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**SECOND  
ASIA-PACIFIC EXPERT  
MEETING ON**

**PROMOTING  
SUSTAINABLE  
CONSUMPTION  
AND PRODUCTION**

**SEOUL, REPUBLIC OF KOREA,  
6-7 NOVEMBER 2003**

**BACKGROUND PAPER**

27 October, 2003

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This paper provides background information for the Second Asia-Pacific Expert Meeting on Sustainable Consumption and Production.

## Abbreviations and acronyms

<b>ADB</b>	Asian Development Bank
<b>CI</b>	Consumers International
<b>CP</b>	cleaner production
<b>CPC</b>	cleaner production centre
<b>CSD</b>	Commission on Sustainable Development
<b>DTIE</b>	Division of Technology, Industry and Economics (UNEP)
<b>EMS</b>	environmental management systems
<b>EST</b>	environmentally sound technologies
<b>GMEF</b>	Global Ministerial Environment Forum
<b>GNI</b>	gross national income
<b>GP</b>	green productivity
<b>IDCP</b>	International Declaration on Cleaner Production
<b>ILO</b>	International Labour Organisation
<b>LCA</b>	life cycle assessment
<b>NCPC</b>	National Cleaner Production Centre
<b>NGO</b>	non-governmental organisation
<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>PPP</b>	purchasing power parity
<b>SC</b>	sustainable consumption
<b>SETAC</b>	Society of Environmental Toxicology and Chemistry
<b>SME</b>	small and medium-sized enterprises
<b>SPC</b>	sustainable production and consumption
<b>UNCED</b>	United Nations Conference on Environment and Development
<b>UNDESA</b>	United Nations Department of Economic and Social Affairs
<b>UNDP</b>	United Nations Development Programme
<b>UNEP</b>	United Nations Environment Programme
<b>UNESCO</b>	United Nations Educational, Scientific and Cultural Organisation
<b>UNIDO</b>	United Nations Industrial Development Organisation
<b>USAID</b>	United States Agency for International Development
<b>WB</b>	World Bank
<b>WSSD</b>	World Summit on Sustainable Development



**UN Division for Sustainable Development**

[www.un.org/esa/sustdev](http://www.un.org/esa/sustdev)



**UNEP Sustainable Consumption**

[www.uneptie.org/sustain](http://www.uneptie.org/sustain)



**UNEP Cleaner Production**

[www.uneptie.org/cp](http://www.uneptie.org/cp)

# 1. Introduction

Current patterns of consumption and production, particularly in the developed countries, are unsustainable. They are depleting forest resources, fisheries, ground water and biodiversity, polluting air and water, degrading soil fertility and ecosystems, and causing dangerous climate change. Poverty, inequality, discrimination and other injustices are also constraining development.

Over the next 50 years, the global population is expected to increase from 6 billion to about 9 billion, and people in developing countries are expecting to catch up with the standards of living in the developed countries. This will simply not be possible unless there are major changes in the way people consume and produce.

The problem of unsustainable consumption and production was placed on the international agenda by the 1992 Rio Earth Summit and its Agenda 21 action plan.

Efforts to shift to more sustainable patterns have expanded steadily since 1992, particularly in developed countries, but also in developing countries in recent years. Some positive results have been achieved, particularly toward more sustainable production, but this progress has been more than offset by increases in overall consumption levels driven by economic development, industrialization and population growth. Increasing consumption by almost 1 billion consumers in developed countries and some 800 million middle-high income consumers in developing countries is putting unprecedented pressure on natural resources and the environment.

Concern over unsustainable patterns of consumption and production was reinforced by the 2002 World Summit on Sustainable Development in Johannesburg, which devoted a chapter of its Plan of Implementation to the issue. The Johannesburg Summit recognized a need to de-link economic growth from environmental degradation through increased efficiency in energy and water use, waste reduction, and cleaner production, promoted through

internalisation of external costs, use of a life-cycle approach, and consumer information and education.

Recognizing that consumption and production patterns are increasingly global and that international cooperation is needed to address them in cost-effective ways, the Johannesburg Summit called for the “development of a 10-year framework of programmes in support of regional and national initiatives to accelerate the shift towards sustainable consumption and production patterns that will promote social and economic development within the carrying capacity of ecosystems.”

Agenda 21 and the Johannesburg Summit noted that international responsibility for sustainable consumption and production differs among countries, with developed countries expected to take the lead, and with all countries benefiting.

Since 1992, experiences in many countries, developing as well as developed, have demonstrated approaches to sustainable consumption and production that provide economic, social and environmental benefits. These approaches can now be disseminated to benefit all countries through international cooperation and assistance.

Within the United Nations system, the United Nations Department of Economic and Social Affairs and UNEP are taking the lead in promoting implementation of the international 10-year framework, in cooperation with other international organisations, including UNIDO, HABITAT and OECD, together with governments, industry, NGOs and consumer groups worldwide.

In response to the Johannesburg Plan of Implementation, the First Asia-Pacific Expert Meeting on Promoting Sustainable Consumption and Production Patterns was convened in Yogyakarta, Indonesia, 21-23 May 2003. The purpose of the meeting was to take stock of existing activities in the region, exchange information and experiences, and start developing a plan of action for promoting sustainable production and consumption patterns in the Asia Pacific region.

A Second Asia-Pacific Expert Meeting on Sustainable Consumption and Production will be held on 6-7 November 2003, in Seoul, Republic of Korea, to follow up the Yogyakarta meeting in the context of the Marrakech Process. The objectives of the meeting are:

- To discuss and develop the results of the first Asia-Pacific Expert Meeting;
- To identify national and regional priorities and needs for capacity building and technical assistance;
- Develop a regional strategy reflecting those priorities and needs;
- Report on its conclusions to ESCAP, UNCED and UNEP.

This paper provides background information for the meeting.

## Global Trends in Consumption and Production

The last half-century has seen unprecedented economic and human development. The world's population has doubled to 6.2 billion since 1950, while the gross world product has expanded sevenfold, based on large increases in production and consumption of energy and materials. Global oil consumption and paper production, for example, have both more than tripled since the early 1960s.<sup>1</sup>

On the natural resource front, over the past century, mainly as a result of agricultural expansion to meet the growing demand for food and other agricultural products, about half of the world's wetlands area has been lost and grasslands have been reduced by more than 90% in some areas.<sup>2</sup> Soil degradation has afflicted two-thirds of the world's agricultural lands as farming practices have intensified to meet increasing demand for food, with particularly high growth in demand for meat and dairy products. The world's forested area has declined from 11.4 square kilometers per person in 1970 to only 7.3 square kilometers at present.<sup>3</sup>

## Global consumption, poverty and development

- Spending on household consumption worldwide increased 68 per cent between 1980 and 1998.
- Almost 1.3 billion people live on less than \$1 a day and close to 1 billion cannot meet their basic consumption requirements.
- 80 per cent of the total of \$19.3 trillion in household consumption in 1998 took place in high-income countries, while low-income countries accounted for only 4% of all private consumption.
- 200 million vehicles will be added to the global car fleet if car ownership in China, India, and Indonesia reaches the current world average of 90 vehicles per 1,000 people.
- World energy production rose 42 per cent between 1980 and 2000, and is projected under current conditions to grow 150-230 per cent by 2050.
- 70 per cent of all freshwater withdrawal is for use in agriculture, where inefficiency abounds; over half of the water drawn for agriculture is lost to leakage and evaporation.
- The average citizen of the industrial world consumes 9 times as much paper as the average citizen of the developing world, although consumption is rising fast in many developing countries.

**Source: UNEP 2003 (22<sup>nd</sup> Governing Council discussion paper)**

Nearly 70% of the world's major fish stocks are over-fished or are being fished at their biological limit to meeting growing demand for fish and fish products. Dams and other water diversions to meet growing demand for water, especially for agriculture, fragment almost 60% of the world's large rivers. As a result of unsustainable development and degradation of freshwater ecosystems, 20% of the world's freshwater species are extinct, threatened or endangered. Global emissions of greenhouse gases and other air and water pollutants are continuing to climb.

Looking at material flows, industrial economies have become more efficient in their use of materials, but overall waste

generation has continued to increase<sup>4</sup>. A study of five industrial countries for the period 1975–1996 showed that although resource consumption declined on a per capita and per unit GDP basis, overall resource consumption and waste flows into the environment continued to grow owing to economic and population growth. One half to three quarters of annual resource inputs to industrial economies were returned to the environment as wastes within a year. Improvements in resource efficiency and waste reduction have been limited by continuing use of older generation technologies and by consumer lifestyles focusing on mobility, convenience and product disposability.

People, goods, services, information and money are moving around the globe more rapidly and in larger volumes. World trade in goods and services increased over 60% in the last decade, with exports from developing countries expanding from an average of about 20% of GDP in 1990 to over 30% today. While foreign direct investment in developing countries has declined in the past two years, at \$162 billion it is still several times higher than in 1990 and represents the largest element of resource flows to developing countries.<sup>5</sup>

And in contrast to the wealth in developed countries - and among the developing world's emerging middle class – there are 1.2 billion people in the world living on less than \$1 per day.

