

**SECOND INTERNATIONAL EXPERT MEETING  
ON THE 10-YEAR FRAMEWORK OF PROGRAMMES  
FOR SUSTAINABLE CONSUMPTION AND PRODUCTION**

**San José, Costa Rica, 5-8 September 2005**

**Summary by the Co-Chairs of the Meeting**

<b><u>Chapter</u></b>	<b><u>Page</u></b>
I. Introduction .....	2
II. Work of the Working Groups .....	10
Working Group 1: Production Processes and Industrial Development : Summary by the Co-Chairs of the Working Group .....	11
Working Group 2: Urban Planning and Waste Management: Summary by the Co-Chairs of the Working Group .....	19
Working Group 3: Sustainable Consumption and Product Development : Summary by the Co-Chairs of the Working Group .....	28
Working Group 4: Regional and National Strategies for Sustainable Consumption and Production Summary by the Co-Chairs of the Working Group .....	36
Working Group 5: Energy, Climate Change and Air Pollution Summary by the Co-Chairs of the Working Group .....	42
III. Summary of the Cooperation Dialogue Sessions .....	49
IV. Conclusions by the Co-Chairs of the Meeting .....	53

## **I. INTRODUCTION**

1. The Second International Expert Meeting on the 10-Year Framework of Programmes for Sustainable Consumption and Production (SCP) was held in San José, Costa Rica, from 5 to 8 September 2005. The meeting was organized by the United Nations Department of Economic and Social Affairs and the United Nations Environment Programme, and hosted by the Ministry of Environment and Energy of Costa Rica, in collaboration with the Ministry of Foreign Affairs and the Costa Rican National Cleaner Production Center. Financial support for the meeting, particularly for the participation of experts from developing countries, was provided by the Governments of Austria, Belgium, Germany, Finland, Italy, Norway, Sweden and the United Kingdom.

2. Participants in the meeting were experts on various aspects of sustainable consumption and production from government agencies, international organizations, consumer organizations, business and industry, and other non-governmental organizations. Some 150 experts from 70 countries and 9 international organizations participated in the meeting.

3. The meeting was organized to follow up on the first International Expert Meeting on the 10-Year Framework of Programmes for Sustainable Consumption and Production, held in Marrakech, Morocco, in June 2003, which launched the Marrakech Process. That meeting decided to hold a second such meeting in 2005.

4. The Marrakech Process was launched as a response to the call, in the Johannesburg Plan of Implementation, Chapter III, 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.” (para.15)

5. The Co-chairs of the meeting were Mr. Allan Flores, Vice-Minister, Ministry of Environment and Energy of Costa Rica, and Ambassador Viveka Bohn of the Ministry of Sustainable Development, Sweden.

### **Opening Plenary**

6. The Second International Expert Meeting on the 10-Year Framework of Programmes for Sustainable Consumption and Production opened with Remarks by Ms. JoAnne DiSano, Director, Division for Sustainable Development, United Nations Department for Economic and

Social Affairs, and Ms. Monique Barbut, Director, Division for Technology, Industry and Economics, United Nations Environment Programme, followed by the Opening Address of the Minister of Environment and Energy of Costa Rica, Mr. Carlos Manuel Rodriguez Echandi.

7. Ms. DiSano emphasized the need to focus squarely on implementation in advancing work on sustainable consumption and production under the Marrakech Process. She identified a number of key objectives of the meeting, including strengthening international cooperation on priority issues, exploring opportunities for partnerships to advance the work in specific areas, identifying and devising concrete plans for responding to the capacity building and technical assistance needs of developing countries, and providing inputs to the work of the Commission on Sustainable Development (CSD). She reviewed the major milestones since the Johannesburg Summit, including the regional processes that have been set in motion in Africa, Asia, Latin America and Europe. Finally, she stressed the need for innovative approaches to resource use and to consumption and production in order to ensure that societies can provide rising living standards for their members, especially for the hundreds of millions of poor people, while slowing resource depletion and reversing environmental degradation.

8. Ms. Barbut began by invoking the Costa Rican greeting, “pura vida”, as an apt expression of the objective of work on sustainable consumption and production. She reiterated the importance of moving from a pre-Costa Rica consultation phase to an implementation phase defined by action on the ground. She stressed the need for applying new thinking on the life-cycle, or closed-loop, economy such as is embodied in Japan’s 3R (Reduce, Reuse, Recycle) Initiative and China’s “circular economy” concept. She also referred to the potential for “leapfrogging” by developing countries, particular in Africa, by learning from the sustainable development experiences of other countries, both positive and negative, and by availing of the latest available technologies and methods for improved management of production and consumption-related activities. Ms. Barbut indicated that UNEP would focus its energies on implementation of concrete demonstration projects in a number of priority areas, including: new models of sustainable industrial development; waste management linked to poverty eradication; capacity building in areas like life-cycle management, eco-design, and sustainable procurement; trade and sustainable development, with particular reference to the concerns of small- and medium-scale enterprises; sustainable mobility; and public communication.

9. Minister Carlos Manuel Rodriguez Echandi traced the evolution of the Costa Rican Government’s sustainable development philosophy and strategy, encapsulated in the phrase: “Competing without destroying the environment.” The country has made a strategic decision to become an “ecological powerhouse”, declaring peace with Mother Nature as it did with its neighbors and all nations when it abolished its armed forces. He enumerated the major elements of Costa Rica’s national sustainable development strategy, stressing that decisions taken in many sectors, including land-use management and planning, have an impact on environmental and sustainable development policies, hence the need for cross-sectoral coordination and policy harmonization as well as multi-stakeholder involvement in policy planning. While sustainable consumption and production do not always feature prominently on the political agendas of developing countries, awareness is growing and closer international cooperation can facilitate that process, as well as contribute to capacity building and resource mobilization. He also alluded to the innovative approaches pioneered by Costa Rica with respect to valuing environmental

services (such as those provided by watersheds and tropical forests) and devising payment systems for them, including through the creation of a national fund to finance protection of one-half million hectares of rainforest. He invited participants to purchase a “Clean Trip Certificate” to compensate the emissions caused by their flights to and from Costa Rica and to recognize the services provided by Costa Rican forests in their absorption.

10. Ambassador Bohn pointed to stark inequities in the consumption of the world’s resources, with 15% of the world’s population consuming more than 50%, and indicated the need for a more even distribution of consumption and production and more equitable and sustainable development in and between countries. She stressed that work on sustainable consumption and production takes on added importance not only in developed countries, but also in developing countries as living standards rise and consumption and production patterns change. The challenge is to provide more people with a better quality of life without undermining the natural resource base and destroying the ecosystems on which we all depend. For many poor people in the developing world, the quality of their environment and of the natural resource base is a matter of survival. Population growth combined with rapid urbanization is increasing pressures on natural resources and the environment in many countries. She then enumerated key questions that need to be addressed in the present meeting, including: How to take the Marrakech Process forward in the most efficient manner? How to strengthen international and regional partnerships? How to develop specific areas of work, for example through task forces? How to involve the development cooperation community more directly in the process? How to provide useful inputs into the Commission on Sustainable Development (CSD) with respect to its thematic work cycles? In discussing industrial development at CSD-14/15, for example, the focus should be on **sustainable** industrial development. She concluded with the hope that one outcome of the meeting would be to clarify the importance of the Marrakech Process to reaching the Millennium Development Goals (MDGs) and sustainable development.

### **Regional Activities**

11. *Africa*: Two regional expert meetings on SCP have been held since Marrakech, one in Casablanca, which formally established the Africa Roundtable on Sustainable Consumption and Production, and the second in Nairobi. In March 2005, a Special Session of the African Ministerial Conference on the Environment (AMCEN) focusing on the NEPAD Environmental Action Plan endorsed in its Dakar Declaration the African 10-Year Framework Programme on SCP that emerged from the 2<sup>nd</sup> African Expert Meeting. Key areas of focus include affordable and sustainable energy, safe drinking water, urban development and sanitation, and strengthening the competitiveness of African industries in world markets. A few pilot projects have been initiated, including one on plastics waste management in Nairobi and one on sustainable consumption and production in the Lake Victoria region. The 1<sup>st</sup> African Symposium on Life-Cycle Analysis has just concluded. The main international partners in African SCP work are UNEP, UN-DESA, Germany and Norway. Lessons learned from the work thus far include: the importance of interaction between the policy process and technical expert groups; and that SCP can provide a framework for achieving development goals such as the MDGs.

12. *Asia-Pacific*: Two regional expert meetings on SCP have been held since Johannesburg, one prior to Marrakech in Yogyakarta (Indonesia), and one after in Seoul. As a result of those

meetings, the ESCAP Committee on Managing Globalization adopted sustainable consumption and production as part of its medium-term work programme. A regional “help desk” for SCP, as recommended in the first regional meeting, has yet to be established. In March 2005, ESCAP held the 5<sup>th</sup> Ministerial Conference on Environment and Development (MCED) in Seoul and adopted an “Environmentally Sustainable Economic Growth (Green Growth)” approach as a strategy for ensuring environmental sustainability while pursuing economic growth, and as an alternative to the conventional “grow first and clean up later” approach. The Seoul Initiative to promote “Green Growth” for the next 5 years, to be launched in November 2005, will promote sustainable consumption and production as a key component and could function as one of the task forces of the Marrakech Process. ESCAP plans to hold a policy forum on “Green Growth” in Seoul, 8-9 November 2005, focusing on policy options to improve eco-efficiency of consumption and production patterns by internalizing environmental costs through fiscal and financial reform. Another policy forum on sustainable consumption patterns will be held in early 2006 focusing on eco-efficiency in consumption and production as economic growth continues, and on policy options to integrate sustainable consumption and production into economic development plans. Improving the role of public policy in providing more sustainable consumption choices to consumers, such as public transportation, and linking traditional lifestyles and cultural values with consumer behaviour will also be discussed.

13. *Europe*: The European Stakeholders meeting on SCP in Ostende, Belgium, was held in November 2004. Among the issues considered were the linkages between SCP and other regional strategies, coupling economic growth and improved livelihoods, involving the financial sector in SCP, strengthening communications strategies towards producers and consumers, and international cooperation on SCP. The European Union has a number of initiatives and publications on SCP, including the revision of the 2001 Sustainable Development Strategy for adoption in spring 2006, with a new emphasis on SCP as a cross-cutting issue and the introduction of more concrete goals. Efforts are also being made to ensure coherence between domestic SCP policies and international commitments. Pilot projects are underway with the private sector on integrated product policies, focusing on mobile phones and teak furniture, and a handbook on green public procurement is in preparation. In June 2005, the EU passed a new eco-design directive pertaining to energy-using products.

14. *Nordic countries (Denmark, Finland, Norway, Sweden)*: A sub-regional meeting of the Nordic countries emphasized the importance of focusing work on the SCP agenda more sharply and breaking it into manageable tasks. Business and industry is seen as key to making progress, with government encouragement. As North-South business relations are increasingly important as a result of globalization and rapid growth in North-South trade, the Nordic Group held a roundtable on the topic in Oslo, which recommended the integration of SCP into the management of supply chains and investment plans. It also noted new market opportunities for emerging economies in sustainable products and identified a number of challenges in this area, including: lack of coordination at the international level, including in relation to trade and sustainable development; a need for a more predictable, transparent policy and regulatory environment; the importance of ensuring non-discrimination in trade; a lack of infrastructure in many developing countries; environmentally damaging subsidies and high costs of capital for investing in cleaner technologies.

