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TO THE COUNCIL, THE EUROPEAN PARLIAMENT
AND THE ECONOMIC AND SOCIAL COMMITTEE

on a

Europe - Asia Co-operation Strategy in the Field of Environment

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STATEMENT OF PURPOSE

The goal of this Communication is to enhance the efficiency and the impact of the overall co-operation between Europe and Asia in the field of environment. It proposes key measures which would produce long-lasting impacts. In doing so, the Communication should become a reference for use by those co-operating or seeking co-operation in the environmental field and beyond between Europe and Asia. Furthermore, it points out that at present there is no systematic mechanism to keep track of all environmental co-operation activities conducted in Asia by the Member States. Therefore the Communication is intended to promote the concept of voluntary co-ordination between all European actors having or planning to have co-operation in the field of environment with Asia, with a view to optimising the impact of limited resources.

SUMMARY

Triggered by the 1994 European Council meeting in Essen, where the EU confirmed its intention to strengthen co-operation and dialogue with Asia, the Commission prepared this Communication.

Asia's environment: more than one issue at stake for Europe. The severity of the environmental problems in Asia have many implications for Europe. The global environment, the link to social issues, the threat to economic stability, and the business opportunities are all reasons for an environmental dialogue with Asia. Europe has already launched such a dialogue by conducting development and economic co-operation activities to protect the environment. More is needed and the impact of the resources available needs to be better focused.

Europe: a world leader in environmental technologies and services. With a long experience in environmental management and nearly 60 % of the world patents in environmental technology, Europe is well equipped to work with Asia to address its environmental issues, especially in the urban environment and in pollution reduction & prevention, which need more attention. Asian governments' acknowledgement of the increasing importance of environment has put it higher on the political agenda, and the consequent development of local markets for environmental technologies, could give rise to mutually beneficial business opportunities.

Strategy based on three pillars of environmental co-operation. The overall objective of the Europe-Asia environmental co-operation is to assist Asia protect its natural resources and reduce & prevent pollution. Current and future donor funding is insufficient. Financial mobilisation from the private sector and through more efficient pricing and cost recovery in the public sector will be critical to enhance the donor effort. Three measures should produce long-lasting impacts, provided they are applied in a co-ordinated manner at the European level:

1. Increase environment management capacity in Asia, encouraging more efficient and sustainable use of natural resources, and supporting a more sustainable pattern of wealth creation;
2. Facilitate market-based approaches to environmental protection, with emphasis on pollution reduction & prevention, and protection of natural resources; and
3. Develop, promote and support Europe-Asia environmental R&D networks; facilitate the rise of environment awareness & training, thus also validating investments in the longer term.

Four criteria for pursuing co-operation activities. European activities should be pursued according to the criteria of mutual interest, complementarity - taking into account the Member States' activities, synergy with international donors and lending agencies, and necessarily sustainability.

The Community should develop with each Asian country or region, along the three pillars indicated above, specific environmental priorities as part of a co-operation strategy, starting with the identification of the country's most serious problems. It should then pursue the dialogue on environmental aspects of mutual interest, promote a participatory approach, try to increase awareness, implement capacity building programmes, and assist European environmental entrepreneurs. It will be necessary to verify whether the existing resources are sufficient to conduct these activities.

INTRODUCTION

At the European Council in Essen (8 to 10 December 1994), the European Union (EU) confirmed its intention to strengthen co-operation and dialogue with Asian countries and organizations. The Council invited the Commission to propose concrete initiatives to this effect, within the framework of the new Asia strategy. The strategy presented in this Communication is one of these initiatives.

The Community's New Asia Strategy highlights the need for effective co-operation in the environmental field between Europe and Asia¹. Environmental concerns have also been addressed in other recent Communications related to Asia. The "Europe-Asia Co-operation Strategy for Energy" - COM(96) 308 - stresses that the development of the energy sector in Asia is already causing significant environmental damage. It calls for a strong effort to avoid that actions to reduce global CO₂ emissions are compromised by an increase of emissions in Asia resulting from growing local energy consumption. This argument is further strengthened in the "EU-India Enhanced Partnership" - COM(96)275 - which recognizes that large countries such as India hold a key position in bringing about substantial reductions in global CO₂ emissions. The Communication "Creating a New Dynamic in EU-ASEAN Relations" - COM(96)314 - recommends that information is made available in order to agree on priorities for environmental co-operation with ASEAN countries.

The severity of the environmental problems in certain Asian countries, the global nature of many of them, and the promises made at Rio require a strengthening of the environmental dialogue. Such a dialogue has been initiated in the context of the Community's development and economic co-operation activities to protect the environment, and in the context of the bilateral approach to environmental co-operation underway between the Community and several Asian states. These activities are critical because they can raise people's awareness of environmental issues, promote a participatory approach, strengthen the countries' capacity to handle environmental challenges, and mobilize private sector resources for environmental protection and business co-operation thus improving the environmental performance in a wide range of economic sectors.

The present Communication discusses how Europe could contribute to Asia's efforts to improve its environment, capitalizing on its collective strengths in this area. It indicates how the efficiency and the impact of the overall environmental co-operation between Europe and Asia can be enhanced, how the Community's environment co-operation could complement Member States' policies, and how the Commission could take initiatives to promote co-ordination. Furthermore, this Communication attempts to identify those European environmental strengths that could be advantageous to Asia and presents the activities especially suited for action at Community level.

For the purpose of this Communication, "environment" includes urban and industrial pollution, soil protection and improved management of remaining forest resources, and protection of rivers, lakes, and marine areas. The strategy covers 17 countries: **Afghanistan, Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Laos, Malaysia, Maldives, Myanmar, Nepal, Pakistan, Philippines, Sri Lanka, Thailand, and Vietnam**. Most of these countries are developing countries with a combined GNP of almost 1,300 billion ECU in 1994. GNP per capita varies from 150 ECU to 2,800 ECU, reflecting wide disparities in the economic and social backgrounds. Total population is almost three billion and the urbanization rate is increasing very fast. The GNPs of most of these Asian countries are growing at some of the highest rates in the world. Asia is becoming a prominent market, with half the human race and more than a billion consumers who will have significant buying power by the year 2000.

This Communication is divided into six sections:

¹ "Towards a New Asia Strategy", COM(94) 314 final, 13.07.1994, page 23.

Background	Analysis	Strategy
① Environmental challenges in Asia	⇒ What needs to be done	① Basis for a Europe-Asia environment co-operation strategy
② Stakes for Europe	⇒ Europe's strengths	⇒ ② Proposals
③ Existing environmental co-operation	⇒ Improvements needed	③ Criteria for selecting Europe-Asia co-operation activities

1. ENVIRONMENTAL CHALLENGES IN ASIA²

1.1. Environmental situation

Pressure on Asia's resources is intense and growing. Serious problems include water and air pollution, poor waste management, land degradation, deforestation, and the loss of biodiversity. These problems cause increased health costs and mortality, reduced output in resource-based sectors, and resulted in a loss of overall environmental quality.