## **2. Sustainable consumption and production**

Developing, implementing and integrating policies for sustainable consumption and production is essential for sustainable development. Those policies must stimulate cleaner production, more environmentally sound goods and services, improved employment conditions, and more informed and responsible consumer behaviour.

Policies for promoting sustainable consumption and production have used a variety of instruments, including process standards, product standards, environmental taxes, reduction of environmentally harmful subsidies, support for research and development, preferential finance, packaging and recycling requirements, consumer information, eco-labels, eco-design and life-cycle analysis.

While production and consumption are two sides of the same coin, efforts to change unsustainable consumption and production have tended to focus either on production or consumption, with most of the early efforts on the production side. More recently, there have been increasing efforts to integrate efforts toward sustainable consumption and production through policies that take into account the negative impacts of products and services across the full life-cycle, from raw material extraction, to production, to consumption, to disposal.

### **Sustainable consumption and production in China**

“China’s remarkably low per capita consumption pattern is an opportunity to avoid the mistakes of many other countries that have developed very high levels of material and energy consumption. Moving towards more sustainable consumption patterns could lead to more competitive domestic enterprises and greater access to international markets.”

#### **China Council for International Cooperation on Environment and Development**

“China is a developing country with a huge population and limited per capita resources. So it is most important for China to advance sustainable consumption and production and ensure sustainable development. ‘Green consumption’ has been put on the agenda as the main theme for action in the current century.”

#### **China Consumers Association**

To reflect this experience, this chapter will first consider efforts toward sustainable production, particularly through the cleaner production approach, then examine the consumption side, and finally consider efforts to integrate the two.

## Cleaner Production

Cleaner production reduces waste and pollution in the production process and conserves natural resources, often reducing the costs of production.

Cleaner production encompasses a number of terms and concepts, including eco-efficiency, pollution prevention and waste minimisation. Cleaner production is defined by UNEP DTIE as *“the continuous application of an integrated preventive environmental strategy to processes, products, and services to increase overall efficiency, and reduce risks to humans and the environment. Cleaner Production can be applied to the processes used in any industry, to products themselves and to various services provided to society”*.

Two major international efforts to promote cleaner production have been the establishment and support of National Cleaner Production Centres (NCPs) in many countries and the adoption of an International Declaration on Cleaner Production (IDCP).

The National Cleaner Production Centres, many of which have been supported by UNEP and UNIDO, as well as cleaner production centres (CPCs) at provincial or local levels, help to build national capacities, disseminate information, transfer cleaner technologies, and promote networking on cleaner production.

The International Declaration on Cleaner Production, developed by UNEP, provides a set of principles to encourage cleaner production and measure progress. The Declaration improves understanding of cleaner production and provides an opportunity for all stakeholders to demonstrate their support.

Cleaner production demonstration projects supported by cleaner production centres have tested, adapted and optimised cleaner production processes and technologies and built capacity within industry. The National Cleaner Production Centres collectively have conducted more than 1000 demonstration projects in diverse industrial sectors. International donors such as UNEP, UNIDO and USAID have supported many of these efforts.

### International Declaration on Cleaner Production (IDCP)

In 1998, UNEP launched the International Declaration on Cleaner Production (IDCP). As of July 2003, the IDCP had over 400 signatories and had been translated into 15 languages. The IDCP is a tool to mobilise commitment from various stakeholders. Signatories are from national governments, companies, industrial associations, universities, NGOs and local authorities.

The goals of the International Declaration on Cleaner Production include:

- Encouraging support for the adoption of the CP approach as a prudent economic investment;
- Renewing and intensifying the commitment to CP by industrial and governmental leaders so that they become local promoters of this strategy;
- Promoting international cooperation and technology transfer to maximize the results and synergies among CP initiatives worldwide;
- Diversifying and broadening awareness beyond the typical users of CP, thereby, increasing overall demand; and
- Spreading awareness of CP as a preferred solution to the unsustainable production and consumption of goods and services, in a way that society and community leaders understand exactly how this strategy works and the benefits.

Many information sharing and networking activities on cleaner production have been organized in recent years. International, regional and national roundtables and workshops have been held and networks organized, including the biannual International High-Level Seminars on Cleaner Production organized by UNEP, the

Greening of Industry Network (GIN), the International Green Productivity Association (IGPA), the World Cleaner Production Society (WCPS), InWent's (formerly Carl Duisberg Gesellschaft) Latin American Network, and the Canadian C2P2 network. The International Cleaner Production Information Clearinghouse (ICPIC) provides information on cleaner production centres, documents and web-sites.

Collaborative approaches within the business community and with other stakeholders can be valuable for planning and implementing cleaner production.

Partnerships include waste minimisation clubs, community-business partnerships, and business-business partnerships, such as the National Productivity Council in India and the Victorian Environment Improvement Plan in Australia.

Education and training in cleaner production is another important activity. There are currently about 50 undergraduate or graduate education programmes in cleaner production worldwide. Training also includes train-the-trainer activities supported by training kits from UNEP, UNIDO, InWent<sup>6</sup> and others. Journals dedicated to cleaner production include the Journal of Cleaner Production and the Journal of Industrial Ecology.

Recently, some multinationals have undertaken programmes to introduce cleaner production techniques and social responsibility throughout their supply chains, in programmes called "greening the supply chain" and "corporate social responsibility." Industries with large environmental impacts, such as mining and refining, oil and gas, pulp and paper, and chemicals have focused on cleaner production, while labour intensive sectors, such as textiles, clothing, footwear and coffee, have focused on labour conditions.

However, overall progress on the development and implementation of national cleaner production policies and strategies has been slow. Different countries have taken different approaches, with developing countries generally preferring the use of grants, research and subsidies to promote

cleaner production. Developed countries have often focused on voluntary programmes by industry.

In the Asia-Pacific region, Australia has adopted a national cleaner production policy, while the cleaner production approach has been included in national development plans in China, India, Indonesia, New Zealand, Republic of Korea, Singapore, Sri Lanka and Thailand.

The Asian Development Bank (ADB) has promoted cleaner production policies in the Asia-Pacific region, including a project to integrate cleaner production into industrial development in Sri Lanka.

### **National Cleaner Production Centres (NCPCs)**

In order to promote cleaner production at the national level, UNIDO and UNEP initiated a National Cleaner Production Centre (NCPC) programme. Today, 23 NCPCs span the globe promoting the development and implementation of cleaner production. The Centres offer training, publish guidance manuals and carry out CP Opportunity Assessments. The NCPCs have assisted in setting up local cleaner production centres (CPCs) of which there are now over 50 worldwide. CPCs are able to provide CP solutions tailored to local conditions. China, for example, has a network of 24 CPCs in the provinces which draw on the technical experience of the NCPC.

NCPCs have also been partners in major projects sponsored by international donors such as USAID, the Swiss Government and the World Bank.

The centres have developed a global network, with a wealth of knowledge and experience that ensures expert services.

The United Nations Division for Sustainable Development is assisting a number of countries, including Vietnam, in developing National Cleaner Technology Strategies.

The projects use a methodology developed by the Division taking into account national capacities and national and international markets to assess likely growth sectors, and identify cleaner technologies to make those sectors more productive, cleaner and more competitive.

## Sustainable Consumption

In 1995, the United Nations Commission on Sustainable Development (UN CSD) defined sustainable consumption as: “the use of services and related products which respond to basic needs and bring a better quality of life while minimising the use of natural resources and toxic materials as well as the emissions of waste and pollutants over the life cycle so as not to jeopardise the needs of future generations.”

Sustainable consumption programmes address sustainability issues by targeting consumer choices in goods and services in order to reduce their negative environmental and social impacts. Sustainable consumption also encompasses factors such as equity, poverty, quality of life and employment conditions.

Many actors have begun to promote and achieve sustainable consumption. UN agencies and international organisations including UNDESA, UNEP, OECD and UNDP, along with NGOs, research institutes, consumer organisations, industry and governments, have implemented various initiatives over the past ten years.

Amongst the most widespread are initiatives focusing on reuse and recycling, eco-labelling and certification, product testing and consumer information and awareness-raising campaigns.

In response to growing consumer interest in the “world behind the product” and a desire to promote action, UNEP launched its Sustainable Consumption (SC) programme in 1999. Sectors such as retail, market research, and advertising, along with governments, youth and consumer groups, have been engaged in research, information sharing, capacity building and progress-

monitoring activities. In 2002, UNEP launched a new Life-Cycle Initiative bringing together industry leaders, academics and policy makers. UNEP is engaging the advertising sector through its Advertising and Communication Forum.