15. *Latin America and the Caribbean:* Three regional expert meetings on SCP have been held since Johannesburg, one in Argentina and two in Nicaragua. The first meeting elaborated a list of priorities for work, building on the Latin American and Caribbean Initiative for Sustainable Development. The fact that Nicaragua, one of the poorest countries in the hemisphere, has taken a lead on SCP issues is confirmation of their relevance not only to the developed world, but to countries at all levels of development. Achievements of SCP work in the region include: formulation of a regional SCP strategy championed by a Regional Council of Government Experts; high-level political support for SCP; progress on the development of national policy frameworks, implementation of a number of pilot projects in such areas as sustainable public procurement, eco-design, and youth and sustainable consumption (e.g., youthXchange). Other achievements include awareness raising campaigns (e.g., public service spots on CNN Español), diploma courses for consumer associations and professionals, and a recently concluded course on life-cycle analysis in Costa Rica. Limited resources for SCP – including from donors – have stimulated creative ways of securing funding. Strong South-South cooperation has facilitated regional experience sharing and, while successful experiences are still few, there are some very good examples.

### **Multi-stakeholder panel discussion**

16. The multi-stakeholder panel discussion included four presentations, by Mr Sherif Arif, a Regional Environmental Advisor at the World Bank, Dr Nadia Haiama-Neurohr, a senior policy officer with Greenpeace, Mr Thomas Bergmark, with the Social and Environmental Affairs Division of Ikea, and Ms Pilar Mallari of the ECOPLAN organization and the Colombia Youth Partnership.

17. The World Bank is using strategic environmental tools to improve assessment of environmental impacts of Bank and client activities. One tool assesses the ‘cost of inaction’, or Cost of Environmental Degradation (COED), which provides a basis for estimating the value of environmental services and the benefits of an activity to address a process of environmental degradation. Application of the tool in North Africa and West Asia indicates that environmental degradation is costing between 2% and 5% of GDP, mostly due to air pollution, water pollution and soil degradation.

18. For Greenpeace, one focus area is the elimination of toxic chemicals and their replacement by safe substitutes and improving the knowledge base for the large and increasing number of chemicals with little or no toxicity data. Greenpeace works with progressive companies to promote improved chemicals regulation and to publicize good performance, and with public interest groups to promote their involvement in decision-making.

19. Ikea has committed itself to ensuring good social, working and environmental conditions at its 1500 suppliers in 55 countries and to increasing the suppliers’ capability and motivation to implement and maintain the standards. The standards are based on UN and ILO conventions and declarations and include 90 criteria relating to legal compliance, pollution, working conditions, and procurement of forest products. When an audit indicates non-compliance with standards, as is normally the case in a first audit, a work plan is proposed to remedy the situation and the supplier is given time, perhaps 2 years, to improve performance. Only if the supplier shows no

willingness to improve performance is the relationship terminated for non-compliance. A concern is the limited capacity of authorities in supplier countries to ensure suppliers' compliance with national laws and regulations.

20. The Colombia Youth Partnership, as part of the UNEP-UNESCO youthXchange programme, works to promote sustainable consumption among young people through education and mobilization, addressing them in their language and culture, for example through comics and concerts. Efforts include working for inclusion of sustainable consumption issues in educational curricula, training of educators, development of information material, and networking among youth organizations.

### **Session on Task Forces**

21. The 2003 Marrakech meeting called for informal task forces or roundtables on sustainable consumption and production, with participation of experts from developing and developed countries, to promote progress on the 10-year Framework. It was suggested that such task forces would be informal groups of countries or organizations to work on specific issues of sustainable consumption and production. Generally a task force would have a lead country, which would initiate the work and provide resources to ensure the participation of developing countries. Information on four such task forces was presented in Costa Rica.

22. Sweden had initiated a Task Force on sustainable lifestyles, in cooperation with UNEP. The Task Force will focus on sustainable consumption patterns related to lifestyles and culture, on information and education for sustainable lifestyles, and on the role of marketing – and of youth in particular – in changing consumer behavior. The Task Force will consider legal, economic and voluntary policy instruments for addressing consumption patterns relating to energy, water, resource consumption, waste, health, food and travel. Argentina, Costa Rica and the United Kingdom will participate in the Task Force, and other countries and organizations are invited to participate. The Task Force is expected to report to CSD-14 and 15 and the 2007 international expert meeting of the Marrakech Process.

23. The United Kingdom announced a Task Force on sustainable products, in part to follow-up on the 3Rs Conference in Japan, the Right Lights 6 meeting in Shanghai and the G8 Summit in Gleneagles, United Kingdom, which called for international cooperation on product eco-design and testing. The Task Force, in cooperation with industry, and open to all countries, would raise awareness of product policy, encourage policy measures to promote product innovation and improved environmental performance, promote cooperation on product eco-design, and report to the G8, the Commission on Sustainable Development and the Marrakech Process. An expert meeting is planned for London in November 2005 to plan the work of the Task Force.

24. Germany announced a Task Force on cooperation with Africa in conjunction with the African 10-Year Framework Programme on Sustainable Consumption and Production approved by the African Ministerial Conference on Environment (AMCEN). The Task Force would share experience between cooperation partners and African countries and among African countries, promoting the integration of SCP in plans and programmes in Africa, developing action plans on SCP, and linking SCP with development cooperation policies and programmes such as poverty

reduction strategies, the Millennium Development Goals, and the Bali Strategy on Technology Support and Capacity Building. Waste management systems and the development of an African eco-label were mentioned as possible specific areas of work. The Task Force could start in early 2006 with initial outcomes reported to the 2007 meeting on the Marrakech Process. Other partners from governments and international organizations are very much welcome to participate.

25. Switzerland announced a Task Force on sustainable public procurement to promote understanding of the issue, exchange experience, identify best practices, and develop links between governments, NGOs and other actors. The Task Force would be open to experts from governments and other stakeholders from all countries. The first meeting could be held in November 2005 in Switzerland to develop a mandate for the Task Force. Following review of the first phase of work at the 2007 meeting on the Marrakech Process, the Task Force might prepare a toolkit for sustainable public procurement applicable to both developed and developing countries.

26. At the closing plenary session, a group of Latin American and Caribbean countries proposed a Task Force on Sustainable Consumption and Production for Micro-, Small and Medium Enterprises (MSMEs), with the objective of ensuring that MSMEs are actively involved and contribute to the implementation of sustainable production and consumption. The Task Force would be open to all interested experts and would communicate via electronic fora and teleconferences, building on regional structures for sustainable consumption and production.

### **Cooperation Dialogue Sessions**

27. A series of Cooperation Dialogue Sessions were organized in order to engage the experts on sustainable consumption and production in a dialogue with officials from development assistance agencies. The presentations and discussions were intended to promote the development, funding and implementation of sustainable consumption and production activities and to explore how development agencies could become a mechanism of implementation for the Marrakech Process. The Co-chairs of the Cooperation Dialogue Sessions were Mr James Riordan of Environment Canada and Mr Sherif Arif of the World Bank. Participating development agencies included the World Bank, the Canadian International Development Agency (CIDA), the Development Policy Department of the Finnish Ministry of Foreign Affairs, the Japanese International Cooperation Agency (JICA), the Dutch Ministry of Foreign Affairs and Development Cooperation, the Spanish Agency for International Cooperation (AECA), the Swedish Agency for International Development (SIDA), and the United Nations Division for Economic and Social Affairs (UN DESA). A summary of the Cooperation Dialogue Sessions, a panel discussion based on the Sessions, and conclusions emerging from the sessions are contained in section III below.

### **Field Trips**

28. A series of field trips were organized for the Working Groups, including visits to:

(a) A coffee processing plant of Volcafe, a consortium of coffee plantations and processing units which produces organic coffee certified by the Rainforest Alliance and the Rainforest Initiative (Working Group 1);

(b) The Brasil hydroelectric plant, where thousands of tons of solid waste have interfered with the dam's operation, requiring costly removal efforts and leading to the introduction of waste management programmes in upstream communities (Working Group 2);

(c) A community rural eco-tourism site that is part of a growing industry in Costa Rica, enabling visitors to experience local culture, biodiversity and rural livelihood activities (Working Group 3);

(d) The Plama Virilla programme, which involves payments to forest land owners and other community members for environmental services, including watershed and river basin management (Working Group 4);

(e) The Rio Azul landfill site with recovery of methane used for generating electricity, while reducing greenhouse gas emissions and generating certified emission reductions for sale (Working Group 5).

29. Meeting participants expressed their great appreciation for the organization of the field trips, which provided a valuable practical complement to the discussions in the Working Groups.

### **Costa Rican Activities on Cleaner Consumption and Production**

30. Mr Sergio Musmanni, Director of the Costa Rican National Cleaner Production Center, presented the country's activities on sustainable consumption and production. He noted the regulatory framework that had been developed to include new trends in policy instruments and mechanisms to promote good performance in the private sector and civil society. Some of the developments are the result of the National Materials Handling Report, the Materials Exchange System, and the introduction of the Extended Producer Responsibility (EPR) mechanism. Practical application of voluntary schemes for cleaner production, with support from the Ministry of Science and Technology and several donors, was highlighted.

### **Training Workshops**

31. A number of training workshops were offered during the meeting, on the following topics:

(a) Sustainable Public Procurement, by Mr Marc Hidson of ICLEI – Local Governments for Sustainability;

(b) United Nations Consumer Guidelines, by Mr Bjarne Pedersen of Consumers International;

(c) Environmental Management Accounting, by the Costa Rica National Cleaner Production Center and the Fundación Centro de Gestión Tecnológica e Informática Industrial (CEGESTI) of Costa Rica;

(d) Waste Management Issues, by Dr Per EO Berg of Dalarna University, Sweden;

(e) Life Cycle Analysis, by Ms Ana Quiroz of ECOGLOBAL, Costa Rica, and Mr Gregory Norris of Harvard University, United States.

## II. WORK OF THE WORKING GROUPS

32. Detailed discussions of sustainable consumption and production were held in five parallel Working Groups:

Working Group 1: Production Processes and Industrial Development, Co-chaired by Mr Edwin Piñero, Federal Environmental Executive of the United States, and Ms Olivia la O’Castillo, Asia-Pacific Roundtable on Sustainable Consumption and Production of the Philippines;

Working Group 2: Urban Planning and Waste Management, Co-chaired by Ms Cristina Cortinas de Nava of Mexico and Mr. Kazuyoshi Okazawa of the Ministry of the Environment of Japan;

Working Group 3: Sustainable Consumption and Product Development, Co-chaired by Mr Kenneth Nkowan, Ministry of Tourism, Environment and Natural Resources of Zambia, and Mr Paul Hofseth, Ministry of Environment of Norway;

Working Group 4: Regional and National Strategies for Sustainable Consumption and Production, Co-chaired by Mr Terence Illott of the Department for Environment, Food and Rural Affairs of the United Kingdom, and Mr Philip Acquah of the Environmental Protection Agency of Ghana;

Working Group 5: Energy, Climate Change and Air Pollution, Co-chaired by Ms Elfriede-Anna More of the Ministry of Agriculture, Forestry, Environment and Water Management of Austria, and Mr David Barrett of the Petroleum Corporation of Jamaica.

33. The Working Groups considered the above themes, taking into account the three dimensions of sustainable development, in light of the following questions: (a) What works, what doesn’t? (b) What are the main obstacles to sustainable consumption and production? (c) What are the priorities for further work and international cooperation?

34. The Working Groups met on 6 and 7 September to discuss their respective themes and questions. On 8 September, the Co-chairs of the Working Groups presented draft summaries of the discussions in their Groups to the plenary for discussion. Following those discussions, the Co-chairs of the Working Groups prepared the following summaries. The summaries were not negotiated and do not represent consensus texts, but are the Co-Chairs’ summaries of the highlights of the discussions, taking into account participants’ comments on the drafts.

