998-)	对外贸易经济合作部国际贸易经济司副司长
郑志海 (1999-)	对外贸易经济合作部国际贸易经济合作研究院院长

外方成员：

David Runnalls (外方组长）	加拿大国际可持续发展研究院院长
Victor Lichtinger	墨西哥环境与资源部部长、北美环境合作委员会前执行主任tke
Geoffrey Oldham	英国 Sussex 大学教授
Tadashi Omiya	日本三菱汽车株式会社执行官
Konrad von Mol	荷兰阿姆斯特丹 Free 大学教授、 美国世界野生生物基金会高级研究员
Bill Long (1998-1999)	OECD 前环境主任
Katsuo Seiki (1995-1997)	地球产业文化研究所前专务理事
Rubens Ricupero（名誉成员）	联合国贸发会议秘书长

另外工作组的工作是由以下人员协助进行的：国家环保总局环境与经济政策研究中心程路连、沈晓悦、周新、国冬梅；对外经贸部国际贸易研究院李永江、赵玉敏、杨基健；北京大学光华管理学院刘学；对外经贸大学夏友富、董虹以及对外贸易与经济部刘小伟、王燕、陈晓东。国际方面的项目协调人为加拿大国际可持续发展研究院杨婉华。

附录 2　贸易与环境工作组历年召开的会议及研讨会

会议	召开时间	会议地点
预备会议	1995．1．15-16	中国北京
第一次会议	1995．9．11-13	中国北京
第二次会议	1996．5．6-8	中国福建武夷山
第三次会议	1996．9．18-20	中国北京
ISO14000 专题研讨会	1996．11	中国北京
第四次会议	1997．4．21-23	加拿大卡尔加里
第五次会议	1998．4．20-23	中国黄山
第六次会议	1998．11．12-14	中国北京
第七次会议	1999．4．16-17	中国北京
第八次会议	1999．10．22-23	中国北京
第九次会议	2000．5．8-9	中国江苏无锡
第一届中国加入 WTO：贸易与环境问题研讨会	2000．5．10-11	中国江苏无锡
第十次会议（非正式会议）	2000．11．3	中国北京
第十一次会议	2001．5．22-23	中国哈尔滨
第二届中国加入 WTO：农业、贸易与环境研讨会	2001．5．24	中国黑龙江宝泉岭
WTO 政策研究设计研讨会	2001.8.29-9.1	中国北京

附录 3　贸易与环境工作组历年开展及完成的研究项目

与环境标准及措施有关的“绿色壁垒”和市场准入

- 环境标志及对中国的影响（1996）
- 中国绿色食品发展和环境保护(1996)
- IS014000 与中国:贸易与可持续发展展望(1996)
- 欧盟国家环境标准及要求对中国纺织行业对外贸易的影响(1999)
- 改进出口产品外包装与中国可持续发展(2000)

环境标准及竞争力(污染避风港)

- 污染避风港及中国 ODS 控制(1997)

贸易与环境政策协调

- 中国环境政策与贸易政策的协调研究(1999)
- APEC 贸易自由化:中国贸易与可持续发展(2000)

投资与可持续发展

- 国际投资规则与可持续发展:中国的角度（1999）
- 若干国家级经济技术开发区贸易、投资与可持续发展协调研究(2000)

技术转让

- 洁净煤技术转让:现状、障碍、机遇和战略研究(1998)
- 中国实施 AIJ 战略(1997)
- 从国际角度看中国的洁净煤技术转让(2000)
- 利用清洁发展机制(CDM)促进中国技术转让和外国投资的前景(2000)
- 清洁发展机制及促进洁净煤技术向中国西部转让(2001)

中国加入 WTO

- WTO 中的贸易与环境问题(2001)
- 中国加入 WTO 对贸易与环境影响的初步分析(2000)
- 贸易自由化环境影响综合评价：国内外经验回顾及其在中国的应用（2001）

行业研究

- 中国环境服务领域对外开放策略研究(2000)
- 木材贸易及中国森林资源保护（2001）
- 中国渔业贸易自由化与环境保护（2001）