UNEP’s series of informal regional consultations on sustainable consumption, in Africa, Asia-Pacific, Eastern Europe, and Latin America and the Caribbean, have promoted action planning, information sharing and strategic thinking on the issue.

The Division for Sustainable Development of the United Nations Department of Economic and Social Affairs (UNDESA) supports a work programme on “changing consumption and production patterns.” The programme includes development of a core set of Indicators on consumption and production patterns and revision of the UN Guidelines on Consumer Protection to include sustainable consumption.

Based on the work of the UN Division for Sustainable Development and the UN Commission on Sustainable Development, the General Assembly, in 1999, adopted an expanded version of the 1985 UN Guidelines for Consumer Protection, with new elements on sustainable consumption.

UNEP, in partnership with Consumers International (CI), has recently carried out a review of the implementation of the Guidelines.<sup>7</sup> The survey of fifty-two governments found that more than 80 per cent of governments surveyed found the Guidelines useful, and the same number have initiated information campaigns related to sustainable consumption. However, the survey also found generally slow progress in policy implementation.

The OECD has also worked on household consumption indicators for such sectors as waste, water and energy, and has reviewed sustainable consumption trends and policies in OECD countries.<sup>8</sup> The UNDP Human Development Report 1998 focused on consumption patterns in human development.



Many countries, including Mauritius, India, Senegal, Chile, and Indonesia, have launched consumer-awareness raising campaigns on issues such as energy and water conservation, waste recycling and alternative transport. Some 82% of governments indicated that their country had implemented some form of recycling. Many, however, note that substantial improvements are still required.

Some countries have introduced environmental fiscal policies, including eco-taxation and reforming subsidies that promote unsustainable consumption and production. A growing number of countries, including at least eight in Asia, are introducing extended producer responsibility policies requiring producers to take back packaging and sometimes entire products, such as automobiles and electronic equipment, thus promoting eco-design and waste minimisation.

#### **United Nations Guidelines for Consumer Protection (1999)**

The new section G on “Promotion of Sustainable Consumption” covers the following:

- Shared responsibility of all stakeholders;
- National strategies and policy mix;
- Eco-design using life-cycle assessment;
- Environmental health and safety standards
- Impartial environmental testing;
- Alternatives to hazardous substances;
- Awareness raising;
- Environmentally sound products and services;
- Economic instruments;
- Indicators and databases;
- Government operations and procurement;
- Research on consumer behaviour.

In the food sector, the global retail market for organic produce has been growing very rapidly, particularly in Western Europe, increasing from \$10 billion in 1997 to \$17.5 billion in 2000. An estimated 17 million hectares of agricultural land are now

managed organically worldwide to meet this growing demand from concerned consumers who are willing to pay a premium for environmentally sound produce. The market for “fair trade” products, produced under good social conditions, is also growing.

#### **Asia Pacific governments support the UN Guidelines on Sustainable Consumption**

“The UN Sustainable Consumption Guidelines are a good reference for government to use in formulating and strengthening consumer protection policies. The Government is yet to fully implement them.”

**Herry Hadisanjoto,**  
Directorate of Consumer Protection, MOIT,  
Indonesia

“The Guidelines contain some useful recommendations for the Government to take into account in policy development, and provide a sound framework for the development of strategies to foster sustainable consumption within Australia.”

**Kerry Smith**  
Director, Sustainable Industries Branch,  
Ministry of Environment and Heritage, Australia

“The Guidelines are both easy to understand and useful for policy making. The Guidelines ... clarify the necessary policies required for promoting sustainable consumption patterns.”

**Tetsuya Kamijo**  
Assistant Director, Policy and Coordination  
Division, Global Environment Bureau, Ministry of  
the Environment, Japan

Consumer organizations and individual consumers are increasingly calling for government policies and industry action to support sustainable consumption. A number of governments have supported regional or national consumer information labelling programmes, including Germany, India, Singapore and the Nordic countries. International certification and labelling initiatives, such as those of the Forest Stewardship Council and the International Federation of Organic Agriculture Movements, supplement national and regional schemes that cover sectors such as textiles, laundry detergents, energy and tourism.

Studies of consumer trends and behavioural factors are continuing. The joint UNEP/UNESCO "Is the Future Yours?" research project surveyed over 10,000 young people in 24 countries about their consumption patterns and lifestyles. The advertising and communication industry has also supported investigations into youth consumption patterns.

In recent years, there has been growing attention to the potential role of government and institutional consumption both to reduce the negative environmental and social impacts of their own operations, and to drive markets in general toward more sustainable goods and services. Purchases of goods and services by governments, including local authorities, commonly amount to 15-25% of GDP, representing a demand that can have a powerful market impact.

In the United States, for example, as a result of a 1993 Presidential Decision that all computers purchased by the federal government should meet certain energy efficiency standards, certified by the Energy Star label, a large majority of computers on the United States market now meet those standards. In Canada, government purchases of power from renewable sources have substantially expanded the demand for such power and created a market in which other consumers can purchase "green power." In Austria, a coordinated move by public hospitals to use only cleaning products that are safe both for people and the environment has served as a model for other consumers. Many cities have purchased cleaner vehicles - electric, hybrid, natural gas fuelled - for the municipal fleets, reducing air pollution directly and helping build a market and infrastructure that other consumers can use.

Japan has adopted a green public procurement law supported by an extensive database of sustainable products and a Green Purchasing Network of businesses, government agencies, local authorities and consumer groups to promote and support green procurement.

Most of the work on sustainable public procurement has focused on environmental issues, but in some cases consideration is

now being given to integrating social issues into public procurement programmes.

While sustainable public procurement can be a powerful force for sustainable consumption and production, it also presents difficulties. Public procurement is commonly decentralized both among different ministries and between national and local authorities, and coordinating purchasing among those offices is difficult. It is also difficult to train procurement officers to identify sustainable goods and services.

To overcome those difficulties, it may be useful to begin a sustainable public procurement programme with a few products or services with clear benefits, readily available products at affordable prices, and simple specifications for sustainability. Based on that experience, and on the experience of more advanced countries, the system can be developed into more complex areas.

To examine the potential of sustainable public procurement and how the obstacles can be overcome, the UN Division for Sustainable Development has organized two International Expert Group Meetings on Sustainable Public Procurement, the first held in December 2002 and the second in November 2003. Further work in this area is planned.<sup>9</sup>

## **Integrating consumption and production**

Given that consumption and production are two sides of the same coin, there are clear benefits to coordinating strategies for sustainable consumption and production. The environmental impacts of consumer behaviour such as travel, for example, depend on the vehicles and transportation systems available, as well as on consumer choice and behaviour. The environmental impacts of disposal of goods - and the benefits of recycling - depend on product design as well as consumer behaviour.

The major approach to date toward integrating sustainable consumption and

production strategies has been the life-cycle approach, taking into account the total impact of goods and services through all phases of their life-cycles, including raw material extraction, product design, production, marketing and distribution, consumption, recycling or reuse, and final disposal. Many products have their primary environmental impacts during one or two phase, but that impact depends on actions at other phases.

Paper, for example, has large environmental impacts in the logging phase - depending on forest management systems - and in the pulping and paper-making process - depending on the technology used. There is no significant direct impact of the use of paper, and modest impacts at the disposal stage - depending on recycling programmes, and disposal systems. Some products - such as vehicles, refrigerators, air conditioners and light bulbs - have their greatest impacts in the use phase due to energy consumption and pollution emissions, with the impact depending on product design and consumer behaviour.

Many of these impacts cannot be effectively addressed by cleaner production programmes that focus on the production process and its impacts, or by consumer programmes that focus on consumer choice among available products.

The most extensive work on integrated approaches, particularly at the public policy level, has been in the European Union. A focus there in recent years has been on "integrated product policies," which focus on particular products across their life cycles and consider how those involved in production, consumption and disposal of those products can most effectively address the total impact across the phases. Integrated product policies include sustainable product design programmes, multi-stakeholder product panels, deposit-return schemes and extended producer responsibility.

UNEP's *Product-Service Systems and Sustainability* booklet (2002) contains case studies on combinations of products and services that meet consumer needs with less environmental impact, providing

economic, social and environmental benefits. This approach goes beyond the life-cycle assessment of a particular product or service and consider alternative product-service combinations that could provide the same service.

As the examples above indicate, integrated approaches make use of measures to promote both cleaner production and sustainable consumption, using a variety of measures in a coordinated manner, with a particular emphasis on life-cycle assessment.