**Working Group 1**  
**Production Processes and Industrial Development**  
**Summary by the Co-chairs of the Working Group**

35. The Working Group was co-chaired by Mr Edwin Piñero, Federal Environmental Executive of the United States, and Ms Olivia la O’Castillo, Asia-Pacific Roundtable on Sustainable Consumption and Production of the Philippines. The Working Group included 23 participants from 17 countries and 3 international organizations.

**Overarching Issues**

36. Understanding the pressures on business and the way business responds to these pressures is key to using the drivers for sustainable industrial development. To be effective, strategies and legislation must take these pressures into account.

37. Consumers want high-quality, inexpensive goods while simultaneously expecting companies to be socially and environmentally responsible in the way these goods are produced.

38. In promoting sustainable industrial development, governments can lead by doing, implementing coherent and appropriate approaches, and working with industry to do the same. For example, green procurement initiatives can send a signal that encourages SCP.

39. Many governments, particularly in developing countries, still look at environmental and sustainability concerns as secondary elements and as expenses and/or obstacles to achieving priorities such as rapid industrialization, employment creation and poverty reduction. Additionally these countries may face difficulties obtaining the necessary technology and/or knowledge, and management techniques.

40. A system of strict command and control regulations alone may not work well for a variety of reasons. For example, such approaches may not be effective in areas where the industrial sector varies greatly in size and in the nature of targeted consumers; as well as where micro-, small and medium-size, formal or informal, enterprises provide work and income for most of the population.

41. In regard to implementing SCP practices, while there are some similarities between developed and developing countries, there are important differences, and solutions suitable for one group may not work for others. This may also be the case when analysing different solutions for the informal and formal industry sectors.

42. Problems arising from changing government priorities, as well as changes in corporate management, increase uncertainties in implementing industrial development programmes as well as in cleaner production activities. The delegation of responsibility from national to local authorities must also be managed, as local governments often lack technical and financial resources.

43. It is important that both government and business take ownership of the SCP agenda. Government can promote industry adoption of these concepts by working directly in a cooperative manner with related sectors of the economy, perhaps through trade associations and chambers of commerce.

44. Flexible approaches to regulation, including positive incentives and assistance, are necessary for promoting business participation in SCP activities. Companies also need to develop a better understanding of the value of SCP and that it can be profitable and makes business sense.

### **Policy Frameworks**

45. There is a need to develop policy frameworks that promote the adoption of SCP by industry. Regulations, if well designed, work well in many areas, but government cannot regulate everything. Generally, a mix of policies and instruments will be desirable, with financial and economic instruments, information tools, and voluntary approaches complementing regulation.

46. Clarity, predictability and equity in regulatory frameworks are the basic elements of success. Industry prefers stable and transparent regulatory regimes to an environment of regulatory uncertainty and arbitrariness. Industry also wants flexibility in meeting regulatory requirements, to be able to choose how to respond most cost-effectively.

47. Although most developing countries have adopted sound environmental regulations, they sometimes lack the financial, human and technical capacity for effective enforcement. Also, generally they have insufficient resources for proper monitoring of production activities. Such inconsistent enforcement can result in an unfair advantage to those who do not comply, and it also undermines the credibility of the authorities.

48. Whereas regulations have been generally effective in controlling production processes in developed countries, they have not been as effective in addressing the impacts of products during the use and disposal phases. Labelling schemes can help to address impacts in these phases, supporting regulation in the promotion of sustainable production. The Energy Star label in the United States, for example, is used by over 1400 manufacturers and in 2004 generated some \$10 billion in energy savings to consumers. Another example is the Swiss Fair Trade label in the Kenyan flower industry.

49. Extended producer responsibility policies are another tool that has proven successful in addressing pre- and post-production environmental management issues. The Canadian chlorofluorocarbon (CFC) recovery programme was cited as a successful example, where recovery and disposal costs were covered by a voluntary levy on CFC substitutes. Guidelines, codes of conduct and other non-regulatory tools can address problems not covered by regulations, as long as they are not overly burdensome to the industrial process. Also, recognition of efforts can encourage SCP. For example, in Costa Rica, several hydroelectric and refreshment industries have committed to “profiting while protecting” the natural resource base of their economic development, by supporting a recognition program for foresters that help to protect their water sources.

50. In developing countries, voluntary agreements play a large part in helping compensate for weak regulatory enforcement capacity. Secondly, negotiated voluntary approaches to improving industry performance work well with large companies when they see the financial benefit. Also, due to the “demonstration effect”, smaller enterprises may then follow suit. Companies can benefit by being proactive and performing beyond current regulations in order to stay ahead of future regulations. Programmes based on the 3R initiative (reduce, reuse, recycle) were cited as examples where industry has seen potential cost savings and thus has been willing to participate voluntarily. However, this presents a difficult challenge for SMEs.

51. Industry and other stakeholders should be actively involved in the development of legislation, regulation, and other government initiatives to ensure that their technical expertise is used. This can also help prevent inadvertent disincentives to innovation. Canada’s experience in Pollution Prevention Planning is a good example of government setting an environmental performance target for industry while allowing industry to use its expertise to select the most suitable approaches to reach the goal.

52. Efforts are needed to develop regulations that promote the adoption of environmentally sound production technologies and incorporate incentives for companies to adopt them. This can include using available subsidies for transfer of cleaner production technologies, rather than concentrating on end-of-pipe technologies that are strictly for environmental protection and do not improve production efficiency. Care must be taken to ensure that subsidies do not adversely affect the market and competitiveness.

53. The effectiveness of pollution taxes as an incentive for cleaner production can be strengthened if Governments use the revenues for programmes to support environmental compliance by industry, e.g., through financial support for research and development into cleaner processes and products.

54. Despite the many available tools and a large number of demonstration projects, the impact and penetration of SCP activities is still very limited in most countries.

### **Sustainable Consumption and Production and Profitability**

55. A major barrier to sustainable consumption and production, particularly in developing countries and for small and medium-sized enterprises (SMEs), is that companies may not have access to the capital needed to implement available cleaner production options even when their profitability is established. Solutions to the lack of access to technology for cleaner production are needed. Improving access to finance for SMEs may help to promote innovation and should be a priority. Sweden, for example, has financing initiatives and projects that specialize in supporting SMEs to improve their business and develop it in a more environmentally sound way. Developing countries may be able to make greater use of funding sources such as the Global Environmental Facility for this purpose.

56. Another factor limiting investment in cleaner production is that banks generally approve investment loans not on the basis of the profitability of the investment, but on the financial status

of the company, thus limiting access to credit by small companies or companies that do not have a credit history. In many countries, the market for risk capital is underdeveloped.

57. Schemes like rotating loan guarantee funds can reduce exorbitant interest rates facing companies in some developing countries, thereby helping to level the playing field in the acquisition of new technologies. In Nicaragua, small and medium-size hotels have been able to finance the purchase of solar water heaters by using a rotating fund established by the Export Promotion Agency of Spain. In this case it was possible to reduce the interest rate from the local level of 32% to a rate of 9.5%.

58. Environmental management accounting (EMA) is a valuable management tool for calculating the financial and environmental impacts of production operations and new investments. EMA can have an important influence in convincing companies to undertake pollution prevention activities. This may be particularly true in small enterprises, for which even marginal cost savings can be very important. Without such a tool, companies often cannot see the positive financial impacts of SCP. One source of information is the new International Guidance Document on EMA produced by the International Federation of Accountants ([www.IFAC.org](http://www.IFAC.org)), which addresses the gaps that exist in traditional management accounting practice with respects to the costs and benefits of cleaner, more efficient production. This new accounting method will help to demonstrate the profit potential of pollution prevention investments and reduce the need for regulation or subsidies to induce companies to adopt cleaner technologies.

59. Information and assistance centers could be more innovative in exploring new ideas and opportunities for SCP while learning from best practices worldwide and supporting dialogue and cooperation between government and industry. In Nicaragua for example, a broad societal approach has been taken to promoting cleaner production, since high turnover in many enterprises can frustrate efforts at firm-by-firm improvement in management methods. These centers should not compete with local consultancy firms. Examples of such centers that operate at the national scale in some countries are the National Cleaner Production Centres (NCPCs) supported by UNIDO and UNEP. Examples of more local centers are the EPA Public Entity EMS Resource (PEER) Centers in the United States.

## **Partnerships**

60. Partnerships between government, industry, their suppliers and civil society are necessary for building capacity and sharing information about best practices. Such relations need to be built on trust, but this trust is very hard to achieve. Information and assistance centers, including the NCPCs, could be a good bridge between government, industry and NGOs in SCP and industrial development, in part by building trust among these actors.

61. There is already much experience in sharing best practices. An example is the UK government work with various business sectors encouraging them to adopt SCP practices by sharing ideas with each other in a network setting. In the case of supply-chains, the sharing of success stories between multinationals and their suppliers can help develop capacities in the suppliers to find solutions to internal and external environmental problems, which in turn can

strengthen the suppliers' market position. Groups of multinationals dealing with similar types of supplier may benefit from creating networks for building supplier capacity, not only to comply with environmental and social regulations but also to improve their productivity, product quality and financial performance. A change in industry culture towards one in which 'sustainable' is equated with 'profitable' can help compensate for inadequacies in regulatory enforcement. Multinational corporations may wish to explore the capacity of information and assistance centers to carry out training and create capacity building programmes for their suppliers in developing countries.

62. Creating networks of large companies to promote supply chain management work in SCP, such as the network currently being built by several industries and others in China, could be promoted in other countries and supply chains.

63. Government incentive policies can play a role in stimulating diffusion of cleaner technology along supply chains. In Argentina, for example, the government provides tax credits to large companies that make SCP investments in small-scale supplier companies. Industry associations can also promote experience- and technology-sharing between large- and small-scale enterprises, as illustrated by the South African Chamber of Mines' initiative to incorporate and address the concerns of small artisanal miners.

64. Another form of partnership is that between regional and international organizations and information and assistance centers. An example is the current initiative of the Inter-American Development Bank to promote SCP while adapting its activities to specific country conditions through working closely with the NCPCs and helping them engage in new areas of work.

65. SCP should not be a stand-alone issue; it should be addressed in all facets of international economic, social, environmental and health policies. It was noted that, with the proliferation of regional trade agreements, production is increasingly organized into regional supplier networks, so regional SCP efforts take on added importance.

### **Trade and Sustainable Consumption and Production**

66. Market access is a key to development. However, many developing countries do not have access to technologies necessary for SCP. Increased access to technology through trade of goods and services, information sharing, research and development and investment are essential.

67. Some countries, especially in Africa, are not prepared to adopt these new technologies or to respond to changes in policies in other countries. For example, new regulations in developed countries banning the use but not the production of certain types of materials or technologies, which are then exported to developing countries, can cause environmental problems in the developing countries. On the other side, complying with new environmental health and safety requirements in major export markets can impose heavy technical and financial burdens on developing country exporters, as for example with the horticultural products market.

68. While information may be available on planned regulatory changes affecting trade, there are no mechanisms to assist developing country governments and industry in gaining access to

this information before the changes take effect. This is particularly problematic for SMEs in developing countries because they are the last ones to receive the information and lack the tools to respond effectively.

69. A clearinghouse for information or early warning system could be created to inform developing countries of upcoming regulatory changes in developed countries.

70. As international trade continues to grow faster than global GDP, trade rules and agreements can have important implications for incentives to produce cleaner products. Regional and bilateral trade agreements – for example between the United States and its trading partners – generally include an environmental component, and preferential tariffs are applied in some cases to products that are re-manufactured.