1.1.1. Water pollution

Water pollution is Asia's most widespread environmental problem. The costs of cleaning up and managing water resources in a sustainable way may be the highest of any resource. Domestic sewage is the primary source of water pollution in Asia, especially in and around large urban centres. High levels of faecal contamination in Asian rivers threaten human health and aquatic life. Water pollution is responsible for substantial mortality and sickness, particularly among children. Industrialization worsens water pollution. Most industries are located in or near cities and discharge their wastes untreated into rivers. In some East Asian countries, water pollution from industrial sources has inflicted serious losses to fisheries and tourism.

Excessive withdrawal of ground water has depleted aquifers in China, India, Indonesia, Sri Lanka, and Thailand. A large part of Asia's population lives in cities along the coast; the increased use of ground water has led to salt water intrusion in Bangkok, Manila, Jakarta, and Madras.

1.1.2. Air pollution

According to the World Health Organization, 12 of the 15 cities with the highest levels of particulate matter and 6 of the 15 cities with the highest levels of sulphurdioxide are in Asia. The region is also rapidly emerging as a major contributor to acid rain and greenhouse gases. Asia's major sources of air pollution are the transport, energy, and industrial sectors.

Outdoor and indoor air pollution cause considerable sickness and death. The links between respiratory diseases and air pollution are fairly well documented and recent studies have also linked mental dysfunctions to lead poisoning for children. Estimates of the costs of health and productivity impacts are as high as 3 billion ECU per year in the Bangkok Metropolitan Region.

Asia's contribution to global warming or greenhouse gases is rapidly increasing, led by China and India. Asia accounted for about 20 % of greenhouse gases' emissions in 1985; this share is expected to be 25 to 30 % by the year 2000. Incremental growth of anthropogenic CO₂ in Asia by 2000 is expected to more than offset any savings to be achieved by limiting the already enormous emissions in OECD countries to 1990 levels.

The threat of acid rain is growing rapidly in Asia. In 1990, Asia emitted 35 million tons of sulphur dioxide; China was responsible for more than half the emissions. Two-thirds of the emissions originate from coal-fired power and industrial plants, with the rest coming from residential sources. In 2000,

² The information in this section is based on a review of documents prepared by Commission, OECD, UN, and World Bank.

Asia is expected to emit 53 million tons of sulphur dioxide, more than the combined emissions from Europe and the United States.

1.1.3. Poor waste management

Large metropolitan areas in Asia generate over a million tons of solid waste per year. This is expected to increase rapidly with economic growth and continuing urbanization. Cities have trouble collecting and disposing of waste. Uncollected waste presents major health hazards to the population, particularly the poor.

Toxic releases from industry are also increasing fast. The exact extent and range of pollutants released into the environment remain largely unknown. Many cities dump industrial toxic & hazardous waste along with domestic waste, further aggravating health problems and increasing the cost of future cleanup, as toxic waste requires special handling and treatment.

1.1.4. Land degradation

Soil degradation is significant across virtually all agro-ecological zones in Asia. Arable land faces intense pressure from farmers seeking to maintain food self-sufficiency. The nature and scale of this degradation varies widely among and even within countries in the region. In India, for example, about 27 % of the total land area is degraded and up to 50 % is susceptible to erosion.

For erosion, the most widespread hazard is water erosion, caused mainly by excessive exposure of bare soil and inadequate management of runoff. In 1989, the total cost of soil erosion in Indonesia was estimated at 280-330 million ECU per year.

Waterlogging and salinity affect China, India, and Pakistan. They lead to reduction in output, loss of irrigated cropland, and increased salt loadings on return flows and aquifers. Standing water also provides a breeding site for vectors that transmit diseases such as schistosomiasis and malaria.

1.1.5. Deforestation

Asia's forest resource is rapidly depleting. Previously dominant exporters such as the Philippines and Thailand have virtually exhausted their forests. India, historically self-sufficient, has become a major importer. Surplus countries (Indonesia, Laos, Malaysia, and Myanmar) face non-sustainable rates of forest exploitation.

Deforestation is caused by a variety of factors: conversion to agricultural land, demand for fuelwood and fodder, and commercial logging for timber. The economic impact of deforestation can be partially measured in terms of loss of income due to inefficiency, over-exploitation of resources, and loss of future production. Between 1980 and 1985, the costs of forest depletion in Indonesia, Papua New Guinea, and the Philippines were about 42 billion ECU. Based on current trends, imports of timber and forest products are expected to cost Asian countries nearly 17 billion ECU a year by 2000.

An indirect economic impact of deforestation and degradation is that it impoverishes rural populations, dependent on nearby forests for their basic needs. Deforestation in upper watersheds has been associated with increasing soil erosion, the silting up of dams, and increased flooding in the wet season followed by droughts during the dry season. The destruction of tropical rainforests in Asia has increased the global atmospheric loading of carbon by 6 %. Deforestation is the most important cause of habitat loss leading to loss of biodiversity.

1.1.6. Loss of biodiversity

About 20 to 25 % of the earth's flora and the greatest number of fauna in the region are in the wet forests of Southeast Asia. Biodiversity is seriously threatened in the wet forests of south-western Sri Lanka, the forests of eastern Himalayas, and the moist deciduous forests of the Western Ghats in southern India. Biodiversity is threatened by lack of coastal zone management, loss of wetlands, deforestation, degradation of marine resources, loss of grasslands, and a variety of other indirect

mechanisms, such as introduced species, over-exploitation of plant and animal species, pollution of soil, water, and air, and global climate change.

Nearly three-quarters of the natural habitat in the region has been lost or irreversibly degraded, especially in India, Bangladesh, Sri Lanka, coastal Myanmar, south China, Java, and Luzon Island (Philippines). Asia may lose a higher proportion of species and natural ecosystems than any other region in the next 25 years.

1.2. Underlying causes

Asia's environmental problems result from three underlying causes:

1. Lack of policy priorities and institutional frameworks;
2. Asia's large and growing population; and
3. Rapid urbanization and industrialization.

1.2.1. Lack of policies priorities and institutional frameworks

Asia suffers from a lack of strong environmental institutions able to formulate, implement, and enforce environmental policies. Lack of institutional capacity is often further weakened by jurisdictional complexity, insufficient information, and lack of broader participation. While all Asian countries have some environmental legislation, many lack the capacity to perform effective environmental planning and management. Regulations, guidelines, and standards are often not well developed, nor do they take into account the institutional capabilities and scientific knowledge available within the country.

As a result, markets do not reflect the full economic and social cost of environmental problems, nor do they realise the full value of conserving natural resources and biodiversity. Government actions may also encourage inefficient resource use, for example through low water tariffs which encourage consumers to use too much water.