### 3. Asia-Pacific issues and activities



The Asia-Pacific region, with 3.2 billion people, is the world's most populous and is very diverse in culture, geography, economies and demography. It accounts for over 40% of the global economy and is home to 70% of the world's poor.<sup>10</sup>

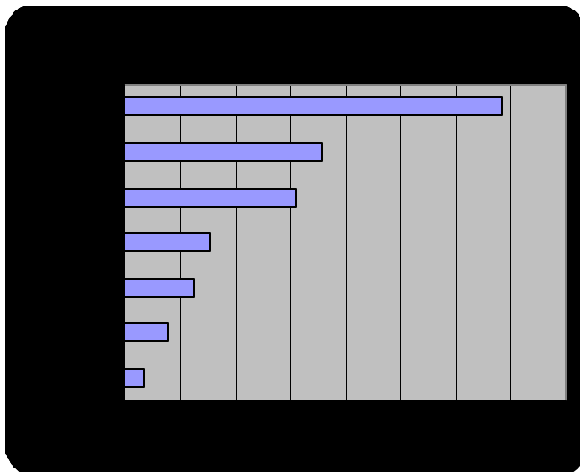
Rapid economic growth, industrialization and urbanization have led to improvements in human welfare, but together with population growth, have also resulted in resource depletion, industrial emissions, air and water pollution, waste accumulation, transport congestion and other problems.

Developing countries of the region are still predominantly rural, but large numbers of people are migrating to cities, creating a growing number of megacities with an increasing middle class. The large and dense populations with their increasing consumption are increasing stress on already fragile environmental systems. Consumers, encouraged by advertising, are emulating the lifestyles of their fellow consumers in the developed world.

Total production output in most sectors and services in the region is expected to climb over the coming decade, regardless of any improvements made by more efficient production processes. The increased production of motor vehicles, household appliances, food, clothing, energy and transport, along with new information and communications equipment such as mobile phones and mobile data-transfer devices, pose threats to the environment. Tourism, aviation and some sports activities are also raising concern.

The forces of urbanisation, globalisation, lifestyle changes and the depletion of basic natural resources in some areas further accentuate these trends. Cleaner production activities in combination with sustainable consumption strategies such as behavioural change, recycling and reuse will need to be pursued in an integrated manner to offset social and ecological disturbances.

A recent study (2003)<sup>11</sup> estimates the Asia-Pacific region to be home to 684 million middle-high income consumers earning above \$7,000 (PPP). India, China, Republic of Korea and Indonesia account for 63% of such consumers in the region and 25% of such consumers' worldwide, although they represent only 26% of the region's population.



Asia-Pacific consumers are increasingly concerned and aware of the impacts of their consumption on the environment. A recent UNEP global study (Global consumers, 2000) included analysis of two cities in the

region - Mumbai/Bombay and Sydney. The survey found consumers in developing countries to be generally more concerned about environmental impacts than consumers in developed countries. Over sixty percent of consumers in Mumbai said that they were very much or quite concerned about the effects of their consumption on the environment. More than half of these consumers said that they either always, most of the time, or often considered the 'life behind' the products they buy, while 45% of consumers surveyed in Sydney indicated that they at least often consider the 'life behind' products.

### Environmental concerns in Asia-Pacific region (UNEP, GEO-3)

- Of the 15 cities in the world with the highest levels of airborne particulates, 12 are in Asia;
- The region includes large areas with severe water stress and large populations;
- More than half of Asia's drylands are affected by desertification;
- Half the region's coral reefs are degraded and threatened, and more than 60 percent of its mangroves have been lost;
- About three-quarters of the world's species extinctions have occurred on isolated islands in the region;
- Positive changes include improvements in governance by public authorities, growing environmental awareness and public participation, and increasing environmental awareness in industry.

However, the great majority of consumers and producers in the region have very limited resources for applying the principles of sustainable consumption and production.

Limitations on the implementation of cleaner production in the region include<sup>12</sup>:

- Limited awareness and political commitment;
- Inadequate enforcement of environmental legislation;
- Limited access to financing;
- Lack of access to cleaner technologies;
- Limited outreach to smaller companies.

Limitations to sustainable consumption in the region include<sup>13</sup>:

- Lack of knowledge and belief in the opportunities;
- Lack of political commitment;
- Lack of support from economic sectors such as retail and finance;
- Inadequate rules on misleading marketing and labelling claims regarding sustainability;
- Resistance to change by consumers.

#### Consumption pressure per person (WWF, 1998)

Taiwan, China	3.42	Thailand	1.52
United States	2.74	Philippines	0.99
Korea Rep.	2.35	Indonesia	0.79
Japan	2.35	Pakistan	0.78
Canada	2.35	China	0.85
Spain	1.92	India	0.47

1 = world average consumer in 1995

#### Urban population as% of total (UNDP, 2001)

	1999	2015
China	31.6	40.7
Fiji	48.6	60.0
India	28.1	35.9
Indonesia	39.8	54.8
Korea, Rep.	81.1	88.2
Malaysia	56.7	66.4
Philippines	57.7	67.8

#### Human Poverty Index (UNDP, 2001)

China	24	Fiji	37
India	55	Indonesia	38
Malaysia	13	Nepal	77
Pakistan	65	Sri Lanka	31
Thailand	21	Vietnam	45

#### Number of TVs in millions (UN, 2000)

	1990	1997
China	309	400
India	27	63
Indonesia	10	14
Japan	75	86

## Cleaner Production

The diverse nature of the region results in different actions and varying levels of cleaner production activities. Developed

economies such as Australia, New Zealand, Japan and Republic of Korea have been promoting cleaner production and introducing it into policy-making and planning for years. Australia and Japan have also provided financial support for cleaner production initiatives in the region.

Some developing countries in the region have also made significant strides in cleaner production, particularly in training, networking and implementation. National Cleaner Production Centres have been established in China, India, Vietnam, Republic of Korea and Sri Lanka. Some other countries have only started considering cleaner production.

Cleaner production activities in the region including training, capacity building and demonstration projects, are often supported by external assistance. Two examples of such cooperative programmes are:

- UNIDO-NCPC collaboration on demonstration projects in India and China, targeting SMEs in a number of key sectors;
- The five-year (1997-2001) China-Canada Co-operation Project in Cleaner Production, including training, awareness raising, development plans for priority sectors, and policies and regulations for implementing cleaner production.

The Asian Productivity Organisation (APO), hosted and supported by Japan, has assisted demonstration projects in China, Thailand, India, Hong Kong SAR and Singapore to promote "green productivity", a concept similar to cleaner production. APO has also initiated green productivity programmes in Fiji, India, Indonesia, Republic of Korea, Malaysia, Nepal, Philippines, Singapore, Thailand and Vietnam.

The governments of China, Vietnam, Republic of Korea, Thailand and the Philippines, along with individual organisations in Australia, Indonesia, Mongolia, and Vietnam are signatories to the International Declaration on Cleaner Production (IDCP). The Declaration currently has over 300 signatories

worldwide, with almost half of them from the Asia-Pacific region.

The Asia-Pacific Roundtable for Cleaner Production has held four meetings since its creation in 1997, in Bangkok, Brisbane (Australia), Manila and Chiang Mai (Thailand). The mission of the Roundtable is to foster dialogue among industry, government, academia, and NGOs in the region to address pollution problems and work together on collective solutions. Roundtable goals include promoting information exchange among its members through newsletters, e-mail list servers, technical journals, special publications, conferences, and symposia. Roundtable meetings are organised biannually.<sup>14</sup>

### **ADB promotes cleaner production**

The Asian Development Bank (ADB) selected five countries (Philippines, Indonesia, Vietnam, India and Thailand) for a Regional Environmental Technical Assistance (RETA, 2001) programme to promote cleaner production policies and practices in the five countries.

Training was provided on such subjects as policy development, cleaner production planning, and disseminating cleaner production applications to a larger audience of Asian nations. The experiences of the participating countries were used to develop generic guidelines for national policy development and strategic planning. Processes were established to facilitate regional networking and cooperation between assistance agencies and other interested stakeholders in Asia.

The ADB has also provided technical assistance in cleaner production to Sri Lanka.

National roundtables, workshops and training courses, along with electronic information systems have also disseminated knowledge and understanding of cleaner production in the region.

Australia, China (including Taiwan), India, Indonesia, New Zealand, Republic of Korea, Singapore, Sri Lanka and Thailand have included elements of cleaner production in national development plans. A National Strategy for Cleaner Production has been developed by the Australian and New

Zealand Environment Conservation Council (ANZECC), including implementation promotion, capacity building and monitoring of progress. ADB continues to support cleaner production in the region via a range of other projects.

Economic instruments have also been used in many countries. Australia, Sri Lanka, Singapore and Vietnam offer special credit lines for cleaner production, while Hong Kong (China), Indonesia and the Philippines have introduced taxes and fees on resource consumption or waste discharge.

## **Sustainable Consumption**

Progress toward sustainable consumption in Asia Pacific has been slow, although the diverse makeup of the region makes trends difficult to assess. Some activities, particularly information campaigns on energy and water saving, have occurred throughout most of the region.

As part of its regional consultations on sustainable consumption, UNEP organised a Workshop on Sustainable Consumption for the Asia-Pacific region in Malaysia in August 2001, in cooperation with Consumers International, Carl Duisberg Gesellschaft and the Australian Government.