71. There is a need for increased support for research and development on production technologies in developing countries in order to reduce technological dependence and improve the effectiveness and adaptability of new technologies to meet local requirements.

### **Special needs of the informal sector and micro and small enterprises**

72. The informal sector is of critical concern for developing countries. Policies promoting SCP and industrial development should take into account their special conditions. The environmental impact of informal and micro enterprises, while very small individually, can be large collectively. We need to recognize however the importance of such enterprises for employment creation and income distribution. Yet, those enterprises are often beyond the reach of regulation and cannot afford investments in SCP. Neither can their managers afford more than a very short time for training in SCP methods. New incentive devices, financial instruments and training tools may need to be devised to meet their particular needs.

73. One tool to promote SCP in the informal sector and micro and small enterprises is tailored and focused training and capacity building. For example, the Government of Brazil is implementing a training program – operationalized by transnational corporations – composed of a short seminar and “in-company training” adapted for micro and small companies’ needs. This is a public-private partnership of the Ministry of Environment of Brazil, the Confederation of Industry of Brazil, the National Industrial Training Service (SENAI), and anchor enterprises. Enterprises from different sectors are mixed in the training to foster cross-fertilization of ideas and lateral problem-solving.

74. Information and assistance centers, including the NCPCs, could be an important intermediary for reaching some of these companies if they can persuade them of the financial benefits of SCP adoption – which in Panama are referred to as “eco-profits” – and help them overcome technical and credit constraints.

## Steps forward

75. In summary, the following key areas present opportunities to accelerate implementation of SCP:

- Mainstreaming SCP in poverty eradication
- Government capacity building at all levels
- Flexible and predictable regulation, and consistency of enforcement
- Promoting profitability of SCP
- Funding sources and financing
- Sustaining the effort after the initial funding
- Incentives and voluntary initiatives
- Distinguishing between large and small industries, formal and informal enterprises, and between developing, transition and developed countries
- Dialogue between industry, government, NGOs, trade associations, and academia
- Ownership of the effort and concept of SCP
- Overall knowledge and awareness of consumers
- Market effects of technology transfer (how exports/trade can help) – and market access
- Consumer behaviour
- Cooperation and dialogue among stakeholders at the regional level to advance the Marrakech Process

76. The following steps could help promote SCP and industrial development:

(a) Explore changes in the relationships of companies with their suppliers and waste disposal services to reduce the focus on volume as a basis for contracts and promote a focus on material flow reductions and waste and resource contracting to promote efficiency;

(b) Encourage both buyers and producers to become engaged in the Marrakech Process;

(c) Promote the participation of the Global Compact and its members in the Marrakech Process;

(d) Encourage involvement of chambers of commerce and industry associations in the Marrakech Process to accelerate diffusion of SCP concepts to a broader audience within industry sectors;

(e) Develop activities on supply chain management as part of the implementation of the Marrakech Process, including the organization of a conference on the topic;

(f) Explore the potential for collaboration between industries and academia, especially in addressing technical issues and in the design of courses in sustainable business management, among other issues. Case studies can be valuable for this purpose;

(g) Recognize the importance of and take advantage of accumulated know-how, established capacity and credibility of the information and assistance centers, such as the NCPC network, as important tools in the diffusion of SCP concepts, with emphasis on both sustainable consumption and production, and how these approaches link to poverty eradication. One proposed activity is efforts to strengthen and expand the programmes of the NCPCs to accelerate the uptake of SCP concepts;

(h) Encourage collaboration between transnational corporations and the assistance centers in the work on sustainable supply chain management and the training of suppliers. More specifically, UNEP is requested to prepare a project proposal for activities that improve the marketability of the services that could be provided by the National Cleaner Production Centers to transnational corporations. Commerce departments can provide support in contacting companies and trying to involve them as much as possible in the process;

(i) Avoid duplication of efforts, build on existing experiences, and promote more widespread education by encouraging and facilitating information exchange;

(j) Develop training activities, simple environmental costing tools, technical and financial support mechanisms, mentoring and other approaches to support micro and small-scale, informal and formal, enterprises in meeting their particular challenges in adopting more sustainable production methods. SCP can be a strategy to improve their competitiveness and profitability, as well as environmental performance;

(k) Encourage the establishment of rotating loan guarantee funds to ensure a level playing field in the acquisition of new technologies by reducing the interest rates available to companies in developing countries;

(l) Encourage further research in SCP, such as developing studies to explore the cost of inaction with regard to the non-implementation of SCP, and links between competitiveness and innovation. Additionally, look into the feasibility of developing local SCP indicators for monitoring progress;

(m) Recognize, promote, and support the importance of regional efforts such as cooperation and dialogue among stakeholders, countries, and governments, at all organizational levels.

**Working Group 2**  
**Urban Planning and Waste Management**  
**Summary by the Co-chairs of the Working Group**

77. The Working Group was co-chaired by Ms Cristina Cortinas de Nava, a waste management consultant in Mexico, and Mr. Kazuyoshi Okazawa of the Ministry of the Environment of Japan. The Group included 18 participants from 12 countries and 5 international organizations.

78. Ms. Cristina Cortinas de Nava gave a keynote speech on the situation in Mexico, where a Waste Prevention and Integrated Management Law was introduced. This included common but differentiated responsibilities for all stakeholders concerned, extended producer responsibility and the polluter pays principle. Solid waste needs to be re-used, recycled or used as a source of energy whenever possible. The law also includes activities on greening of the government. Authorities at all levels (national, federal and local) are to adopt sustainable consumption policies that will help to strengthen markets for recycled materials. A Mexican Network on Environmentally Sound Management of Wastes (REMEXMAR) is being formed in every state to involve local stakeholders in implementation of the law. Argentina, Brazil, Colombia, Costa Rica, Panama and Peru have formed similar networks. Linkages with poverty eradication are important, for example addressing the livelihood concerns and health risks of scavengers. The creation of micro enterprises and cooperatives is promoted. Linking waste management policies with other policies was considered important, such as with energy policies (using waste as alternative fuel), water management (prevention of water pollution), and agriculture (use of organic waste to generate biogas and/or compost).

79. Mr. Kazuyoshi Okazawa (Japan) stressed the importance of the 3R Initiative (Reduce, Reuse, Recycle), which was endorsed at the G8 Summit in 2004 at Sea Island, USA, and launched at an April 2005 Ministerial Conference hosted by the Government of Japan, in which G8 countries participated as well as other countries and organizations, including UNEP, the Basel Convention Secretariat and OECD. The concept aims at reducing waste through eco-efficient resource use, including product design, reuse of items to prolong their life cycle (by means of repair services), and recycling materials that cannot be used directly as raw materials. The issues discussed at the conference included strengthening domestic policies on 3R, reducing trade barriers against the international flow of goods and materials, and cooperation with developing countries. Current measures in Japan include programmes on eco-design for 3R, labelling, simplified packaging, use of reusable boxes, green purchasing, reusable bags, and household waste sorting and recycling schemes. Cooperation between developed and developing countries is important since the approach is also useful for developing countries because it prevents pollution and establishes a resource efficient economy. The Eco-Town project was mentioned as an example of recycling. Science and technology suitable for 3R needs to be promoted, for example research on regional material cycle systems, research on material flows, and development of 3R clean technologies. Japan's Action Plan for developing a global Zero Waste Society includes support to developing countries.

## **A. What works, what doesn't**

### **1. Urban planning and waste management**

80. Mr. Miguel Araujo, Basel Convention Secretariat, described the global challenges on waste management, in particular hazardous wastes, and explained the current definitions and classifications of all waste streams. The overall goal of the Convention is to protect human health and the environment. Objectives include to reduce transboundary movements of hazardous wastes to a minimum, and to minimize their generation, which links to Cleaner Production. The Convention has a network of regional centers for training and transfer of technologies. The strategic plans have evolved towards life cycle management and towards synergies with other multilateral environmental agreements. In 2004 a Ministerial Statement on Partnerships for meeting the global waste challenge was introduced. It was concluded that, despite some successes in managing wastes, there is an unprecedented growth in the generation of hazardous wastes, leading to the accumulation of hazardous wastes in urban settlements, and posing high risks, particularly to the poor, including children. The importance of action at the source was highlighted.

#### *Poverty Eradication*

81. It was mentioned that poverty eradication should be a priority for waste management to which all developed countries should contribute. In the Bahamas, modern solid waste management facilities are required (landfills instead of dumps) but are expensive due to lack of space and economies of scale on the islands. Rapid growth in waste generation (due to tourism) sometimes makes landfills obsolete within one year after installation. An Urban Renewal Project, initiated by the police in a poor area out of concern for criminality, led to better waste management as well as to a decrease of criminality. In addition, the public transport system is not well developed.

82. Leapfrogging to more sustainable patterns of consumption and production was considered necessary to accelerate achievement of the Millennium Development Goals. In the urban management and transportation sector, it would be helpful if organizations such as the World Bank could assist in modifying national accounts to introduce environmental accounting. National accounts should incorporate natural resource depletion and environmental impacts. For example, in El Salvador calculations have been done on how many children die because of environment-related illnesses and other causes and how much environmental problems cost the economy – an estimated 3.4% of GDP every year. This type of study helps to persuade finance ministers. Political deadlocks need to be broken to bring responses to such problems to the highest place on policy-makers' agendas.

83. Poor neighborhoods often pay more for their water since they do not receive water through the municipal piped network, but have to buy it from private vendors.

#### *Governance*

84. Many participants agreed that the basis for dealing in a sustainable and integrated way with issues such as transportation, sanitation (including waste management, wastewater treatment), drinking water, energy, health, and other related environmental, social and economic issues, is

through the development of long term sustainability plans at the community level. In this regard, participants recognized the need to have municipalities develop these plans in inclusive ways. Politicians should understand that achieving sustainability is a protracted process, which requires long-term planning. Building capacity at municipal level and new institutional frameworks are therefore important. Health, social services, and waste management issues are currently being dealt with in an isolated fashion. More integrated frameworks are needed at the local level, including participation of citizens giving their views on what their city should look like in the future.

85. Big cities, which in some cases accommodate 80% of the total national population, face enormous problems. It is universally recognized that waste problems are complex and diverse as medical, agricultural, urban and industrial wastes are commonly mixed together. Solutions will be costly and take long to achieve. Waste, water, energy, construction and transportation all need to be included in sustainable city programmes and policies. Large metropolitan structures can pose unmanageable problems. Splitting those big entities into more manageable small-scale communities might facilitate managing these issues, as one participant suggested. Some participants indicated that there is no integrated responsibility for waste management and sanitation on the national level in their countries, putting too much responsibility on local authorities, which often lack the financial resources and expertise to address the issue.

86. Three key conditions for successful waste management are political will (indicated by regulatory action and budgetary expenditures, not by speeches), leadership (a governor or head of municipality that believes in an integrated approach), and ownership (people should be part of the process, believing that they can change dirty and unhealthy living conditions). An example was given of Alexandria, Egypt, which was unattractive because of municipal waste, but is now clean as a result of the government's will to establish integrated waste management plans with private sector participation and of the leading role of the Governor. The "black cloud" phenomenon in Cairo, Egypt, has sparked the political will to establish integrated solid waste management plans.

#### *Policy instruments*

87. Public awareness and involvement of stakeholders through mechanisms that allow their informed and organized participation in planning activities and in the implementation of measures are key concerns at national level.

88. The need for legal frameworks to address hazardous waste management was mentioned as well as the need for law enforcement and the use of financial and economic instruments. Some participants recommended that people should pay fees that would fully cover the costs of the infrastructure. The Japanese experience with municipal and hazardous waste management shows that appropriate regulations, technology (for treatment, incineration) and economic incentives are keys for achieving progress. In Mexico experiences in the past with regulation and control of hazardous waste led to new legislation on all types of wastes.