1.2.2. Asia's large and growing population

Asia's population is expected to rise from 2.8 billion in 1994 to 4.3 billion in 2025, over 50 % of the projected world total. More than 700 million people currently live in absolute poverty. Population growth contributes directly to environmental damage, as economic, social, and political systems fail to keep up with the growing demands. Asia is already facing heavy resource pressures. Though food production has historically risen faster than population, this has been due to intensified agriculture, bringing its own set of environmental problems. Further expansion of the area cultivated should not be encouraged, as it would have to be at the expense of increasingly marginal forests, land left fallow and wetlands, offering limited agricultural returns and contributing to cumulative environmental degradation.

1.2.3. Rapid urbanization and industrialization

Nearly 33 % of Asia's population currently lives in cities and towns. Urban population growth accounted for 45 % of total population growth since 1960, tripling the number of city dwellers from 266 million to 840 million. The urban population is expected to triple again to 2.5 billion by 2025, when nearly 60 % of Asia's population will be living in cities and towns.

The population explosion is concentrated in a few megacities (> 8 million people). In 1990, Asia had 9 megacities, nearly half the megacities in the world. In 2000, Asia would have 13 megacities. Bombay, Calcutta, and Shanghai will each have more than 15 million people.

Urbanization is fuelled by economic growth. Large cities generate goods and services far in excess of their share of the national population. Shanghai, with only 1,2 % of China's population, generates about 12.5 % of China's industrial output. Bombay has just over 1 % of India's population, but generates over 10 % of India's industrial jobs and handles more than 25 % of India's foreign trade. The Bangkok metropolitan region, with 16 % of Thailand's population, accounts for 48 % of Thailand's GNP and 75

% of Thailand's manufacturing. In Bangladesh, nearly half the manufacturing jobs are in Dhaka, with only 6 % of Bangladesh's population.

Industrialization is also a driving force of economic growth in Asia. While industry accounts on average for 20 % of GDP across Asia, China, Indonesia and Malaysia have industrial sector shares of more than 40 %. The rapid pace of industrialization is expected to continue as Asian countries liberalize markets and relax trade regimes. Most of the industries are located in urban areas, thus aggravating urban pollution problems.

2. THE STAKES FOR EUROPE

Asia's environmental situation presents at least four areas of concern for Europe:

2.1. Global environment

Environmental problems often do not respect national boundaries. Like any country in the world, Europe is affected by the emissions of greenhouse gases and the depletion of the ozone layer. Contamination of international waters and loss of biodiversity certainly affect Europe. Asian countries and Europe have signed, along with many other countries, a number of international conventions (Biological Diversity, Montreal Protocol, Climate Change Convention) to address these issues. It is therefore in the interest of both partners to comply with these conventions, and to address global environmental problems not yet covered by conventions.

2.2. Social issues

Widespread poverty throughout the region, particularly in rural areas, is aggravating the environmental problems in the region. For survival, poor households harvest natural resources beyond sustainable levels. Workers migrating from provinces to the urban centres in the search for an improved life quality overburden these centres and increase the number of urban poor. Poverty is also directly linked to population growth and gender discrimination.

The fight against poverty in developing countries is an explicit objective of Community development co-operation. Promoting sustainable livelihoods in the countryside and improving urban and industrial environmental performance would contribute to reaching this objective and would reduce pressures on the environment.

2.3. Sustainability and economic growth

Environmental degradation coupled with a rapidly expanding population relying on limited resources can slow down Asia's economic growth. The costs of mortality and health problems due to water borne diseases, water contamination or air pollution can affect the growth prospects of Asian countries. In fact, the unsustainable use of environmental resources, water in particular, already affects Asia's urban and industrial development, especially around Asian megacities.

An Asian economic slowdown would have global negative economic implications for all those trading with Asia, including European business which has increasing direct stakes in the Asian economies through local subsidiaries and joint ventures. Although foreign direct investment (FDI) by European companies in Asia's emerging economies decreased from 15 % in 1984-1987 to 12 % in 1988-1990, behind Japan and North America, it remains substantial.³ Asian capital markets have also proved highly attractive for European portfolio investors, and about half of the equities in Asian markets held by foreigners are managed by European investors. There is, however,

³ Supporting Asian Sustainable Development, Options for the European Community, International Institute for Environment and Development, European Programme, August 1994, page 3.

mounting concern that the flow of capital into Asian economies has been based on a speculative urge to reap short-term profits, thereby sacrificing natural resources assets, such as forests. There is also evidence to suggest that foreign firms are setting up production facilities in certain Asian countries in order to benefit from the lax or absent implementation of environmental regulations.

2.4. Business opportunities

Asian industries and authorities are increasingly shaping their activities with environment management and cleaner products and services in mind. Higher environmental performance is more and more seen to play a central role in securing both productivity and competitive advantages. As Asian countries start to address their environmental challenges and improve their environmental performance, Europe can take a lead in developing partnerships with Asia, using European modern technology. With its highly developed expertise and a long tradition in improving environmental performance, the European industry can indeed make a considerable contribution. The market is large and growing, and open trade and economic co-operation should further expand mutually beneficial business opportunities.

3. EXISTING EUROPEAN ENVIRONMENTAL CO-OPERATION WITH ASIA

3.1. Member States

Member States have a wide range of tools for supporting environmental protection and enhancement in Asian countries. There are essentially four European sources of financing:

- Public development aid directed towards the most disadvantaged countries and population groups;
- Commercial promotion schemes (e.g. export credits);
- Own resources of major operators in the European wastewater treatment and waste management sectors, prepared to make sustainable investments in Asia within the framework of their new business strategies and working with local partners to enter these markets; and
- Loans granted by the European banking system, already present and active in Asia.

Currently, there is no systematic mechanism to keep track of all environmental co-operation activities conducted in Asia by the Member States. In some Asian countries, the Commission and the Member States have started to develop such mechanisms. On China, for example, a contact group including the Commission and the Member States co-operating with China has prepared a matrix to identify on-going and planned environmental co-operation activities. This type of initiative should be expanded as a means of avoiding potential duplication of effort and contributes to a more concerted European action.

3.2. The Community

A number of bilateral agreements exist already between the Community and Asian countries. Also the general dialogue such in the context of ASEM includes environmental issues.

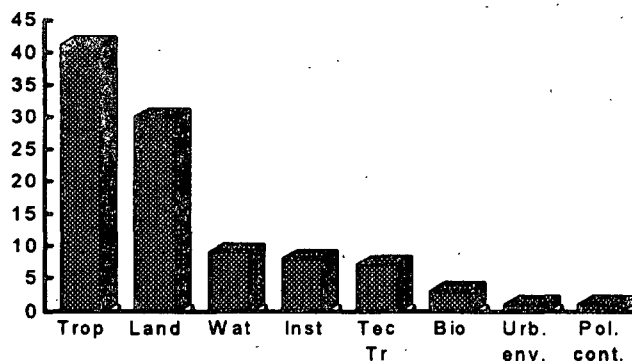
3.2.1. Commitments and main activities

As environmental concerns are an integral part of many activities, it is difficult to define an "environmental project". The Commission however estimated its 1994 commitments in Asia to environmental issues and tropical forests at 130 MECU⁴. This estimate indicates that funding for environmental projects in Asia exceeds 10 % of the total funding committed to Asia, thus meeting the requirement of Council Regulation 443/92. For Asia, 88% of the funds committed went to tropical

⁴ Report from the European Community to the UN Commission on Sustainable Development on its Progress Towards Sustainability. Prepared for the Fourth Session, April 1996, Research and Development. The 130 MECU figure includes 105 MECU from the regional budget line for Asia, 10 MECU from two specific budget lines on environment and tropical forests, and 15 MECU for Research and Development.

forests (41%), land resources (30%), freshwater resources (9%), and institutional strengthening (8%). The remaining 12% went to technology transfer (7%), biodiversity (3%), urban environment (1%), and pollution control (1%).