UNEP, in partnership with Consumers International, conducted a review of national policies to promote sustainable consumption, with the results published in the 2002 report, *Tracking Progress: Implementing sustainable consumption policies*.

The countries surveyed included 12 in the Asia-Pacific region: Australia, China (and Hong Kong SAR), Fiji, India, Indonesia, Japan, Kiribati, Republic of Korea, New Zealand, Sri Lanka and Vanuatu. Three countries - Australia, China and Japan - provided national case studies.

Although progress in many policy areas, particularly economic instruments, product testing, indicators for measuring progress, and research, remains relatively weak, some

positive trends have appeared. Some 85% of responding Asia-Pacific governments had implemented information campaigns related to sustainable consumption. These activities ranged from the Clean Water and Sustainable Forest programmes in Indonesia, to waste minimisation and reuse campaigns in Sri Lanka, to education campaigns on recycling in Kiribati and Vanuatu.

Notable achievements include China's Law on Protection of Consumer Rights and Interests, as well as publicity and education programmes and a 30% sales tax reduction for light vehicles; Japan's Laws on green procurement, recycling and waste management, as well as financial incentives for buying electric, natural gas, methanol and hybrid vehicles; and Australia's "Green Games 2000 Initiative", recycling programmes for aluminium cans, mobile phones, batteries, newsprint and waste oil, the Environment Industries Action Agenda, and a tax on Sydney car parking spaces. At least eight countries in Asia have instituted "take-back" laws requiring companies to recycle or reuse packaging discarded by consumers.

### **UNEP youth forum in Sydney**

Australia hosted the first event of UNEP's global strategy for children and youth. The Eco-Innovate 03 Forum, initiated by Bayer, the University of New South Wales (UNSW) and UNEP, took place at UNSW in July 2003.

The 4-day programme, including speakers, discussion forums, hands-on design sessions, and mentoring by business and technology leaders, attracted young people aged 15-23 from Australia, New Zealand, Singapore, Thailand, Indonesia, The Philippines, China and India. The forum included various activities on sustainable consumption and production patterns.

The need for further dissemination of information was highlighted, with only half of the responding Asia-Pacific countries aware of the existence of the UN Guidelines on Sustainable Consumption prior to the survey. Some 84% of governments surveyed in the region had started to

implement sustainable practices in their own operations, while 75% had started to use fiscal instruments, compared with global figures of 70% and 56% respectively.

The UN Guidelines on Sustainable Consumption were overwhelmingly supported by Asia-Pacific governments, with almost eight in ten reporting that they are easy to understand and useful for policymaking. However, compliance monitoring remains a problem, with just over 60% of governments monitoring progress toward sustainable consumption.

The Asia-Pacific region is second only to the OECD countries in terms of overall implementation in the eight selected policy areas from the UN Guidelines. However, the ratings only measure a *start* to policy implementation.

The UNEP/UNESCO "Is the Future Yours?" project, which surveyed over 10,000 young people in 24 countries, including Thailand and Australia, and the UNEP global consumer survey of 1,000 consumers worldwide, including Mumbai and Sydney, both found that consumers in developing countries were generally more concerned about the impact of their consumption patterns than those in developed countries.

UNEP is continuing its work on youth and sustainable consumption with dissemination of a new interactive sustainable consumption training kit (youthXchange) in Asia-Pacific countries in 2003.

The Japanese Institute of Advanced Industrial Science and Technology (AIST) and UNEP co-hosted a workshop on sustainable consumption in Tokyo in March 2003, discussing research on consumer awareness and action, defining consumer needs, and life-cycle based approaches.

Industry actions in the Asia-Pacific region have been mixed, with manufacturing and natural resource companies in Australia and Japan supporting more efficient and cleaner practices.

Consumer groups and NGOs in the region have been instrumental in efforts to promote sustainable consumption, mostly through

information campaigns and research. There has been a rapid expansion in the number and size of consumer groups in the region in the last few years, including in Thailand, Philippines, Indonesia, Sri Lanka, India and Bangladesh.

Consumers International has been responsible for a number of sustainable consumption campaigns. 'Greening Consumer Choice?', an examination of environmental labels, was published in 1995. CI's Regional Office for Asia and the Pacific conducted a nine-country study of household consumption patterns in the region<sup>15</sup> (1997) and distributed a series of case studies entitled 'A Matter of Living on Earth'. Other work includes the report, 'Meeting Needs, Changing Lifestyles', issued on World Consumer Rights Day in 1997, and a collection of books and campaign materials on *green testing*, *green claims* and *green guidance*<sup>16</sup> to support consumer organizations in promoting sustainable consumption

In some cases, consumers have used their power of choice to change consumption patterns. Thai consumers have used information from an appliance-labelling programme to increase the market share of energy efficient, single-door refrigerators from 12 per cent in 1996 to 96 per cent in 1998.

## Challenges for the Asia-Pacific region

Some possible proposals for action for sustainable consumption and production in Asia-Pacific have been identified, in part through the UNEP *Global Status 2002* reports on sustainable consumption and cleaner production and the regional multi-stakeholder event in Malaysia (2001). They are:

- Governments could take a leadership role through enforcement of environmental and social laws and regulations, application of economic and social instruments, sustainable public procurement, and sector-specific

policies in such areas as energy, transport, land use, urban planning and housing.

- Governments could use the United Nations Guidelines on Sustainable Consumption to strengthen national consumer protection policies.
- Governments could disseminate information and promote discussion of consumption patterns, the environmental and social impacts of consumer choices, efficient use of energy, water and materials, and recycling and reuse of used goods.
- Governments could incorporate sustainable consumption and production approaches into all sector policies and development plans.
- All stakeholders could promote and support multi-stakeholder regional coalitions for sustainable consumption and cooperative activities. These coalitions should involve consumers, youth, government agencies, business, industry, unions, and education and research institutions.
- Business and industry could work with government, research institutions and international development organizations to find ways to increase productivity, conserve natural resources and design more sustainable goods and services within a life-cycle perspective, including through the use of traditional knowledge, values, technologies, products and practices.
- Micro-, small and medium-sized enterprises could be supported in introducing cleaner, more productive technologies, particularly through enterprise associations or collectives. and eco-design, within a life-cycle framework.<sup>17</sup> The experience of the Waste Minimisation Circles in India and the Corporate Synergy System in Taiwan, China, might be useful to others.



- Cleaner production techniques could be disseminated in non-industrial sectors, such as agriculture, forestry, mining and tourism.
- Education in sustainable consumption and production could be strengthened in school and university curricula. NCPCs could collaborate with educational institutions to develop information and training materials.
- The widespread acceptance of environmental management systems (EMS) could be used to promote cleaner production.
- The financial sector could be sensitized to the benefits of cleaner production, and sustainable credit lines could be provided in critical sectors.
- Governments, in cooperation with industry, civil society, research institutes, and international organizations, could develop national indicators for assessing and monitoring sustainability and evaluating the effectiveness of sustainable consumption and production policies.
- Research institutions could assess the life-cycle economic, environmental and social impacts of goods and services and alternatives.
- Consumer organizations, in cooperation with industry and research institutions, could assess the effectiveness of eco-labels to promote sustainable consumption and production under local conditions.
- Governments, research institutes and civil society could assess the economic, social and environmental impacts of subsidies and identify reforms that would preserve the benefits while reducing the negative impacts.

## 4. The 10-Year Framework and the Asia-Pacific region

### The Marrakech process

The Johannesburg Plan of Implementation, adopted at the World Summit on Sustainable Development in September 2002, contains, in chapter III, commitments on changing unsustainable patterns of consumption and production.<sup>18</sup> In particular, the Plan calls for actions at all levels to

“Encourage and promote the development of a 10-year framework of programmes in support of regional and national initiatives to accelerate the shift towards sustainable consumption and production to promote social and economic development within the carrying capacity of ecosystems by addressing and, where appropriate, delinking economic growth and environmental degradation through improving efficiency and sustainability in the use of resources and production processes and reducing resource degradation, pollution and waste. All countries should take action, with developed countries taking the lead, taking into account the development needs and capabilities of developing countries, through mobilization, from all sources, of financial and technical assistance and capacity-building for developing countries.” (paragraph 15)

An International Expert Meeting was held in Marrakech, Morocco, 16-19 June 2003 to advance the development of the 10-year framework of programmes for sustainable consumption and production. The results of the International Expert Meeting, in the form of a proposed “Marrakech Process”, will be submitted to the Commission on Sustainable Development for consideration as part of its post-Johannesburg programme of work. The results of the Meeting are also intended for consideration by other international, regional and national organizations concerned with sustainable consumption and production.