89. Governments at national and local level have responsibilities in waste management. The private sector makes money out of collection, but not disposal. Landfills are normally not

profitable. Landfill operators would therefore like to be responsible for the whole system from collection to disposal. They need a legal and regulatory system that rewards them for their actions. In some cases, where neither the public nor the private sector wanted to invest financial resources, for example in remote areas, NGOs have contributed to collection and composting schemes and succeeded in developing innovative and viable projects and small enterprises. Governments could help them to replicate these initiatives.

90. Waste prevention was considered as important. Some good examples were mentioned: acid lead battery recycling (e.g. Central American experience with Baterias de El Salvador), mercury take-back programmes, recovery of cars, etc. However, recovery rates of packaging are usually low. Even well developed systems – e.g., in Sweden – show low rates for plastic and cardboard recovery (30-40%) while glass and metal reach 70% and corrugated cardboard over 80%. In many developing countries, the content of recyclables are low, in many places not more than 10%. Reducing packaging waste can also be facilitated by product improvement, for example more concentrated detergents.

#### *Best practices and obstacles*

91. UNEP's concept of Cities as Sustainable Ecosystems (CASE) should be considered in the development of appropriate planning models and integrated solutions for communities. One example of this approach is the Melbourne Principles for Sustainable Cities, an initiative of UNEP and ICLEI, which are intended to help cities create environmentally healthy, vibrant and sustainable spaces where people respect one another and nature, to the benefit of all. Currently three communities in Canada are piloting the application of the principles.

92. UNEP, UN HABITAT or other relevant organizations could consider establishing databases, or expanding existing ones, for exchanging best practices. Networks of NCPCs and Basel Convention Regional Centres could be more effectively used.

93. Slovenia has launched a programme for municipalities in which experts guide and assist municipalities in preparing their municipal environmental programmes in order to address their urban environmental problems in a sustainable way.

94. The Republic of Macedonia has developed solid waste management plans for sub-regions. Only 5% of the rural areas are currently covered by organized collection of waste. Other obstacles are the generation of dioxin from burning at municipal landfills. Incinerators may be used improperly, for instance to burn chemicals. A wastewater treatment plant could not continue operating because of lack of funds.

95. Attention was called to the need of small island development States (SIDS) to address their specific urban planning problems. Global warming threats were mentioned (many people live close to the islands' coasts), as were problems with waste disposal, improper use of incineration and illegal housing construction (squatting).

96. A sampling of United States initiatives on urban planning and management was distributed, including projects such as the Resource Conservation Challenge, Hospitals for a

Healthy Environment and Product Steward Partnerships (a more complete listing can be found at [www.sdp.org](http://www.sdp.org)).

97. The Mediterranean Environmental Technical Assistance Programme (METAP) of the World Bank, the EU, the European Investment Bank (EIB), UNDP, Switzerland and Finland, is providing technical support and capacity building to 8 southern Mediterranean countries in solid waste management.

### *Lessons learnt on urban planning and waste management*

98. In summary:

(a) Even developed countries were at a certain point underdeveloped and have passed through various stages of development, and hence may have useful experiences to share with developing countries;

(b) Household waste is a sanitation problem, affecting the health of people and in particular children. Waste management and sanitation have to start at home and should get greater emphasis;

(c) The composition of waste has changed all over the world due to new consumption patterns and products;

(d) Technology support is not always adequate where the hardware is not accompanied by software support (training in selection of technology, operation and management skills). Otherwise technologies can become obsolete or non-functional very quickly (“*white elephants*”);

(e) Proper application of policy instruments is key to making progress. Many mentioned the need for laws and regulations, complemented with technical guidelines, as a minimum basis for protecting the environment. But legislation needs to be enforced. Problems of non-compliance and corruption need to be addressed. Continuity is important. Even successful projects can be vulnerable to changes in, for example, national and local governments and the withdrawal of donors' support. Ownership of the projects by all stakeholders is important. Long-term stability is needed, as is technology (in its broad definition) and economic incentives. Leadership and leadership development can be problematic. Education systems need to be fundamentally changed, extending beyond providing information on environmental issues and aiming at generating leadership in all fields and building citizen power. The private sector needs to have legal certainty and fiscal incentives. International organizations need to cooperate with national governments in legislation, natural resource accounting, and help with databases and websites.

## **2. Sustainable transport**

99. The meeting heard a keynote presentation by Mr Brian Williams of UN HABITAT, who talked about sustainable consumption patterns in urban transport in developing country cities and noted a number of challenges. He cited an estimate that by 2020 transport will kill more than HIV, war and tuberculosis combined, with children accounting for the majority of the victims. Transport affects use of urban space to a great extent, and transport infrastructure investment is one of the leading causes of forced evictions and displacement worldwide. Women are seriously

constrained in their access to transport. Africa is one of the fastest urbanizing regions in the world. Transport is a great employment generator, with 70,000 persons employed in the sector in Nairobi alone. Transportation planning is important for sustainable transport and air quality. Information needs are: who is travelling, where, how, when and why, and how consumers respond to changes in price and other factors. This information allows the development and implementation of transport demand-management planning measures. Local authorities may need targets for such issues as improved road safety and reduced traffic congestion. UN HABITAT's programme for urban transport promotes these types of activity. The private car is not the future for urban transport in the world.

### *Policy instruments*

100. A discussion followed in which a whole range of possible policy instruments was presented. In order to influence consumers' habits, attention should be paid to using both awareness raising and information campaigns (software) and infrastructure (hardware). One participant said that currently the state of traffic and air pollution in cities in developed countries is even worse than in developing countries. One participant felt that regulation on advertising for large cars should be considered, to tackle the problem at the source.

101. In El Salvador, a scheme of flexible hours for government offices is attempting to reduce traffic congestion and air pollution. The World Bank encourages holistic transport planning, including both hardware and software actions. The case for authorities setting an example was also mentioned, such as senior officials using public transport, bicycles or walking.

102. Some participants opposed regulation on private car use, because it would limit the personal freedom of consumers. Management through economic instruments was considered to be a more effective and acceptable instrument. Regulation targeted at industry, such as fuel efficiency design, was also more acceptable. Dedicated lanes for buses and other infrastructural measures were mentioned as means to promote public transport. Other options include use of non-motorized transport such as bicycles (for short distances, and as many participants stressed, in certain natural conditions such as flat terrain), as well as re-design of city centers.

### *Best practices*

103. Bangkok was cited as a case study. Traffic congestion had become extreme, even forcing children to come home from school at 11PM. The local authorities decided to build light rail infrastructure and express ring highways, significantly reducing congestion and pollution problems. The costs, however, were ten times higher than if the authorities had taken similar action 20 years earlier. This could serve as an example for other cities.

104. The EU thematic strategy on the urban environment was mentioned as providing helpful tools for preparing environmental management plans and systems for cities, focusing on transport, urban design and planning and construction.

105. In many developing countries, old cars, often more than 10 years old, are imported as the price is low and repairs can be done without high tech knowledge, creating jobs in the service

sector. However, as one participant pointed out, they create pollution problems and, eventually, they become waste in developing countries.

106. In Egypt many old taxis have converted their engines from gasoline to CNG with incentives provided by the government. Lebanon has banned the use of diesel engines in personal vehicles and taxis with government incentives.

## **B. Priorities for further work and international cooperation**

107. Participants had a lively debate over several priorities and recommendations for further work, for urban planning and waste management, and for international cooperation on cross-cutting issues.

108. Sustainable consumption and production policies need to be integrated into urban management from the first phase of planning. Policy mixes for sustainable urban planning need to be developed, including regulation and economic incentives, in order to manage urban growth, sanitation and land-use, water and wastewater management, waste management and public transportation. With the current rising costs of fossil fuels, the opportunity now exists for governments to re-think their policies on public transport. In particular, long-term urban planning would need to be promoted, including family planning policies where relevant and appropriate, and ensuring adequate funding mechanisms for municipalities.

109. Capital cities of every country should be encouraged to prepare integrated long-term sustainability plans, which include sustainable transport, waste management, sanitation and environmental pollution control. Efficient water use in urban areas needs to be encouraged. These activities should be built upon existing programmes such as the World Urban Forum and UN HABITAT's and UNEP's Sustainable Cities Programme.

110. Integrated solid waste management and the 3R approach need to be strengthened in all regions of the world. While taking preventive action, attention also needs to be paid to sanitation and the clean up of existing problems – such as polluted soils of industrial sites – since this enables transition processes towards more sustainable sites.

111. A partnership should be established to provide a mechanism for promoting citizen participation in planning processes, with special consideration for young people. Partnerships with the business sector need to be built in order to encourage them to produce more eco-efficient products and to participate in recycling and job creation for poor people.

112. Programmes on education, awareness raising and training in urban planning and water and solid waste management need to be enhanced. Special attention should be paid to skills in the selection of appropriate technologies, taking into account the social and economic conditions of countries.

113. Revenues from carbon emission reduction under the Clean Development Mechanism (CDM) of the Kyoto Protocol need to be more widely used as an appropriate tool to support urban finance and other sustainable consumption and production or urban planning investments.

The World Bank has received \$900 million from industrialized country governments and private sector companies to purchase on their behalf verified emission reductions of greenhouse gases from developing countries ([www.carbonfinance.org/](http://www.carbonfinance.org/)).

114. It was proposed to explore the feasibility of creating a global/regional partnership, network or Marrakech taskforce on solid waste management and waste minimization, which could involve national governments and organizations such as the World Bank, UNEP, development agencies and regional development banks.

115. Tools need to be developed for raising the awareness of politicians and government decision-makers, planners, the education sector and the general public. Developed countries should assist developing countries to solve their problems on urban development and solid waste management.

116. International organizations should assist national governments with legislation, natural resource accounting, and policy formation on urban management, including urban planning, transport and waste management, and access to data and methodologies. Access to existing knowledge networks needs to be improved for sharing knowledge, information and experiences on best practices in a target-group specific format (databases, websites, hard copies). Target groups include SMEs (in particular, for data on waste prevention, recycling, product design, marketing and sustainable trade), municipalities and citizens. Assistance on technologies for implementing sustainable consumption and production policies was mentioned, with particular attention to the needs of developing countries, including SIDS.

117. UNEP, UN HABITAT, the World Urban Forum and the Secretariat of the Basel Convention were invited to review their existing regional and national networks for advice and technology support – including the National Cleaner Production Centers and Regional Basel Convention Centers – in order to increase their effectiveness and customer-orientation. One participant called for national Sustainable Consumption and Production Centers, building on or merging with existing structures. Another participant called for national Recycling Centers. Other UN agencies were invited to explore possibilities for more synergies and a more integrated approach, both in their regional networks and in their own functional organization.

118. A verification system for appropriate technologies to promote sustainable consumption and production could also be considered. An increasing number of countries have already created environmental technology verification mechanisms. These can help to develop capacity within developing countries while at the same time helping to create a new economic sector of environmental goods and services.

119. Capacity building programmes need to be strengthened with special attention to the training of leaders, taking into account the social, economic and traditional characteristics of the concerned countries. Public education is needed in the field of sustainable consumption in order to facilitate individual decision making towards more sustainable lifestyles. In particular young people – decision-makers of the future – need to be trained in holistic solution-oriented leadership, making use of and strengthening existing programmes such as the youthXchange programme of UNEP and UNESCO ([www.youthxchange.net](http://www.youthxchange.net)). Schemes should be considered to

motivate city decision-makers to present innovative proposals in support of sustainable urban planning, building upon existing initiatives and providing mentoring. Political parties need to be engaged.