ENVIRONMENTAL FUNDS COMMITTED BY THE COMMUNITY



The next table gives details on the funds committed during 1990 - 1995 to primary and secondary environmental projects⁵ on the main budget lines for Asia. It totalled 596 million ECU⁶.

Theme (amounts in million ECU)	Committed	%
Tropical forests	128,58	40,16 %
Land resources	94,31	29,45 %
Freshwater	27,31	8,53 %
Institutional strengthening	26,26	8,20 %
Technology transfer	23,75	7,42 %
Biodiversity	10,18	3,18 %
Urban environment	4,36	1,37 %
Pollution control	3,85	1,20 %
Marine	1,47	0,46 %
Climate change	0,11	0,03 %
Total to primary environmental projects	320,18	
Total to secondary environmental projects	274,82	
Total for both	595,00	

Regulation 443/92⁷ also states that "consideration shall be given in all operations to protecting the environment and natural resources". In 1993, the Commission established Environmental Impact Assessment (EIA) procedures which is a means for meeting this requirement.⁸

In addition to the above the following activities are supported by the Community:

⁵ Environmental projects have in this table been divided in Primary Environmental Projects (those projects which have a specific environmental purpose), and Secondary Environmental Projects (those sectoral projects which incorporate funding for specific environmental activities).

⁶ Resources from the regional budget line for Asia, the environment budget line and the tropical forest budget line

⁷ Council Regulation (EC) No 443/92 of 25 February 1992 on financial and technical assistance to, and co-operation with, the developing countries in Asia and Latin America, Official Journal No L 52, 27.02.1992, p. 1

⁸ The Commission has since been continuously working to further improve these procedures and make them more effective. During the 1943rd Council meeting (General Affairs, 15-16 July 1996), the Council adopted a resolution to emphasize the importance that the Community places on the systematic use of environmental impact assessment to provide decision-makers with crucial information for project selection, design, and implementation. The resolution recognises the need to expand environmental impact assessment procedures to cover not only projects, but also development co-operation programmes, plans, and policies. It stresses the importance of supporting developing countries to strengthen their institutional capacity in environmental impact assessment policies and practices.

- The budget lines for co-financing with NGOs and for Training and Awareness-raising of development issues, can be used to support projects with an environmental component;
- Training activities are carried out under the Synergy Programme since more than 15 years at four different energy centres in China⁹, focusing mainly on energy efficiency technologies. There is also Synergy sponsored training for the coal sector in China, focusing on clean coal technologies;
- Thermie sponsored activities are taking place in Asia relating to energy and the environment, as well as on the promotion of new and renewable sources of energy;
- The Energy Management Centre in New Delhi, India, and the ASEAN-EC Energy Management Training and Research Centre (AEEMTRC) in Jakarta, Indonesia, include the promotion of energy efficiency to reduce the environmental impact of energy consumption.

S&T Co-operation has been supported by the Community through three successive "Science and Technology for Development Programmes" (STD) from 1983 to 1994, as well as through the "International Scientific Co-operation Initiative" (ISC) from 1985 to 1994. Currently, under the INCO-DC (International Co-operation with Developing Countries) Programme of the 4th RTD Framework Programme, a sizeable part of the 30 % funding earmarked for research on the sustainable use and management of natural resources, supports co-operation with Asia. The large demand for S&T co-operation with Asia reflects the interest of Asian scientists to participate in internationally competitive co-operation programmes.

The EU-China Environmental Management Co-operation Programme (EMCP) has been devised as the initial concrete step towards assisting in China's effort to improve its environmental performance. The general objectives are to minimise China's contribution to global environmental degradation particularly as regards greenhouse gas emissions and air pollution; to encourage sustainable development of the economy; to promote and develop exchanges on environmental issues of mutual interest; and to contribute towards an optimal co-ordination of the European environmental assistance effort being offered to China. Institutional capacity building, natural resource protection, pollution reduction and elimination, fostering dialogue in the legislative and fiscal areas and awareness raising are included in the specific objectives. Integration of environmental considerations into other policy areas in China is also a prime objective. This programme, valued at 18,9 million ECU (13,9 million ECU provided by the Community) has been agreed in principle by both sides.

EBIC and TW. The Community is also supporting economic co-operation with Asia through the European Business Information Centres (EBIC) and Technology Windows (TW). EBICs, set-up in collaboration with the locally-based bilateral Chambers of Commerce and Business Associations of the Member States, provide commercially relevant information and value-added services to European and Asian companies. TWs, concentrating on facilitating technology related co-operation between Asia and Europe, are instrumental in creating a quality image for the European capabilities and technology in the specific sector. Sectors for which TWs are developed enable the growth of other sectors, i.e. they are "enabling". EBICs and TWs have been quite active in the environmental field. EBICs are established or under preparation in Manila, Bangkok, Kuala Lumpur, Bombay, Jakarta, Vietnam, Singapore and Sri Lanka. One of the two operational TWs represents exclusively the environmental field (Regional Institute of Environmental Technology - RIET - in Singapore) and the other TW is quite involved in the environmental field (COGEN: promoting opportunities for electricity generation from biomass).

Asia-Invest Programme, Asia-EcoBest and other Sectoral Programmes. The Asia-Invest Programme and other Sectoral Programmes targeting Asia facilitate growth in two-way trade and investment flows between Europe and Asia. It also helps to raise Europe's profile in Asia, increases

⁹ In Chongqing, Hangzhou, Nanjing and Shanghai.

awareness of opportunities in Asia among European organisations and assists companies from less developed Asian countries to enter into mutually beneficial co-operation with European companies. As a consequence of the increasing importance given by Asia to environmental issues, the Asia-EcoBest project (13 million ECU total budget) has been launched.

ECIP. Given the increasing importance of foreign direct investment (FDI) for the sustainable growth of developing countries, the Commission designed in the late 1980s a flexible instrument, the European Community Investment Partners scheme (ECIP) to promote joint ventures, among others, in Asian countries between local and European operators. Between 1988 and 1994, ECIP has financed more than 300 projects (for a total of about 50 million ECU) in Asia. Environmental projects represented 2 million ECU.