### The Johannesburg Plan of Implementation.

Chapter 3 on “Changing unsustainable patterns of consumption and production” calls for actions at all levels to:

- (a) Identify specific activities, tools, policies, measures and monitoring and assessment mechanisms, including, where appropriate, life-cycle analysis and national indicators for measuring progress...
- (b) Adopt and implement policies and measures aimed at promoting sustainable patterns of production and consumption, applying, inter alia, the polluter-pays principle.
- (c) Develop production and consumption policies to improve products and services, while reducing environmental and health impacts...
- (d) Develop awareness-raising programmes on the importance of sustainable production and consumption patterns, particularly among youth...especially in developed countries, through, inter alia, education, public and consumer information, advertising and other media...
- (e) Develop and adopt, where appropriate, on a voluntary basis, effective, transparent, verifiable, non-misleading and non-discriminatory consumer information tools to provide information relating to sustainable consumption and production...
- (f) Increase eco-efficiency, with financial support from all sources ... for capacity—building, technology transfer and exchange of technology with developing countries and countries with economies in transition, in cooperation with relevant international organizations.

### Paragraph 14, from the WSSD Plan of Implementation, September 2002

The Marrakech Process is intended to strengthen international cooperation and increase exchange of information and best practices to facilitate the implementation of national and regional programmes to promote more sustainable consumption and production. In particular, it should ensure that all countries benefit from work on this issue, with developed countries taking the lead in changing consumption and production patterns. The framework is to develop and evolve over the 10-year period to reflect progress and experience as well as changing priorities and emerging issues.

The development and implementation of the 10-year framework should also take place at the regional level. To date, two regional meetings have been held in the Latin America and Caribbean region (Buenos Aires, April 2003, and Managua, October 2003), one previous meeting in the Asia-Pacific region (Yogyakarta, Indonesia, May 2003). Meetings in the African and European regions are planned. The results of those regional meetings, and the regional concerns and priorities they identify, will provide a basis for the international 10-year Framework is to operate.

In order to accelerate the shift towards sustainable consumption and production patterns, there is a need to strengthen international cooperative efforts, to ensure that they focus on national and regional priorities, and to increase exchange of information and experience, so that all countries can benefit. Work under the 10-year framework will identify ways to facilitate international cooperation and coordination among programmes, particularly the programmes of the UN system, and improve information flows in order to support national and regional activities addressing the various issues of consumption and production.

In promoting broad international cooperation in support of sustainable consumption and production through the framework, a particular focus should be placed on policies and practices that simultaneously promote economic growth, social development and environmental protection. Many cleaner production techniques, for example, increase resource efficiency and labour productivity, thus reducing waste and pollution and conserving resources, while increasing competitiveness and access to markets and improving working conditions. Another example would be life-cycle cost analysis that indicate when purchase of such products as energy-efficient lighting and appliances by consumers, businesses or public authorities result in rapid payback through lower operating costs, as well as providing environmental and health benefits,

## Concept of the Framework

The scope of the framework of the Marrakech Process is defined by Chapter III of the Johannesburg Plan of Implementation: "Changing Unsustainable Patterns of Consumption and Production". It does not include general consideration of issues addressed in other chapters of the Plan, including poverty eradication (chapter II), management of natural resources (chapter IV), globalization (chapter V), health (chapter VI) or means of implementation (chapter X), although aspects of those issues should be addressed when they relate directly to sustainable consumption and production.

Work on the framework should also avoid duplicating other major international programmes related to sustainable development in the follow-up to the Johannesburg Summit and other recent UN conferences. In particular, the framework should be complementary to the extensive UN system efforts to address the Millennium Development Goals with their focus on poverty<sup>19</sup>, and efforts to follow-up on the Monterrey Conference on Finance for Development<sup>20</sup> and the Doha Ministerial Meeting of the World Trade Organization.<sup>21</sup>

The 10-year framework should ensure support by sustainable consumption and production programmes of the UN system and other international organizations for national and regional activities and priorities, and support the full participation of developing countries in international programmes.

The 10-year framework should respond to economic, social and environmental conditions and trends and their impacts on sustainable development. Urbanization, for example, is expected to continue in developing countries, with major impacts on local environmental and social conditions. Urban planning and management will therefore be increasingly important in determining consumption and production patterns and sustainable development.

Increased trade, foreign direct investment, technology transfer and electronic communications, as well as cultural

exchange, also have important impacts on sustainable development, as consumption and production patterns become increasingly global in nature. Increased freight transport and personal travel is leading to higher consumption of fossil fuel and increased air pollution and carbon dioxide (CO<sub>2</sub>) emissions in most countries. Information and communication technologies continue to develop rapidly, and while these technologies have the potential to reduce energy and material consumption, the evidence to date seems to indicate that increased use of electronic media and communications tends to stimulate increased paper and energy consumption and travel.

Analysis of such global trends and their impacts on consumption and production is an important part of planning for sustainable consumption and production and is being undertaken by a number of programmes. This analysis of major economic and social trends and their impacts should be supported and the results made widely available.

Technological development is a major driving force for consumption and production patterns, both as a main driver of economic growth and consumption of energy and resources, and as the driver of increasing eco-efficiency of production and consumption and pollution reduction. The framework should therefore include consideration of ways to promote the development, dissemination, transfer and use of more sustainable technologies, both through specific technology policies, and through other policies, incentives and consumer behaviour that create demand for such technologies.

The majority of existing programmes promoting sustainable consumption and production focus on environmental issues, with some efforts to integrate economic development with environmental protection. Only a very few programmes, such as Fair Trade schemes, or pressure on multinational corporations to ensure decent working conditions in their developing country suppliers, directly address social issues such as poverty, inequality and employment. Greater efforts are required to integrate

social development issues into programmes under the framework.

While the framework does not directly address natural resource management, many of the programmes for sustainable consumption and production involve resource conservation as a result of increased efficiency in resource use by industry, business and households. In the case of agriculture, consumer choices concerning food and clothing, such as increasing demand for organic products, or declining demand for beef, affect agricultural markets, production methods and economic opportunities for farmers. Those impacts need to be studied, and activities under the framework will need to be coordinated with related programmes and international arrangements, particularly arrangements in the areas of energy and water.

Many of the activities within the scope of the framework have an impact on international trade and financial flows, and those impacts need to be examined. Efforts are needed, for example, to ensure that environmental protection measures do not impose unnecessary constraints on trade, particularly on exports from developing countries. In general, there is a need for further studies of the impact of globalization on sustainable development in general and sustainable consumption and production in particular. Work under the framework will need to take into account progress in the new round of multilateral trade negotiations.

### **The First International Expert Meeting**

The first International Expert meeting on the 10-year Framework of Programmes for Sustainable Consumption and Production, held in Marrakech, Morocco, 16-19 June 2003, noted that the 10-year framework is a continuous, long-term process towards the achievement of sustainable consumption and production patterns, which should be further elaborated through enhanced international cooperation.

The following possible elements of the Marrakech Process were identified:

(a) Targeted responses by international organisations corresponding to governments' priorities in the area of sustainable consumption and production. On this basis, UN DESA and UNEP are asked to expand the "Survey of International Activities on Consumption and Production Patterns" compiled by UN DESA, with regard to the identified priorities for the Marrakech Process to make it more comprehensive and make it available to all countries;

(b) Establishment of mechanisms that encourage and support information and experience sharing, network building, and dissemination of best practice. Such mechanisms could be interactive web sites and expert meetings on specific issues under the sustainable consumption and production umbrella;

(c) Involvement of all stakeholders and establishment of concrete partnerships. Business and business associations were called on to implement sustainable production and consumption including through business-to-business partnerships at all levels, and promote a sustainable business culture;

(d) An invitation to UN-DESA, together with UN-HABITAT, and in collaboration with UNEP and other relevant organizations and relevant financial institutions, to prepare, based on the work of this meeting, and in particular on the priorities identified at this meeting, a report on the actions needed at the international level to support national action in the waste, transportation, construction, and water and sanitation sectors, indicating the agencies, organizations, institutions, etc. that should be involved in each action;

(e) Strengthening of regional processes in all regions, which would also contribute to the international process. At the international level, the Marrakech Process should include a broad expert meeting for the 10-year framework of programmes in two years time, supported by international organizations and donor contributions. The ongoing Marrakech Process on sustainable consumption and production should be supported by informal task forces or round tables on sustainable

consumption and production, with participation of experts from developing and developed countries, to promote progress on the 10-year framework and the implementation of Chapter 3 in the Johannesburg Plan of Implementation;

(f) Subsequent international expert meetings to address a wide range of sustainable consumption and production issues, also taking into account the work programme of the Commission on Sustainable Development; and

(g) Dissemination of this report to other UN agencies, international financial institutions, NGOs and business. Governments are invited to take into account the outcome of this meeting in the preparations for the governing bodies of all relevant UN agencies and programmes.

The framework, the priorities and the cooperative processes should evolve to meet changing conditions and concerns, taking into account the evolution of other activities undertaken to follow-up the Johannesburg Plan of Implementation and the outcomes of other major UN conferences.