120. Mechanisms are needed, such as the SEED initiative (Supporting Entrepreneurs for Environment and Development) ([www.seedinit.org](http://www.seedinit.org)) for SMEs in developing countries, which supports the development of innovative multi-stakeholder proposals that address the three pillars of sustainable development at the local level. Programmes that can advise entrepreneurs on business planning and how to increase funding possibilities from the private sector, development banks and multilateral funds are needed, similar to UNEP's Financing Cleaner Production initiative. Expertise at the regional and sub-regional level needs to be strengthened to provide technical assistance and support for the preparation and implementation of bankable projects.

121. Some participants recommended establishing a funding mechanism or Trust Fund for developing capacity and facilitating the development of long-term integrated sustainability plans in developing countries, including SIDS. These plans would provide the basis for securing long-term commitments for sustainable consumption and production. Reference was also made to the New Earth fund, which provides small-scale voluntary contributions by businesses and people for local initiatives at the community level ([www.newearth.info](http://www.newearth.info)).

### **Working Group 3**

## **Sustainable Consumption and Product Development**

### **Summary by the Co-chairs of the Working Group**

122. The Working Group on Sustainable Consumption and Product Development was Co-Chaired by Mr. Kenneth Nkowan, Ministry of Tourism, Environment and Natural Resources of Zambia, and Mr. Paul Hofseth, Ministry of Environment of Norway. Participants included 27 experts from 20 countries and one international organization.

123. The discussions covered a wide range of issues regarding sustainable consumption and product development. It also touched upon interlinkages among the three pillars of sustainable development, namely economic development, social development and environmental production, considering products as the interface between consumption and production. The discussions drew on the experiences of participants and reflected their different backgrounds.

124. When considering approaches to changing consumer behaviour, there is a need to recognize the differences in the level of development among countries and regions. The Group reaffirmed the importance of paragraph 15 of the Johannesburg Plan of Implementation, which encouraged the promotion of regional and national initiatives to accelerate the shift towards sustainable consumption and production within the carrying capacity of ecosystems. While all countries should take action, developed countries are to take the lead, taking into account the development needs and capacities of developing countries. .

125. The Group benefited from presentations by Ms Lucy Shea of Futerra on effective communication for sustainable development and Ms Eveline Venanzoni of the Swiss Agency for the Environment, Forests and Landscape on sustainable public procurement. The field trip to Nacientes Palmichal, which practices community-based tourism, was an inspiring experience for the Group.

#### **Changing consumer behaviour**

126. While sustainable consumption often refers to consumption by individuals and households, it was noted that goods and services are also consumed by public sectors and businesses, which can be called “institutional consumers”. Institutional consumption is substantial, and efforts to promote sustainable institutional consumption may be different from efforts to promote sustainable consumption by individual consumers. “Institutional consumption” is considered below.

127. Many consumers want to consume in a responsible manner. Nowadays, consumers in developed countries have access to a wide range of information, but this does not mean that consumers can always make rational choices. It is important that public policies empower, motivate and inspire the public to adopt more sustainable lifestyles.

128. However, it is difficult to target individual consumers effectively, in part because sustainability is not the most important issue for most consumers, who are primarily concerned

with product performance and price, as well as perhaps with health issues, comfort or convenience. It is often more effective, therefore, to communicate sustainability in an innovative way so that it is understood in the context of other issues in which consumers are more interested.

129. Consumer behaviour is based in different cultural contexts. In designing sustainable consumption policies or tools, such as labels or communication campaigns, it is important that they reflect these cultural contexts. This is also why there is no one policy that fits all situations.

130. To effectively promote sustainable consumption, it is important to have a long-term, forward-looking vision of sustainable lifestyles. Policies can then be formulated based on the vision and appropriate measures devised, which include wise use of products and services as well as consideration on the level of consumption in general.

131. Providing information to consumers is a key to changing consumer behaviour, but more must be done than just providing information. Consumers must also be engaged in more effective ways, for example by using innovative communication strategies and better branding of sustainable lifestyles to motivate and inspire them to adopt a more sustainable lifestyle. Consumer education is also important, and Governments and consumer organizations can play a major role in consumer education. It was suggested that education on sustainable consumption and production could be linked more closely with the United Nations Decade on Education for Sustainable Development.

132. In addition to ensuring the provision of information and education, Government can play an important role in promoting sustainable lifestyles by ensuring availability of alternative choices and enabling consumers to act more responsibly, for example through urban planning that provides infrastructure such as public transportation. In addition, Government can establish regulations that promote or facilitate sustainable lifestyles. It was pointed out, however, that the Government cannot always legislate consumer behaviour, especially where such legislation conflicts with broadly shared cultural norms. Governments can also, as institutional consumers, provide a model for sustainable consumption and expand or create markets for sustainable products and services. Finally, Government can facilitate dialogue with and among other stakeholders. It was also pointed out, however, that it can be difficult to bring about sustained behavioural change.

133. As children grow up, their values, expectations and habits are formed. Engaging youth in dialogues on sustainable consumption is therefore necessary for changing future patterns. Using the influence of women's consumption choices on the choices of others, particularly within the household, is also critical. It was noted that mothers should be encouraged to act as teachers to their children by demonstrating good examples.

134. In trying to promote sustainable consumption, it may be useful to implement small steps at a time. For example, when devising eco-labels, it may be effective to begin by targeting a small range of sectors and products. Several examples were mentioned in this regard, including the Energy Star label developed in the United States, curb-side recycling in Canada, and smart meters for measuring electricity usage in Ontario, Canada. Some participants noted, however,

that eco-labels by nature are supplementary tools since they only cover the “top end” of a given product range and are not designed to mainstream sustainability per se.

135. Participants emphasised the need for approaches to allow policy makers and businesses to assess their own situations and decide on priorities responding to their conditions. Participants from developing countries noted the need for assistance in identifying best practices and in selecting appropriate tools, such as life-cycle analysis (LCA) and assessment of the social impacts of products and services.

136. Priorities can be defined in different ways. They can be based on large-scale, long-term trends like globalization, demographic change, democratization or the knowledge economy, on local environmental problems like contaminated water, disaster management or waste handling, or on scientific risk assessment. The European Union recently completed a major study of environmental priority-setting based on final consumption expenditures, reviewing 8 national studies and one new analysis for the EU25. The study indicated that some 40 product categories cause the large majority of environmental impacts. For the most important environmental issues (material use and waste, energy use, toxic emissions, land use), there are three product categories that consistently cause about 70% of the life-cycle environmental impacts, while representing only 50% of total consumption expenditure, namely:

- (a) Food and food products (meat, dairy, followed by other food products);
- (b) Transport (motor vehicles, air traffic, followed by other means of transport);
- (c) Buildings, including electricity used within buildings.

### **Institutional consumption**

137. In contrast to the difficulty of targeting individual consumers, there was wide agreement on the effectiveness of targeting institutional purchasing, including both public institutions and businesses. While this can be done at the initiative of the institutions concerned, communities can also be mobilized to put pressure on institutions to behave sustainably.

138. Public procurement, by both central and local governments, constitutes a large proportion of national expenditure, and this purchasing power can influence the market. By implementing sustainable procurement - procurement that is environmentally and socially responsible - the public sector could encourage the production of sustainable products and enhance corporate social responsibility. Participants considered transparency an important aspect of sustainable public procurement, and noted that transparency facilitates the elimination of corruption. It was also pointed out that with the public sector practicing sustainable procurement, there will be wider benefits that can be spread to other sectors, such as standard setting, development of manuals and guidelines, information sharing, and creation of markets for sustainably produced products.

139. In Switzerland, sustainable public procurement that addresses transparency, equal treatment of bidders, promotion of competition and efficient spending of public money is practiced within the framework of the country's sustainable development strategy. It takes into account

environmental, social and economic criteria and is broadly accepted and welcomed by the different stakeholders.

140. In this globalizing world, goods are being produced through long chains of suppliers. Consumers are increasingly concerned about the nature of the goods they purchase. This in turn is reflected in increased attention that manufacturers are paying to the practices of suppliers who provide the materials. Many concerned companies are already addressing this issue by such means as supplier codes of conduct. At the same time, this should not create barriers to small and medium-sized manufacturers, especially in developing countries. Participants considered that a database on products, such as that being developed by the International Green Purchasing Network, could assist the purchasing decisions of institutions. It was generally agreed that further work will be needed to address this issue.

### **Sustainable product development and lifestyles**

141. In developing a sustainable consumption programme, there is a need to envision a future of sustainable lifestyles and products: What can be achieved by efforts toward sustainable consumption and production in 10 years? What will daily life be like in the future? How can a vision of sustainable consumption and production be sold to the public? How can minds be changed?

142. It was noted that globalization can lead to the spread of unsustainable consumerism, as seen in some parts of Asia where many consumers are adopting western lifestyles and products.

143. Product design is a decisive factor in determining the impacts of consumption. Product design is carried out mainly in developed countries, while developing countries are mostly involved in manufacturing. Both production and consumption patterns in developing countries are thus significantly determined by product design in developed countries.

144. Participants from developing countries noted that they often have limited choices of sustainable products, and the challenge for them is to strike a balance between meeting basic needs and fulfilling environmental requirements.

145. A number of examples were presented to demonstrate the environmental, economic and social gains achieved through sustainable products and lifestyles. However, these gains have not been widely recognized by consumers, producers, governments, investors or trade unions. Tools such as reporting, indicators, benchmarking and awards need to be used to increase recognition of the benefits of improved products and lifestyles. Means and mechanisms for disseminating information on the benefits for producers, consumers and the general public need to be developed and implemented, including information addressed to small and medium-size enterprises. Cooperation with relevant NGOs can be instrumental in supporting these efforts.

146. There is a need to mainstream sustainability aspects into business strategies and product development. Sustainable products and services are still largely niche markets. For example, only a few percent of products have eco-labels.

147. There is a need for common yardsticks to measure the sustainability of products and services, even if it may be difficult to agree on appropriate levels. Indicators are important for this purpose, allowing the benchmarking of product performance. Open information, quality assurance, labelling and certification will also assist companies in making their raw materials and supply chains more sustainable.

148. In order to ensure that products are sustainable, it is important to delink production from environmental degradation through steady improvements in resource efficiency and environmental protection. Efficiency gains may, however, be offset if consumers replace products in ever-shorter cycles (e.g., mobile phones or TV sets) or if larger versions replace smaller (e.g., cars, apartments, appliances).

149. Cooperation between governments and business is important to encourage industry to produce sustainable products, in some cases through actions along the product chain (for example, through joint efforts of hardware and software producers to improve product performance), and establishment by governments of the necessary framework conditions that businesses need. Cooperation between business and government should address the beginning of product development, in addition to production, use and disposal, as an estimated 80% of the costs and life-cycle impacts of products are determined in the design phase.

150. Promoting sustainable products requires a mix of instruments, including regulations, economic instruments (to “get the price right”) and information tools. Not all instruments work in every country and in every situation, and the policy mix has to be adapted to local conditions. While developed countries are putting in place proactive programmes and innovative instruments, the main challenge for many developing countries is to ensure compliance with the regulatory framework and to respond to international obligations, although innovative instruments are also being tried in a number of developing countries

151. A number of successful examples of eco-labelling schemes were described, including labels covering only one factor, such as energy, as well as labels based on broader environmental and social criteria. In general, energy-efficiency labels (such as Energy Star or the EU A to G grading system) were considered successful since they can effectively communicate cost-savings, to which many consumers respond. Graded labelling (such as A to G) can also influence producers to avoid low grades by upgrading products or taking low-performing products off the market.