GSP. The European Community's Scheme for Generalised Tariff Preferences (GSP) includes some provisions intended to encourage beneficiary countries to undertake effective environment protection policies. The GSP regulation on industrial products¹⁰ provides that as from January 1998, additional preferences may be granted to countries able to prove they have adopted and are applying ITTO standards relating to the sustainable management of forests. The GSP regulation relating to agricultural products¹¹ includes a similar provision in relation to agriculture. The Commission is studying the modalities for putting these preferences into practice.

3.2.2. *Dialogue*

ASEM. The development of joint policies in the area of environmental protection is among the 6 main areas for future Europe-Asia co-operation retained in the Chairman's conclusions from the 1st Asia-Europe Meeting (ASEM) in Bangkok¹². ASEM acknowledged the importance of addressing environment issues such as global warming, protection of water resources, deforestation and desertification, bio-diversity of species, and marine environmental protection. ASEM also suggested that mutually beneficial co-operation should be undertaken in this field including the transfer of environmentally sound technology to promote sustainable development.

In the context of ASEM, the Community assisted its Asian partners in planning an Asia-Europe Environmental Technology Centre - AEETC - to mainly undertake R&D activities, and provide some policy guidance to Asian governments.

ASEAN. In terms of EU-ASEAN co-operation, the Commission in its Communication "Creating a New Dynamic in EU-ASEAN Relations" - COM(96)314 -¹³ considers the protection of the environment as a key concern and proposes to improve environmental co-operation through increased exchange of information and attention to priority areas in this field. Such priorities include: enhancing ASEAN states' capacity to develop and implement effective environmental legislation, inviting members of government, industry and other interest groups to share responsibility for the protection of the environment, encouraging ASEAN participation in the pursuit of regional and global environmental objectives, and ensuring the installation of appropriate technology for mitigating pollution, especially from new industries, vehicles and energy production.

¹⁰ Council Regulation (EC) No 3281/94 of 19 December 1994 (Art. 8) applying a four-year scheme of generalized tariff preferences (1995 to 1998) in respect of certain industrial products originating in developing countries, Official Journal No L. 348, 31.12.1994, p. 1

¹¹ Council Regulation (EC) No 1256/96 of 20 June 1996 (Art. 8) applying multiannual schemes of generalized tariff preferences from 1 July 1996 to 30 June 1999 in respect of certain agricultural products originating in developing countries, Official Journal No L. 160, 29.06.1996, p. 1

¹² Chairman's Statement of the Asia-Europe Meeting, Bangkok, 2 March 1996.

¹³ "Creating a New Dynamic in EU-ASEAN Relations", COM (96) 314 final, July 1996.

3.3. European Investment Bank (EIB)

Since 1993, EIB has extended its lending operations to Asia under a three-year Council mandate covering Latin-American and Asian countries. This mandate was extended to the end of 1996 and a new three-year mandate is being discussed by the Council. EIB lending in Asia during the first mandate amounted to 322 million ECU. The EIB projects in Asia are not specifically directed towards environment but mainly concentrate in the energy and transport sectors (construction of natural gas pipelines to replace coal in Thailand and Indonesia, natural gas exploitation in China, hydroelectric power in Pakistan, and airport extension in the Philippines)¹⁴. In Latin-America, EIB has financed a larger number of environmental projects (water supply and sanitation in Argentina and Paraguay and hazardous waste treatment in Buenos Aires). EIB is currently considering similar projects in Asia. EIB's actions are increasingly geared towards financing the European private sector. This approach complements the actions of other bilateral and multilateral financing institutions and of private banks.

4. BASIS FOR A EUROPE-ASIA ENVIRONMENT CO-OPERATION STRATEGY

4.1. Mobilize the private sector

The World Bank estimates Asia's environmental needs at 34 billion ECU a year by the year 2000¹⁵. In 1991, the total level of donor lending was 1.2 billion ECU, less than 5 % of the needed amount. Since current (and even future) donor funding is far from meeting Asia's environmental investment needs, financial mobilization of the private sector, and more efficient pricing and cost recovery in the public sector, will become increasingly important themes in the environmental arena. In addition, it is necessary to create a framework which will ensure that foreign direct investment (FDI), now much larger than aid, supports the shift to technologies and practices which better respect the environment.

The Communication on Trade and the Environment¹⁶ states that economic performance and environmental performance are not necessarily incompatible. While achieving environmental benefits can entail additional short-term costs, there is a wide range of "win-win" opportunities in the design and implementation of environmental policies, which could improve resource efficiency, competitiveness, and employment.

4.2. Focus on sectors which are today's priorities for Asia

4.2.1. *More emphasis on urban and industry related issues*

Asia's rapid urbanization and industrialization are increasingly shifting Asia's environmental priorities from natural environment to urban and industry related issues. A preliminary survey, still to be completed by an overview of the environmental activities of the Member States, showed that in the follow-up of the Rio Conference, most donors have focused on natural environment related issues. Urban and industry related issues only recently started to receive more attention within the Community. For example, only 2 % of Community funds have been committed to urban environment and pollution control. Future environmental co-operation with Asia will need to better address urban and industry related issues without neglecting natural environment issues. The Community will have to develop adequate policies and instruments for this.

14 For many years, the environmental issues of project financing have been EIB's major concern. EIB's environmental policy statement summarizes the strict environmental guidelines and procedures applied by EIB in all of its lending operations.

15 Toward an Environmental Strategy for Asia, Paper 224, The World Bank, Washington DC, December 1993.

16 "Trade and the Environment", COM(96) 54 final, 28.02.1996.

4.2.2. More emphasis on pollution prevention and cleaner technologies

To date, donors have focused little assistance on helping developing countries adopt new pollution prevention and cleaner production processes or technologies. Even when these have greater front-end costs than conventional pollution control technologies, cleaner technology can be less costly in the long term as it uses materials and energy more efficiently and produces less waste for treatment.

This shift from "end-of-pipe" equipment and clean-up services to integrated and cleaner environmental technologies will affect the environment industry by increasing the importance of research, design, consulting and other services across all industrial sectors directly or indirectly associated to environmental cleanup or remediation. There is also a need for developing integrated approaches for the economic sectors contributing to environmental degradation. These approaches should steer them toward better environmental practices.

4.3. Start from European strengths and go for "win-win" opportunities

Asia cannot stop its environmental degradation and protect its natural resources without addressing the causes underlying the current situation. When looking for solutions, Asian countries can benefit from the diversity of the Community's know how, institutional capacity, innovative policies and financial experience.

Europe is traditionally strong in raising public awareness, providing environmental education, promoting participatory environmental decision making at the local level, creating novel environment regulations, raising consumer awareness, developing eco-labelling schemes, as well as implementing cleaner and environmentally sound technologies. A state-of-the-art European environment technology base has emerged after two decades of environment protection directives. An area where Europe is particularly competitive is on water and wastewater management¹⁷. Europe's broad experience in regional co-operation, in environment standards and regulations, and on other more market based approaches, could be very useful to Asia's economic integration process.