## UNEP Governing Council, February 2003

### Decision 22/6. Promotion of sustainable consumption and production patterns

Recalling paragraph 14 of the Plan of Implementation of the World Summit on Sustainable Development, which states that fundamental changes in the way societies produce and consume are indispensable for achieving global sustainable development. All countries should promote sustainable consumption and production patterns, with the developed countries taking the lead and with all countries benefiting from the process, taking into account the Rio principles including, inter alia, the principle of common but differentiated responsibilities as set out in principle 7 of the Rio Declaration on Environment and Development. Governments, relevant international organizations, the private sector and all major groups should play an active role in changing unsustainable consumption and production patterns,

Recalling also the work undertaken by the United Nations Environment Programme since 1992 to promote cleaner production, pollution prevention and sustainable consumption, in cooperation with other United Nations organizations and other stakeholders, Recognizing the results in the field of cleaner production, pollution prevention and eco-efficiency already achieved and documented in regular progress reports published on the occasion of the biannual high-level conferences on cleaner production, and the remaining and emerging challenges with respect to sustainable consumption and production,

1. Requests the Executive Director to strengthen sustainable consumption and production activities of the United Nations Environment Programme within its existing mandate and subject to available resources, and consistent with the recommendations adopted at the World Summit on Sustainable Development;
2. Requests the Executive Director to strengthen existing eco-efficiency, cleaner production and sustainable consumption programmes, such as the United Nations Environment Programme's regional cleaner production roundtables and its partnership with the Society of Environmental Toxicology and Chemistry, including facilitating the transfer of environmentally sound technologies, especially to developing countries and countries with economies in transition, and activities to stimulate the design of sustainable products and services;
3. Invites the Executive Director to build upon the United Nations Environment Programme's existing activities and initiatives with relevant governmental institutions and the private sector, including with the finance sector, tour operators and the telecommunications industry, to contribute to strengthening the role of business and industry in promoting sustainable consumption and production patterns;
4. Requests the Executive Director to support initiatives and activities to enhance corporate responsibility and accountability, within the existing mandate of the United Nations Environment Programme, as referred to in paragraphs 18 and 49 of the World Summit Plan of Implementation;
5. Requests the Executive Director to develop and facilitate consumer awareness campaigns and provide information to Governments to assist in implementing sustainable consumption approaches, such as those contained in the United Nations Guidelines for Consumer Protection;
6. Requests the Executive Director to further develop training, awareness raising and capacity-building programmes in support of Governments, local authorities and business and industry, in particular in developing countries and countries with economies in transition, on sustainable production and consumption in cooperation with other relevant United Nations organizations and international intergovernmental organizations;
7. Requests the Executive Director, in implementing the present decision, to take fully into account, inter alia, gender issues and differing circumstances in regions and countries, in particular the characteristics, development needs and capabilities of developing countries, particularly small island developing States and countries with economies in transition, so that all countries can benefit from the process, by setting up, or contributing to, regional programmes, building upon existing networks and activities;
8. Requests the Executive Director, within the mandate of the United Nations Environment Programme, to take an active role, working in cooperation with Governments, other relevant United Nations organizations and intergovernmental organizations and involving other stakeholders, in pursuit of the development of a 10-year framework of programmes in support of regional and national initiatives to accelerate the shift to sustainable consumption and production patterns, as set out in paragraph 15 of the Plan of Implementation, and to bring forward at the next special session of the Governing Council/Global Environment Ministerial Forum, in 2004, a report on its activities, with regular reporting thereafter;
9. Requests the Executive Director to report to the Commission on Sustainable Development, as appropriate, on the progress of the work done;
10. Invites Governments to provide financial and technical assistance and capacity-building to enable developing countries and countries with economies in transition, especially least developed countries, to take an active part in these activities.

## The first Asia-Pacific Expert Meeting

The first Asia-Pacific regional meeting on the 10-year Framework of Programmes on Sustainable Consumption and Production was held in Yogyakarta, Indonesia, 21-23 May 2003.

The meeting was jointly organized by the Republic of Indonesia and the United Nations Environment Programme (UNEP), with support from the United Nations Development Programme (UNDP), the United Nations Division of Economic and Social Affairs (UNDESA) and the Hanns Seidel Foundation.

The report of the meeting contains the following conclusions and recommendations:

### Chair's summary

Over 60 participants, representing governments, businesses and civil society organisations from 12 countries in the Asia-Pacific region (Cambodia, Indonesia, Iran, New Zealand, Pakistan, Papua New Guinea, Thailand, India, Malaysia, Japan, Philippines and Sri Lanka), met in Yogyakarta, Indonesia, from 21-23 May 2003, to take stock of existing activities, exchange information and experiences, develop common strategies to promote sustainable consumption and production patterns, productivity, employment and economic growth in the Asia Pacific region.

The meeting concluded the following:

- *Recognising* the fact that the Asia-Pacific region has the potential to become the world's main manufacturing hub over the next 10 years and needs to address the challenge of alleviating poverty and increasing the quality of life of all its people;
- *Further recognising* the enormous pressure on the environment and natural resource base of the region that continuation of current consumption and production patterns would cause;

- *Recalling* paragraph 15 of the Johannesburg Plan of Implementation which calls for the development of a ten-year framework of programmes in support of regional and national initiatives to accelerate the shift towards sustainable consumption and production;
- *Further recalling* the outcomes of UNEP's 22<sup>nd</sup> Governing Council and Global Ministerial Environment Forum, held in Nairobi, February, 2003, which requested UNEP to strengthen its sustainable consumption and production activities within its existing mandate and subject to available resources and consistent with the recommendations adopted at the World Summit on Sustainable Development, working in co-operation with governments, other relevant United Nations organisations and intergovernmental organisations and involving other stakeholders;
- *Considering* that activities need to be strengthened to promote more sustainable consumption and production patterns, involving all governments, in partnership with UN and other international organisations, development banks, business community and civil society;
- *Inviting* the international community to assist the Asia-Pacific region in carrying out the activities needed, by providing funds, know-how and technology;
- *Expressing* the commitment and willingness of the region to share information and knowledge with other regions so as to contribute to the global process;
- *Recommends* that:

### **A. Governments take the following actions in order to promote sustainable consumption and production patterns:**

1. Establish coherent and integrated policies and strategies that create clarity and stability for both day-to-day operations and long-term investments and planning processes in support of paragraph 15 of the Johannesburg Plan of Implementation of WSSD;

2. Develop mechanisms/processes to ensure greater involvement of stakeholders in policy making;
3. Ensure more effective enforcement of environmental laws and regulations;
4. Prepare a road map for integrated implementation of multilateral environmental agreements;

***B. Governments in partnership with other stakeholders carry out the following actions***

5. Governments and other stakeholders are encouraged to develop and apply market-based and voluntary instruments, complementing regulatory instruments;
6. Governments, financial institutions and business are encouraged to ensure better access to financing schemes, including loan guarantees and soft loans, particularly to small and medium sized enterprises;
7. Governments are encouraged to implement incentive schemes for promoting sustainable consumption and production patterns;
8. Governments are invited to implement, in partnership with civil society, the UN Guidelines on Consumer Protection (section G on sustainable consumption) through a process of awareness raising, adoption, and implementation, including legislation and enforcement;
9. Governments are invited to integrate, in partnership with civil society, sustainable consumption and production issues into formal and informal education systems;
10. Governments and business are encouraged to adopt sustainable procurement practices and policies, which should not be used as disguised trade and investment barriers;
11. Governments, business and civil society are encouraged to increase support to establish and initiate research and development on consumer behaviour,

sustainable production processes, products and services;

***C. Other stakeholders carry out the following actions***

12. Business is encouraged to carry out self-assessment and define strategies and action plans for economic, environmental and social components of business;
13. Business is encouraged to provide credible self-declarations on their products and performance;
14. Business is encouraged to develop and follow codes of conduct on national and regional basis;
15. Business is encouraged to assist small and medium sized enterprises in adopting sustainable consumption and production practices, through their supply chains and/or in their local community context;
16. International organisations such as UNEP, UNIDO, the Asian Productivity Organisation (APO) and the Asian Development Bank (ADB), and national productivity organisations are requested to strengthen existing institutions such as National Cleaner Production Centres (NCPCs) to enhance their service packages in order to promote sustainable consumption and production patterns, for example by including product-related issues, inter alia, life-cycle analysis, product and service design and marketing;
17. UNEP is invited to explore the possibility of establishing an International Declaration on Sustainable Consumption and Production, or expanding its existing International Declaration on Cleaner Production to that end;
18. International organisations such as UNEP, UNIDO and UNDESA are suggested to develop a generic framework tailored to regional needs for effective national commissions/committees on sustainable development;
19. International organisations such as UNEP, UNESCO, UNIDO, UNDESA and APO are requested to establish help centres



for national and regional dissemination of information and expertise;

20. UNEP and other organisations are requested to develop guidelines and training packages to support capacity building in all stakeholder groups;

21. Civil society and governments in partnership with international organisations are invited to develop awareness and communication campaigns for all stakeholders, including rural and urban communities;

22. Civil society is encouraged to continue their leading role with genuine commitment in integrating traditional values and lifestyles in modern society with support from other stakeholders;

23. All stakeholders in sustainable consumption and production, including governments, business and civil society are encouraged to communicate and collaborate – on the local, national and regional level – to plan strategically to achieve sustainable consumption and production patterns.