152. Education and awareness-raising are important tools, particularly when combined with product information tools. The importance of the work place as a source of education and training was also noted, as well as other forms of informal education, such as youth groups. Participants also considered the pros and cons of the role of television (e.g. soap operas) and other media such as radio, theatre and popular drama.

153. There is a need to work with the media and advertising sectors to promote sustainable consumption and production through effective communication strategies that also address the needs of illiterate persons. Strategies should emphasize the importance of product design in avoiding negative impacts and not just “end of the pipe” clean up. They need to decide which

issues to communicate, which products and social groups to target, and what kind of message to use.

### **Priorities for future work**

154. The Working Group considered priorities for future work for three key issues: institutional procurement, including both public and private procurement; sustainable product design; and sustainable lifestyles. Task forces are being proposed for these three issues. It was hoped that the proposed actions on these issues will be implemented and that progress will be reported to the next international expert meeting on the 10-year framework of programmes on sustainable consumption and production to be held in two-year's time. The need for intensified research efforts to assist in setting priorities and measuring results were also noted, and recent declarations on this by the scientific community were noted (for example, the Oslo Declaration, [www.oslodeclaration.org](http://www.oslodeclaration.org)).

### **Institutional Procurement**

155. **Sharing experiences and learning from each other:** Regarding public procurement, participants expressed a strong need for sharing success stories and learning from each other. This could be done through a web-site, and participants noted the existing web-sites, such as those of ICLEI and the International Green Purchasing Network (IGPN). Participants also agreed that a peer review of experiences is a good way of learning from each other.

156. **Sharing information on sustainable public procurement:** Participants considered it important to have access to practical information regarding sustainable public procurement, including social aspects, such as legislation, regulations, guidelines, handbooks, specifications and calls for tender. This could also be provided by a web-site, such as the one that UN-DESA is developing, or a clearing-house, such as those being developed by ICLEI and IGPN. Participants considered access to this information to be crucial so that those looking into launching or shifting to sustainable procurement would not have to start from scratch. Although this information, for example guidelines and handbooks, is on public procurement and is disseminated primarily to public institutions, if the information is publicly accessible, it could also be used by private institutions.

157. **Combining forces:** Although each country or local authority has its own priorities, participants considered that joint procurement, nationally or regionally, could strengthen the learning process and increase purchasing power, thus increasing the effectiveness of sustainable procurement. By the same token, megacities could join together in implementing sustainable procurement. Participants considered that this would influence the market and have a stronger demonstration effect. Combining or expanding existing networks, such as IGPN and ICLEI's BigNet, could also strengthen the efforts of the institutions involved. In the case of IGPN, the network includes private sector and non-governmental organizations.

158. **Getting started:** Participants recognized that many countries and local governments require assistance in starting sustainable procurement, including guidance on specific products. There is also a need for training procurement professionals and developing training tools.

159. **Database on product information:** Participants considered that institutional procurement officers, in both public and private sectors, would benefit from access to a product database. Existing databases of UNEP and IGPN could be enhanced. A dedicated database could also be developed for posting information on products of small- and medium-sized enterprises (SMEs) in developing countries. Through this database, these SMEs could have direct access to the market without going through middlemen, and thus increase their profitability. Fair trade products could also be promoted through such a database. It was also pointed out that special attention is needed to unique conditions that small island developing States (SIDS) face. Strategies aimed at supporting access to traditional markets by SIDS may be encouraged while exploring opportunities for cooperation in greener production.

160. **Getting the private sector involved:** Procurement information that is developed and disseminated primarily for the public sector can also be useful for the private sector. In fact, as noted above, the membership of IGPN ranges from the public sector to the private sector and non-governmental organizations. There are already a number of manufacturers practicing sustainable procurement through supply chains by such means as supplier codes of conduct. However, further studies need to be done regarding this issue. As this illustrates, there is a strong link between sustainable institutional procurement and sustainable product development.

### **Sustainable Product Design**

161. **Working towards a common vision and issues:** Participants considered that it is important to refine and communicate a shared vision of sustainable product development and challenge industry to deliver it. There is a need for Governments to determine where there are shared concerns and priority product groups, possibly referring to the UN work programme on sustainable public procurement. Where shared concerns exist, product policies could be adopted more widely.

162. **Improving products and services:** Some participants considered it useful to develop a multi-stakeholder consultation, involving Government, industry, consumers, workers and NGOs, on specific product chains to assess ways to minimize the main social and environmental impacts in the supply chain of the production processes and in the post-consumption phase in order to improve conventional production.

163. **Information, education and capacity building:** The group agreed that information, education and capacity building targeted at industry and other stakeholders, such as industrial design schools, are essential for success in changing production patterns, thus stimulating supply of sustainable products and services. Awareness raising campaigns, product performance matrices and labelling, guidelines and manuals, for example on design for sustainability, are important for assisting stakeholders in taking actions. Participants considered that Governments should engage and establish sustainable design strategies, paying special attention to the needs of SMEs and micro-enterprises.

164. **Common tools to support innovation and competition:** Participants considered that Governments should develop, strengthen and promote effective tools such as yardsticks, reporting, indicators, benchmarking and awards, and should increase transparency. There is a need for establishing and promoting performance benchmarks, especially minimum standards,

which could be applied widely in practical policy measures such as procurement. Local and national governments, chambers of commerce, and civil society can be partners in promoting and using such benchmarks.

## **Sustainable Lifestyles**

165. **Building action plans:** The group found that national action plans on sustainable consumption and production could be a cornerstone for achieving progress towards sustainable consumption. Governments could therefore develop and implement such plans, which might address not only the motivation of individual consumers, but also the empowerment of consumers to make sustainable choices in an integrated way, reflecting their cultural background. Such plans could be developed through a multi-stakeholder process, both at the national level and through international cooperation. The action plans should not stand on their own, but, where relevant, should be integrated into national development plans.

166. **Ensuring implementations of action plans:** Some participants emphasized that NGOs and others should encourage Governments to embark on actions and implementation. Sometimes actions by NGOs in the home country of a multinational corporation may result in changes in its subsidiaries in another country. Demands by global stakeholders, such as Consumers International, to implement formal agreements, for instance the UN Guidelines for Consumer Protection, may lead to change as well.

167. **Building a vision of sustainable lifestyles:** Some participants considered it important to have multi-stakeholder dialogues, involving Governments, business, advertising agencies, media, consumer organizations and NGOs to discuss forward-looking visions of sustainable lifestyles.

168. **Collecting good examples:** Participants considered it essential that good cases, or “examples of what works”, should be shared across countries and stakeholders in support of sustainable lifestyles. It was therefore considered important to develop tools such as directories, guides, databases, indicators for effective policies, research, and communications.

169. **Provisions for social learning should be organised and linkages established:** Actions, communications, and experiments at the local level should be connected and evaluated, and conclusions drawn that have general value, and that in turn can be fed back to the communities for practical application. Given the pivotal role of learning, a clear link between work on sustainable consumption and production and the UN Decade on Education for Sustainable Development should be established, and UNESCO-UNEP’s “YouthXchange” programme should be implemented in the official curricula.

## Working Group 4

### Regional and National Strategies for Sustainable Consumption and Production

#### Summary by the Co-chairs of the Working Group

170. The Working Group was co-chaired by Mr. Terence Ilott, Department for Environment, Food and Rural Affairs, United Kingdom, and Mr. Philip Acquah, Environmental Protection Agency, Ghana. The working group included 24 participants from 18 countries and 2 international organizations.

#### General overview of national strategies:

171. The group heard two presentations on national strategies on SCP – from Mr Kari Raivio (Chancellor of University of Helsinki, Finland) and from Ms Victoria Belaustegui (Ministry for the Environment and Sustainable Development of Argentina) – which illustrated two different case studies of SCP strategies. A number of similar themes emerged in these case studies, including:

- (a) The need to develop national strategies on SCP (reflecting the three pillars), and/or to integrate SCP actions into national sustainable development or poverty reduction strategies;
- (b) The costs (environmental, economic, and social) of inaction;
- (c) The need to tailor any strategy to the country's or region's specific context and priorities, taking into consideration global challenges;
- (d) Involvement of a range of stakeholders in the strategy formulation process;
- (e) Creating an inventory in order to analyze existing SCP policies, identifying gaps and challenges;
- (f) The competitive advantage obtained from eco-efficiency;
- (g) Use of voluntary agreements and partnerships with the private sector;
- (h) Enabling consumers to make sustainable choices;
- (i) The need for a mix of coordinated tools, including economic measures and awareness raising;
- (j) The need for a strong scientific evidence base, while still assessing future trends;
- (k) The long-term nature of any SCP project;
- (l) Importance of reporting and monitoring (set of indicators);
- (m) Public sector leadership by example through procurement;
- (n) Institutional arrangements.

172. In the discussion of the national strategies, a number of common key challenges to the development of any SCP strategy, in both developed and developing countries, were identified.

## **Development of SCP strategies and/or integration of SCP into existing strategies**

173. There was agreement that it is not possible to determine whether developing a specific strategy on SCP, or integrating SCP into the existing strategies, is a better option. It will depend on the national context of the particular country.

174. SCP is a broad and cross-cutting issue. Integrating SCP into national strategies on sustainable development as an overall national objective is important. Implementing concrete SCP actions is extremely useful in communicating the longer-term goals of sustainable development.

175. Once integrated, a second step could be to develop concrete sectoral action plans or frameworks (e.g. on energy, agriculture, transport) that aim to promote and adopt sustainable patterns of consumption and production, with concrete targets and indicators. However, it is important to ensure coherence between the different strategies (e.g. sectoral, regional, local) and policy tools.

176. Another challenge identified was that the concept of SCP is not clear to the general public. The role of education is crucial here (as recognized by the UN Decade of Education for Sustainable Development), and needs to take priority. It might be better to use other terminology, as Norway did with its national strategy on SCP: “consumption and production for the future”.

177. For other countries, in particular developing countries where SCP is still a new issue and not established as a priority, the integration of SCP into poverty reduction strategies or other national development plans could be a useful approach. There was also general agreement on the need to link SCP to the Millennium Development Goals (MDGs). This would highlight and demonstrate the linkages and, more importantly, the contribution of SCP to reducing poverty (e.g. fair trade and organic agriculture can increase income and quality of life of farmers in developing countries).

178. Regional SCP strategies can add value to national strategies, helping to establish them in an international context when key SCP challenges cannot be solved unilaterally.

179. A ‘two-pronged’ approach of promoting SCP, both as a priority in its own right and as a cross-cutting issue contributing to other priorities, is beneficial. This has been the approach for integrating SCP into the new work programme of the Commission on Sustainable Development.

## **Areas for priority action on SCP**

180. In identifying areas for priority action on SCP (e.g. sectoral, institutional, technological, financial), a mapping exercise is a useful first step, providing a picture (even if not a comprehensive one) of a country or region’s existing policies and programmes. This prevents both overlapping initiatives and wasted financial and human resources.

181. Individual countries or regions will invariably have their own priorities for actions, and use a mix of instruments (e.g. economic, regulatory, voluntary). Accepting this, the group still

identified a number of areas of such importance to the SCP agenda that they were always likely to be priorities for action. These included:

- (a) Public procurement (and government leading by example);
- (b) Education and awareness-raising;
- (c) Changing behaviour;
- (d) Technology;
- (e) Efficiency (“clean, clever and competitive”);
- (f) Sound scientific evidence;
- (g) Improving eco-design of products;
- (h) Poverty reduction / quality of life;
- (i) Trade (overcoming trade barriers and distortions);
- (j) Financial instruments.