Consequently, the Community can provide highly relevant support to address the needs of the Asian countries by facilitating and accompanying the activities of Member States and their operators in Asia. Based on the above strengths, mutually beneficial opportunities exist in the following three areas:

4.3.1. Environment management capacity building

Asian public and private decision makers are increasingly aware of the costs of environmental degradation (lower productivity, higher medical expenses). As a consequence, environmental issues, once neglected, are moving higher up Asian agendas. This gives Asia the opportunity to improve environmental policies, enlarge environmental management capacity, implement a control and monitoring capability, and move from curative action to more preventive policies including the introduction of cleaner production.

To reach long-term sustainable development, environmental institutions of Asian countries must dispose of a high level of technical, managerial and political skills. In the past, such institutions used to be reactive, i.e. rejecting and setting limits to development proposals, thus complicating and delaying their implementation¹⁸. With increased environmental management capacity, they would have the opportunity to be proactive, setting limits and requirements when projects are designed, applying a participatory approach, and enabling efficient enforcement of the requirements because of the full support of national, provincial, and local decision makers.

¹⁷ The promotion of technologies for a sustainable use and management of water is the primary aim of the Task Force "Environment - Water", launched by the Commission under the 4th RTD Framework Programme.

¹⁸ Study for A Regional Strategy for Danish Environmental Assistance to Southeast Asia, Draft Final Report, Ministry of Foreign Affairs (Danida) and Ministry of Environment and Energy (Danced), Page 5 - 11.

Europe has built a strong capacity for environmental management which regroups four main types of activities: (1) policy analysis (development of policy instruments; such as legislation and regulations, market-based instruments); (2) technical engineering (site assessment, process design, control specifications, project management); (3) environmental consulting (impact assessment, environmental audits, environmental monitoring, risk management); and (4) management services (expert system, financial analyses, data base management).

4.3.2. *Market based approaches*

There is a large and increasing demand in Asia for equipment and technologies to reduce and prevent pollution, and for protecting natural resources. Opportunities for environmental improvement can be identified in a wide range of economic sectors with an impact on the environment such as industrial production, energy, transport, agriculture, and public works.

In the energy sector for example the development and use of 'clean coal' technology represents a substantial opportunity for Europe, as coal is used on a massive scale in some countries such as China and India. Indonesia as well, which has large reserves, is considered an attractive market for clean coal technology. Coal already accounts for some 30% of all energy consumed in Asia. Electricity generation using coal will continue to grow very rapidly (60% of the additional installed capacity in China). This will have important environmental consequences at local and world-wide level.

The transport sector, strongly influenced by the large economic growth in Asia, makes considerable demands on the environment. Policy decisions on standards of marine equipment, the operational and accidental discharges of oil at sea, the increase of passenger transport by air, and the problems of urban transport in several cities in Asia represent environmental challenges and market opportunities. The possibilities for technology transfer and large return on investment in improving transport-related energy efficiency and pollution reduction in outdated transport equipment may be very attractive in certain parts of Asia.

Information & Communication Technology (ICT) is at the forefront of decisive technological advances in environment protection (environment monitoring, risk control, management systems, simulation, etc). ICT is also a means to spread best practices. The use of ICT based approaches to environment protection, and the systematic use of ICT as vehicle for exchanges of experience, facilitation of information access, technology transfer and keeping-in-touch with trends in environment R&D, would enhance the impact of the efforts deployed. The experience which the Commission has with the ICT programmes such as Esprit could serve as an example in both cases.

As a result of economic growth and increasing public and political environmental awareness, Asia is one of the world's most promising future markets for the introduction of environmentally sound technology, including cleaner technologies and cleaner production. The Regional Institute for Environmental Technology (RIET), an EC-Singapore initiative, estimates Asia's environmental market at between 17 and 50 billion ECU a year. According to the OECD, Asia's share of the global environmental market is expected to rise from 4 % in 1992 to 14 % in 2010, reflecting an estimated 12 % annual growth rate¹⁹. In 1993, the ASEAN nations represented an environmental market of about 1,5 billion ECU a year. India and China are increasing their investments in environmental protection, pollution reduction and prevention. China committed 13 billion ECU on environmental protection or projects including environmental improvements in its five-year plan that ended in 1995.

In many countries, regulations drive demand for environmental products and services. Because the political attention has been primarily focused on economic growth, firms have been slow to invest in environmental protection. Now the situation is changing rapidly as polluting firms shift from a passive attitude to a more pro-active tackling of the problem, often ahead of legislation and driven by concerns

¹⁹ The Global Environmental Goods and Services Industry, OECD, 1994, Table 6 and Page 23.

for eco-efficiency. This is quite true in Asia, where companies are increasingly focused on exports and want their products to meet environmental standards.

Achieving environmental improvements at least cost would enable countries to do more with the same financial resources, thus further increasing the market potential. Instruments of environmental policy that foster cost-effective solutions include environmental taxes and "tradable emission permits".

4.3.3. Innovation and research & development

Asia has the opportunity to generate knowledge and develop innovative and appropriate technologies to solve the problems described previously, and to reach a sustainable economic development. By fostering relations between researchers and institutions, Asia could broaden its research and technological capacities at the human resource and institutional levels. This opportunity in research and development is also an opportunity to strengthen the links with the economic sectors responsible for product development and distribution.

Innovation and research will be more efficient and productive if high quality Asian institutions are more involved in international research activities. The co-operation activities of the Community RTD Framework Programmes are good examples of what can be achieved in the international context, and the experience gathered can be exploited as an asset for Europe.

Many Member States have government programmes to support environmental technology development. Environment R&D expenditures (see Box 1) as a percentage of total government R&D support are higher in the Member States (between 1 and 4 %, with Denmark at 4.5 % and the Netherlands at 4.2 %) than in the United States (0.7 %) or Japan (0.5 %). In the 4th RTD Framework Programme of the European Community 8.8% of the total budget is for Environment work.

BOX 1

ENVIRONMENT R&D: INDICATIVE GOVERNMENT BUDGET APPROPRIATIONS (in descending order on the % of total R&D appropriations)

Country	Environmental R&D (ECU million in Purchasing Power Parities, 1992)	Share of total government R&D appropriations (%)
European Community ²⁰	230,21	8,8
Denmark	23,7	4,5
Netherlands	76,7	4,2
Germany	445,4	3,6
Austria	18,4	2,3
Italy	149,6	2,2
Greece	4	2,1
Finland	14,1	2,0
Spain	43,3	1,9
Belgium	15,3	1,7
United Kingdom	94,8	1,3
France	126,6	1,1
Ireland	1,3	0,8
United States	409,9	0,7
Japan	50,3	0,5

Source: 4th RTD Framework Programme 1994-1998; and "The Global Environmental Goods and Services Industry", OECD, 1994, Table 19 page 35

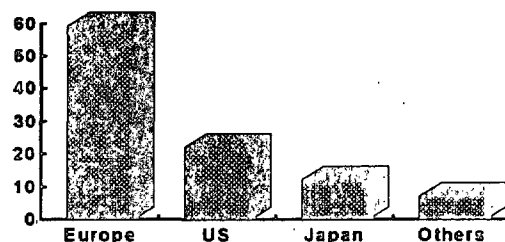
20. 4th RTD Framework Programme 1994-1998

21. Averaged = 1150 million ECU for the period 1994-1998 divided over 5 years

One of the most important indicators of a country's potential for growth in the technology sector, is its share of international patents. With the environment industry in a state of rapid technological flux, future markets will be won by the technological leaders. Europe dominates the world's environment industry.