## ESCAP 2003

At its September 2003 session in Bangkok, the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) noted that:

The Johannesburg Plan of Implementation calls for the development of a 10-year framework of programmes in support of regional and national initiatives to accelerate the shift towards sustainable consumption and production. As a follow-up, an International Expert Meeting at Marrakech, Morocco, in June 2003 initiated the development of the 10-year framework. A follow-up regional expert meeting is planned for Seoul from 5 to 7 November 2003 to assist in the development of a 10-year framework for Asia and the Pacific. The outcome of that meeting will be reported to the Committee, possibly through a panel discussion.

Document E/ESCAP/CMG/2 highlights the key aspects of the above process and relates it to the relevant activities of the ESCAP secretariat. It is envisaged that the technical-level discussions under the Marrakech process on sustainable consumption and production will be linked with the policy-level discussions in the legislative meetings of ESCAP.

The Commission additionally lists in its priority initiatives of the Regional Platform and its Ministerial Conference many of the work areas included within in the 10-Year framework, such as:

### ***Sectoral-related:***

1. Cleaner production and sustainable energy (issues under this cover energy efficiency, renewal energy, cleaner transportation, pollution prevention, etc.);
2. Protection and management of and access to freshwater resources (issues under this cover water conservation and efficiency issues);
3. Oceans, coastal and marine resources and sustainable development of small island states (which covers issues of fishery conservation and protection);
4. Action on atmosphere and climate change (covers issues of energy efficiency and renewable energy);
5. Land management and biodiversity conservation (covers issues related to GMOs, biotechnology, organic products, etc.);
6. Kitakyushu Initiative (covers issues related to solid waste management, chemical and hazardous waste);
7. Poverty reduction for sustainable development (covers issues related to poverty and consumption and production);

### ***Policy-related:***

8. Capacity building for sustainable development (covers policy related issues such as policy instruments, tools for policy making, monitoring and assessment).

# Annex 1

## Some National Activities in the Asia-Pacific Region

- Japan's laws on green procurement, recycling and waste management and financial incentives for buying electric, natural gas, methanol and hybrid vehicles support sustainable consumption. The "Law Concerning the Promotion of Procurement of Eco-Friendly Goods and Services by the State and Other Entities (Law on Promoting Green Purchasing)", which was enacted in May 2000, encourages consumers to seriously consider the environmental aspects of products and services when purchasing them. For more information see: <http://www.env.go.jp/en/lar/green/index.html>
- China's Law on Protection of Consumer Rights and Interests, publicity and education programmes, environmental labelling, energy-saving campaigns for household electrical appliances, certification of environmentally sound products and 30% sales tax reduction for light vehicles. On 15 March 2001, the China Consumers' Association in collaboration with other related government departments launched a large-scale "Green Consumption" campaign.
- The Australian and New Zealand Environment Conservation Council (ANZECC) developed a National Strategy for Cleaner Production in 1996. The Strategy strives to advance implementation, capacity building and progress measuring. This strategy evolved out of extensive consultation between various stakeholders and a series of background consultancy projects. The strategy document is available at: <http://www.environment.gov.au/epg/environment/eecp/pubs/nscp.pdf>
- New CP legislation in China: China has now adopted a law that requires all companies above a certain size and which do not meet the environmental standards set by the authorities, to either close down, or to undertake a CP audit. The audit will give the company some grace time to achieve improvements through CP, before the authorities decide to take action against them (and hopefully they would come into compliance with the help of CP).
- A range of training seminars and workshops to promote CP have been conducted throughout the Philippines. These have been supported by local and international donor organisations, industries, government agencies, and non-government institutions. Companies in the Philippines have initiated, developed and implemented different programs that contribute to CP. They have also actively participated in various programs and projects. As of 2001, eighty-three companies are ISO 14000 certified and adopt cleaner production approaches. Various stakeholders, particularly industry, have also developed case studies and demonstration projects on CP.

# Annex 2

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- Further information on cleaner production and sustainable consumption is available on the UNEP DTIE web-site:*  
[www.uneptie.org/pc](http://www.uneptie.org/pc)

## ENDNOTES

- <sup>1</sup> UNEP. 2003. "Discussion paper on promoting sustainable consumption and production patterns", 22<sup>nd</sup> UNEP Governing Council and Global Ministerial Environment Forum, Feb, 2003
2. World Resources 2000-2001: People and Ecosystems, the Fraying Web of Life, United Nations Development Programme, United Nations Environment Programme, World Bank and World Resources Institute.
3. UNEP, Global Environment Outlook 2000.
4. The Weight of Nations: Material outflows from industrial economies, World Resources Institute, 2000.
- <sup>5</sup> World Investment Report 2003, Fig. 1.1, UNCTAD, Geneva
- <sup>6</sup> InWent's Sustainable Consumption and Cleaner Production Capacity Building for Cleaner Production Centers will be facilitated in more than

10 countries in the summer of 2003. The training package is available on the web:  
<http://www.uneptie.org/pc/cp/library/training/cdgp/ack/start.htm>

<sup>7</sup> UNEP/CI. 2002. *Tracking Progress: Implementing Sustainable Consumption Policies*. Paris: UNEP/CI.

<sup>8</sup> OECD. 2001. "Policies to promote sustainable consumption: An overview". Paris: OECD. and OECD. 2002. *Towards Sustainable Household Consumption?: Trends and Policies in OECD Countries*. Paris: OECD.

<sup>9</sup> See [www.un.org/esa/sustdev/sdissues/consumption/cpppr01.htm](http://www.un.org/esa/sustdev/sdissues/consumption/cpppr01.htm)

<sup>10</sup> Source: UNEP Regional Office for Asia and the Pacific (ROAP).

<sup>11</sup> BENTLEY, M. 2003. "Global consumers and sustainable consumption: An international study". Ph.D. dissertation, AGSIRD, Paris.

<sup>12</sup> UNEP. 2002. *Overview of the Status of Cleaner Production in Asia and the Pacific*. UNEP ROAP.

<sup>13</sup> UNEP. 2003. SCP discussion paper, 22<sup>nd</sup> UNEP Governing Council and Global Ministerial Environment Forum, Feb, 2003

<sup>14</sup> See [www.aprcp.org](http://www.aprcp.org)

<sup>15</sup> Consumers International. Regional Office for Asia and Pacific. 1997. *A Discerning Middle Class?*, Malaysia: Jutaprint.

<sup>16</sup> For more information about Consumers International's activities and publications on sustainable consumption visit the web-site at: <http://www.consumersinternational.org>

<sup>17</sup> UNEP Global 2002 – Sustainable Consumption (p. 35-37) offers additional actions and approaches for business, consumers, international agencies and governments.

<sup>18</sup> Report of the World Summit on Sustainable Development, United Nations document A/CONF.199/20, available at [www.un.org/esa/sustdev/](http://www.un.org/esa/sustdev/) under "WSSD Report".

<sup>19</sup> Implementation of the United Nations Millennium Declaration, United Nations document A/57/270 (2002); See [www.un.org/millenniumgoals/index.html](http://www.un.org/millenniumgoals/index.html)

<sup>20</sup> See [www.un.org/esa/ffd/](http://www.un.org/esa/ffd/)

<sup>21</sup> See [www.wto.org/english/tratop\\_e/dda\\_e/dda\\_e.htm](http://www.wto.org/english/tratop_e/dda_e/dda_e.htm)

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## About DSD/DESA

The United Nations Division for Sustainable Development (DSD), within the Department of Economic and Social Affairs (DESA) in New York, serves as secretariat for the United Nations Commission on Sustainable Development, preparing documentation for the annual meetings of the Commission. The Division also served as the Secretariat for the Johannesburg Summit and is responsible for promoting and monitoring follow-up to the Summit.

The Division also organizes international expert meetings, publishes analytical documents, and provides technical assistance, particularly in the areas of energy and water.

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## About UNEP DTIE

The mission of the UNEP Division of Technology, Industry and Economics (UNEP DTIE) is to help decision-makers in government, local authorities, and industry develop and adopt policies and practices that: are cleaner and safer; make efficient use of natural resources; ensure adequate management of chemicals; incorporate environmental costs; and reduce pollution and risks for humans and the environment.

UNEP DTIE, with its head office in Paris, is composed of one centre and four branches. It focuses on raising awareness, improving the transfer of information, building capacity, fostering technology co-operation, partnerships and transfer, improving understanding of environmental impacts of trade issues, promoting integration of environmental considerations into economic policies, and catalysing global chemical safety.

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