PATENTS IN ENVIRONMENTAL TECHNOLOGY 1985-1988 (%)

Country	Percentage Share
Europe	59
United States	22
Japan	12
Others	7
Total	100



Source: 1993 European Commission Report "The Future of Industry in Europe"

5. PROPOSALS

As implied in the Statement of Purpose at the beginning of the text, this Communication aims to provide over-arching elements: i) to the Europe-Asia environmental relationship in order to improve the efficiency and effectiveness of relations on the environment; and ii) to the resources available to put those relationships into practice. The following steps will help improve the environment co-operation, and will increase its proficiency:

1. Focus on three key areas of activities;
2. Pursue the environmental dialogue on the basis of specific strategies for each country;
3. Increase the effectiveness of the Europe-Asia co-operation
4. Allocate sufficient resources to meet the challenges.

5.1. Focus on three areas of activities

The specific environment needs and concerns will vary among countries in Asia and will have to be envisaged at a subregional or national level in co-ordination with the Member States. Nevertheless, the following areas were identified as a key to producing long-lasting impacts in all countries:

1. Enlarge Asia's environmental management capacity;
2. Facilitate market-based approaches to environmental protection, with emphasis on pollution reduction and prevention, and protection of natural resources; and
3. Strengthen the Europe-Asia environmental R&D network.

5.1.1. Develop Asia's environment management capacity

The mobilization of national or international private capital and the development of trade in the environment field requires appropriate environment policies. These policies should provide a legislative and regulatory framework, including the use of market based approaches, clearly defining the rules between environmental operators and countries, and providing the necessary guarantees to investors and commercial partners.

To enlarge Asia's structural capacity to tackle environment issues, the Community should:

- Work together on the development of monitoring capabilities which offer greater transparency, and assist Asia's policy-makers in building up organizational, managerial, and technical capacity to address environment issues at the local, regional, national, and global levels.
- Offer assistance with the formulation of policies or adaptation of institutional frameworks, depending on the national priorities of the countries concerned, by making expertise available, supporting human resources development, master plans or strategic studies, and assist in establishing a participatory approach.
- Foster a broader Europe-Asia dialogue on environment policy instruments and legislation procedures (e.g. environmental impact assessments, enforcement, and control); fiscal and institutional reform; awareness and information development; training and research; and more market based approaches.
- Ensure greater exchange and transparency of information on environmental issues.
- Assist in providing information to Asian and European producers and traders about the increasingly important voluntary environmental approaches in the two regions. Such approaches include: environmental agreements, eco-labelling schemes, EMAS, certification, ecologically produced foods, etc...
- Encourage participation of the public and private sectors and NGOs on environmental aspects of relevance to the wider communities of Asia and Europe.
- Prepare and conduct training on environmental issues (especially urban), and produce and disseminate high quality training materials.
- Monitor developments in environment management, auditing, product verification, environmental certification (ISO 14000 and EMS) and quality control. Publish sectoral performance analyses reports and offer advise on these to Asian partners.

5.1.2. Facilitate market-based approaches to environment protection, emphasising pollution reduction & prevention, and protection of natural resources

A strengthening of the role of market operators would be mutually beneficial, both from an environment and from an economic point of view. Europe's private sector can bring along with its investments or co-operation initiatives, environment technologies and services, including cleaner technologies and environmental best practices - EBP - which could contribute effective solutions to Asia's environment problems. Environmentally sound technologies, including cleaner technologies, will help protect the global and local environment, and will bring commercial benefits to both European and Asian suppliers of such environmental sound technologies and services. The users of the environmental conscious technologies and services will enhance their environmental performance while increasing their efficiency and profitability.

The Community should facilitate market-based solutions, and:

- Assist in the promotion of European environmental products and technologies through a specialized market and technology advisory service as a complement to existing trade promotion structures.
- Create awareness for environment friendly products and processes of relevance to the larger population.
- Identify key polluting sectors and organize, co-ordinate, and publicize the implementation of highly visible pilot demonstration projects (primarily on pollution prevention) in various sectors of the economy, on subjects which demonstrate the effectiveness of various European environment technologies and EBP.

- Help publicize tried European technologies and EBP, and promote their potential. If necessary, the Community can help to speed up the recourse to innovative solutions, e.g. through the use of new information technologies (Internet, CD-ROM). In this context it would be useful if RIET (see Box 2) were to set-up a database on available EBP and know-how. In the interests of both Asian partners and European enterprises, the Community can also facilitate access to new markets and assist in particular SMEs in setting up business consortia or co-operation networks and partnerships.

BOX 2

REGIONAL INSTITUTE OF ENVIRONMENTAL TECHNOLOGY IN SINGAPORE
RIET: DRIVING ENVIRONMENTAL BUSINESS IN ASIA

In 1993, the Community and Singapore jointly established RIET to promote the transfer and exchange of environmental know-how and services between Europe and Asia. In three years of operation, RIET became a centre of excellence and a source of expertise with strong institutional links across Asia.

RIET is in direct contact with governments, financing institutions, environment standards organisations, and trade bodies. RIET champions environment policies, regulations, and standards to support sustainable economic growth. It developed capacity building and business facilitation services for a global network of 10,000 businesses around the world. RIET's network contains many leading suppliers of environment technology and management companies from Europe and the Asia-Pacific region. To serve suppliers, RIET opened the door to over 4,000 customers in the region through market information, client-centred research, effective promotion, and business development support. Driving demand, RIET helps each year several hundreds of Asian companies address environment problems through environment management support and project or equipment brokerage.

For the period 1997-2002, the Community reserved 8 million ECU for the Asia-EcoBest project. It will promote European environment best practices and business and will be operating through RIET. Asia-EcoBest will promote and satisfy, through a method of co-financing, an increased demand in respect of environment related "Awareness & Promotion", "Information & Intelligence", "Human Resource Development", "Diagnostics" and "Matchmaking" in both the less and more advanced countries of Asia. RIET will seek to attain the objectives by designing and marketing an attractive package of "service tools" including: conferences and courses; training kits and material; surveys; Environment Impact Assessments and other diagnostic activities; facilitating business co-operation contacts and gatherings; brokering best-practice pilot projects and activities; provision of short-term consultancy services; publication of reports and production of newsletter(s) and other information materials. The management structure adopted for Asia-EcoBest will ensure a tuning of its operations to the needs of the environment sector.

- Organize short-term visits or information seminars in Europe and Asia to raise awareness of available European environmental goods and services - RIET has already organized such events on environment management systems, ISO 14000 standards, clean technologies, and pollution reduction and prevention systems. In the area of solid waste management, the Community could for example, initiate exchanges involving European cities that have successfully addressed their waste management problems. Similar exchanges could be conducted with European industries that have successfully reduced their pollution loads.
- Advise European and Asian suppliers of EBP on available opportunities in Asia through conferences, seminars, workshops, publications, and environmental awareness raising courses for companies.
- In synergy with multilateral agencies, support training scholarships in Europe or long-term missions of European experts to Asia in the context of contracts between European or Asian countries and environmental companies, or as part of innovative financial schemes (Build Operate Transfer, Build Operate Own, Third Party Financing). These scholarships or missions could deal with technical, economic, or legal issues.

- Assist European and Asian companies by increasing their awareness of European solutions and by implementing capacity building programmes. In addition, the Commission should also work directly with companies in initiatives at Community level. The Community could help find openings for European operators in these extremely competitive markets and encourage industrial and business co-operation between environmental operators in Europe and Asia, or could support exchanges of personnel for short periods.
- Promote efforts to encourage companies to use the existing support tools for financing, in particular ECIP and EIB. Depending on actual needs, the Community could also develop new modalities to support SMEs.

5.1.3. Develop, promote and support the Europe-Asia environment R&D network

A strong Europe - Asia environment R&D network between industries, research centres and universities will generate the know-how, develop innovative and appropriate technologies needed to improve Asia's environment, and assist Asia in its sustainable economic development. To strengthen such a network, the Community should:

- Stimulate co-operation among Asian and European environment industry research teams, universities and research centres to foster awareness building, education, and innovative solutions. Encouraging the use of European environment technology, and training and exchange of scientists, technicians and managers from Asian countries should be particularly promoted. The experience acquired within the RTD Framework Programmes and the Task Force "Environment - Water" may offer a valuable contribution.
- Further encourage high quality European and Asian institutions to join international research activities addressing global issues such as greenhouse effect, control of urban growth, and assessment and conservation of natural resources. Use should also be made of the European Network for Research in Global Change (ENRICH).
- Strengthen the links between R&D and the economic sectors responsible for product development and distribution, by fostering relations between Asian researchers and industries and by enhancing Asian research and technological capacities at the human resources and institutional levels.

5.2. Pursue the environmental dialogue with Asia and develop country strategies

The Community should pursue the dialogue with Asia on environment aspects of mutual interest, such as public awareness, institutional strengthening, pollution prevention, and natural resources protection. This dialogue will allow to define priorities in each Asian country and increase the effectiveness of Europe-Asia co-operation. Account will have to be taken of activities carried out by international organisations.

For each country, the Community should work towards a specific environment strategy, developed with the Asian partner, taking existing strategies as starting point, and, to the extent possible, be co-ordinated with relevant Member States and international organisations. These strategies will recommend efforts to achieve a sustainable production and consumption.

5.3. Increase the effectiveness of Europe-Asia co-operation

Environmental co-operation with Asia should be improved by making the internal procedures of the European donors more effective. The following measures can be envisaged:

5.3.1. Strengthen synergy with Member States' programmes

As indicated earlier, there is currently no systematic mechanism to keep track of all environmental co-operation activities that the Member States are conducting with Asia. This is a potential area for improvement which would require a close and continuous dialogue between the Member States and

the Commission on their respective activities and policies in order to enhance a more coherent European policy towards Asia. As an example: an information and co-ordination mechanism, such as the one developed for China (i.e. a contact group and matrix, showing the activities of the Member States in the different areas) could avoid potential duplication of effort. The Commission's role should be complementary to that of the Member States and aim at ensuring a concerted Community action along the pillars specified in section 5.1. Member States should also be encouraged to exchange views on procedures and methodologies to spread good practices and avoid duplication of efforts.

5.3.2. Increase flexibility

The set of environment strategies developed in co-operation with the Asian partners, in the context of the overall co-operation strategies with the countries, could be accompanied by an approved environment co-operation framework with specified budget and duration. Within such a framework, the Community can then co-finance projects immediately after identification and comparative evaluation, provided they meet the criteria fixed in the framework.

5.3.3. Increase EIA's effectiveness

Environmental concerns should be integrated into all economic sectors. By taking environmental criteria into account, countries will achieve sustainable development as a result of improved production techniques and product quality. Savings in the use of raw materials and energy will result. One tool for incorporating environmental concerns in various economic sectors is Environmental Impact Assessment (EIA). EIAs are too often conducted after a project has been designed as a way to justify, a posteriori, the project's environmental soundness. To be effective, EIAs must be undertaken in parallel with other preparatory studies so that the results can be integrated in a project's design. Environmental procedures should also be expanded to co-operation programmes, plans, and policies, as requested by the Council and the Member States.

5.3.4. Develop indicators

Various indicators should be developed to monitor the impact of co-operation activities. Examples of indicators include: reduction in the ambient pollution level (air, water, soil) over the course of a given co-operation activity, amount of resources used per entity of production, surface area of land covered by forests in a given region, etc. These indicators can also be used to evaluate co-operation activities once they are completed.

5.4. Allocate sufficient resources to meet the challenges

Asian countries need to mobilize about 34 billion ECU a year for environmental investments from the public sector and from the national and international private sector. To better face the challenges, the Community will have to give careful consideration to whether a need exists in the medium to long term for increasing financial and other resources for Europe-Asia environment co-operation. For such considerations to be valid, a continuous flow of information on budgets and the content of actual Europe-Asia environment co-operation by the various donors in Europe and in Asia, is essential. This would allow a better definition of the amount of the additional financial package that may be needed.

For the environment co-operation to be effective, it is essential that appropriate tools and instruments, in line with the requirements of Asia as reflected in Chapter 4, are developed.

6. CRITERIA FOR SELECTING EUROPE-ASIA ENVIRONMENT CO-OPERATION ACTIVITIES

Environmental co-operation activities will be selected according to the following criteria:

6.1. Mutual interest

The identification of a mutual interest between Asia and Europe will be the starting point to justify each activity. Both regions should benefit. Moreover, the partnership concept implies that both sides will make resources available in the interest of the project. The RIET approach has shown that Asia has already accepted this principle.

6.2. Complementarity with Member States' activities

The Community's Europe-Asia co-operation activities should avoid duplicating the bilateral activities of Member States and focus on projects that have a real "European" added value. In particular, the Community should favour activities requiring a range of European know-how and technology, and addressing sensitive issues where Asian partners expect an objective assessment of technological, legal, and institutional options.

6.3. Synergy with multilateral agencies

Regular consultations with multilateral agencies such as EIB, WB, ADB, UNEP-IE and UNDP will ensure that various activities are consistent with and complement each other.

6.4. Sustainability

The Community's assistance is the catalyst that will enable a dialogue and exchanges between Asia and Europe. As such this assistance is limited in time. Therefore, European activities must be designed and implemented in a way that allows all of the actors involved to pursue their activities, once Europe's assistance stops. Taking into account social and gender aspects, in particular the needs of urban and rural populations, and promoting a participatory approach, should also help achieve sustainable development.

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