182. It is important at all times to maintain a balanced view of all sustainable development considerations – and avoid a bias towards purely environmental priorities. The social agenda must always be represented, and economic concerns must be incorporated (as subsidies and regulatory measures have finite limits, especially in the developing world).

183. A different approach to determine priorities would be to look at how SCP could contribute to achieve national and global priorities such as climate change, chemical safety or biodiversity. For example, Norway gives priority to these three areas in its strategy, and Switzerland has set climate change as a national environmental priority. They are exploring policies to promote sustainable use of energy in order to achieve the targets of the Kyoto Protocol.

### **Facilitation of stakeholder involvement and inter-governmental coordination**

184. In developing a national or regional SCP strategy, it is vital to involve the relevant stakeholders (both inside and outside government) in this process as early as possible. Their expertise can be utilized in helping to set priorities, and they can provide a valuable monitoring role (e.g. academics and civil society working on SCP issues such as Life Cycle Analysis, indicators, corporate social responsibility, etc).

185. The identification of the key stakeholders will be made easier if a comprehensive mapping exercise (identifying existing SCP projects and programmes) has been carried out. There is no one way to involve stakeholders (options include a public consultation exercise, or meetings with relevant NGOs), but the relative strength of a country or region’s NGO network needs to be taken into consideration. Some participants supported systematizing the participation of regional and sub-regional networks working on SCP in all regions.

186. Another way to involve stakeholders is showing the win-win situations; for example showing the benefits and opportunities for business competitiveness, such as the EU strategy on “clean, clever and competitive”, and the sector strategies programme in the United States, in

which the government works with industry to promote environmental management systems and overcome regulatory (or other) barriers to performance improvement.

### **Monitoring and indicators**

187. Determining what precisely a strategy wishes to achieve, and setting clear targets is a prerequisite to success. There is a need for sound, scientific evidence-based decision making, taking into account environmental limits.

188. The means of monitoring progress – whether internally or by a non-governmental body – must be an integral part of the strategy formulation process. If it is an afterthought, it will not be effective. Again, stakeholders need to be involved in this process as early as possible.

189. It would be useful to establish a small set of key, globally accepted indicators that would reflect the ecological, social and economic dimensions of SCP. It was agreed that this was an area to which the Marrakech Process could usefully contribute. There are strong links between indicator development and work on costs of inaction.

190. Regarding indicators for SCP, quality is more important than quantity. What is most needed is tasking the establishment of a small set of reliable indicators, which are easily communicated to the public at large.

### **General conclusions for the Marrakech Process**

#### *191. Guidelines on SCP strategy formation*

(a) Countries need to develop national strategies on SCP (reflecting the three pillars), or integrate SCP actions into relevant national sustainable development, poverty reduction, or other socio-economic strategies (such as the EU Lisbon agenda);

(b) There is a great deal of value in countries and regions developing their own processes for formulating SCP strategies, given the significant amount of differentiation due to their specific priorities and circumstances;

(c) Some non-prescriptive guidelines to support the development of national strategies for SCP would be a beneficial resource. These could provide suggestions for important steps to be taken during the process, and suggest a menu of elements or policies that a successful SCP strategy could include. UNEP and/or UN-DESA could develop such a set of guidelines, taking into account the experience of different countries. Such guidelines could also help countries in sharing their experience under the Marrakech process;

(d) Countries could also consider shared reviews of their SCP strategies;

(e) Regional and sub-regional strategies on SCP can be strengthened by building institutional linkages with the existing regional and sub-regional bodies (for example the European Union (EU), African Ministerial Council on the Environment (AMCEN), Latin American Forum of Ministers of the Environment, and the Mediterranean Environmental Technical Assistance Programme (METAP) financed by the European Commission, European Investment Bank, the World Bank, UNDP, Finland and Switzerland);

(f) Implementation is needed at both the national and the local level, and the different approaches needed at each level must be taken into consideration. Awareness building and dialogues could help facilitate this.

#### 192. *SCP linkages to poverty reduction and international processes*

(a) There should be more cooperation between the SCP agenda and poverty reduction, especially in relation to the Millennium Development Goals;

(b) The 'Cooperation with Africa' Task Force, led by Germany, could be a useful forum for discussing this issue;

(c) SCP should be mainstreamed into poverty reduction strategies, following the effort that has been initiated by UNEP. Efforts should be made to build more cooperation among SCP experts, the World Bank and development agencies, as was also recommended in the Cooperation Dialogue Sessions. Both donor and recipient countries should be encouraged to make a commitment to integrate SCP into poverty reduction strategies;

(d) The group recognised the importance of the Cooperation Dialogue Sessions held during this meeting as a good starting point to highlight linkages between the Marrakech process and the MDGs and poverty reduction strategies. In order to follow up this dialogue and cooperation, it was suggested that UNEP and UN-DESA collaborate on further work to communicate clearly the linkages between these programs and SCP (including advantages; opportunities and the existing projects implemented by development cooperation agencies);

(e) The group recognised the need to continue to consider SCP as a cross-cutting theme in the Commission on Sustainable Development.

#### 193. *Indicators and monitoring*

(a) Indicators were recognised as a key element of any national strategy on SCP. It is essential that the development of indicators begins early in the strategy formation process;

(b) The group supported the promotion of bottom-up, participatory development of indicators within countries, and for greater dialogue on the different indicator sets developed;

(c) The group acknowledged that there could be significant benefits to developing a small set of key indicators (building on existing data) which could be shared internationally and from which countries could select, as appropriate, in creating their own indicator sets. The possibility of a separate Task Force on SCP indicators should be considered;

(d) There may also be benefits in developing a toolkit to help countries evaluate and monitor the success of specific SCP policies. This might also be considered by a Task Force on indicators;

(e) The existing Marrakech Task Forces on specific subjects (e.g. on procurement and on sustainable lifestyles) could usefully gather information on participating countries' policies in these areas;

(f) The group supported the existing work that organisations such as the United Nations, the International Organization for Standardization (ISO), OECD and the Global Reporting Initiative were doing in this area;

(g) Participants recognised the importance of using good scientific evidence to develop policies on SCP.

#### 194. *Involving stakeholders*

(a) Governments can usefully use the market, and voluntary-based initiatives, to involve the private sector in SCP;

(b) Governments and international processes should build on measures to involve civil society in SCP, including promoting participation of regional and sub-regional networks working on SCP in all regions;

(c) Innovation should be spread through greater work with business associations, trade unions, consumer bodies, civil society groups, and chambers of commerce;

(d) Business and its relations with suppliers should be used to promote SCP. The Recommendations on challenges and future work agreed upon at The Nordic Roundtable on Business relations in a north/south perspective in Oslo (February 2005) constitute an example of a point of departure for further practical actions;

(e) In addition to this, the United Nations could invite representatives of international business initiatives related to sustainable development, such as the Global Compact, to do further work in this area;

(f) The Marrakech process should build on and encourage cooperation between networks of scientists and academics working on SCP. The participants noted that this would link to conclusions reached in the Oslo Declaration earlier this year ([www.oslodeclaration.org](http://www.oslodeclaration.org));

(g) The media is an important stakeholder to involve, to ensure that the right messages are being communicated and to help raise awareness.

#### 195. *Cost of inaction*

(a) A robust analytical tool which countries could use to determine the environmental, economic, social (including the link to health), and cultural costs of inaction on SCP could be very useful, particularly in identifying priorities, and raising awareness of the issues amongst Governments and the wider public;

(b) The Marrakech process could help in taking this forward. The World Bank has usefully shared its methodology in this area on the web at [www.metap.org](http://www.metap.org).

196. *Sustainable procurement*: Procurement was recognised as a key element for any strategy on SCP. The group supported the Swiss Task Force on Sustainable Procurement.

**Working Group 5**  
**Energy, Climate Change and Air Pollution**  
**Summary by the Co-chairs of the Working Group**

197. The Working Group was Co-chaired by Ms Elfriede-Anna More, Ministry of Agriculture, Forestry, Environment and Water Management of Austria, and Mr David Barrett, Petroleum Corporation of Jamaica. The Group included 23 participants from 17 countries and 3 international organizations.

198. Energy, climate change and air pollution are important issues relating to consumption and production patterns. Energy is essential to socio-economic development and to meeting basic human needs, but it is associated with emissions that contribute to air pollution and climate change. Final energy consumption comprises energy use by industry and transport and “other sectors” including agricultural and residential. In developed countries, final energy use is typically evenly divided among these three groups, while in developing countries, residential energy use is generally much greater. Per capita energy use in developed countries is much higher than in developing countries, while consumption is growing faster in developing countries.

199. In sub-Saharan Africa, most energy is consumed by the residential sector, which relies largely on traditional biomass. Indoor air pollution from poorly ventilated and inefficient stoves contributes to respiratory disease and other health problems, especially for women and children. Energy consumption in developing countries’ transport sector is growing at a much faster rate than other sectors and, while air pollution problems have been significantly reduced in developed countries, increases in energy consumption in developing countries, particularly in the transport sector, are expected to contribute to severe air pollution in many urban areas and to overall levels of greenhouse gas emissions and concentrations. The Working Group addressed these problems with a view to identifying what works and what doesn’t work and to identifying major constraints to progress. It was noted that the fourteenth session of the Commission on Sustainable Development, to be held in May 2006, will consider progress made on these issues, and that the results of this Working Group should be an input to those deliberations.

200. In reviewing a wide range of country experiences and best practices, it was noted that Austria’s energy supply mix has a large renewable energy component: 71% of its electricity is produced with renewable sources, including hydroelectricity, solar energy and wind energy. Though it faces difficulties in meeting its Kyoto commitment, Austria has undertaken awareness-raising programmes that stress the importance of energy efficiency in meeting Kyoto targets.

201. Experience in Jamaica points to the need for a catalytic organization or “driver” to promote changes toward sustainable consumption and production patterns in the area of energy. An energy focal point has been identified for analyzing and implementing energy policies, with a strong environment component. Some potential projects, such as peat development, have been shelved for environment reasons. Other developing countries, including Costa Rica, Morocco,

and some island countries such as the Dominican Republic and Cuba, noted similarities in that they rely heavily on imported fossil fuels and have difficulties meeting the energy needs of people, some of whom are without access to modern energy services.

## **Energy Efficiency**

202. Energy efficiency programmes were cited as among the most effective means to change consumption patterns, in particular as they are often substantially more cost-effective compared to expanding energy supply infrastructure. Austria has undertaken an effective building renovation programme that rewards those who implement energy efficiency measures when upgrading older residential buildings. Austria has also met with success in raising awareness about the benefits of passive solar measures to reduce household energy consumption.

203. In Jamaica, a large percentage of the energy supply is imported fossil fuel and energy efficiency programmes, including energy audits, have been undertaken. A national energy fund to assist such projects, currently under consideration, was viewed as a good model for other countries. In Germany, for example, an increase in the cost of electricity of only .002€/kWh was considered sufficient incentive to establish such a fund. Other measures undertaken by Jamaica include reducing or removing customs duty on imported energy-efficient technologies and reducing consumption taxes on energy-efficient equipment.

204. A high share of combined heat and power (CHP) technologies in overall energy production has been extremely successful in Finland's efforts to promote energy efficiency. Energy service companies (ESCOs) can encourage efficiency and have met with success in many countries, including Germany, China and Cuba, and are particularly effective with small and medium-sized enterprises.

205. Energy labelling to encourage consumers to buy energy-efficient appliances have been used successfully in many countries. Appliances are labeled according to established standards for measuring energy consumption as a means of providing consumers with better information on the environmental benefits and cost savings of energy-efficient products. In many countries, such programmes have also encouraged competition among appliance producers to reach higher efficiency standards and remove low-efficiency models from the market. Successful examples include the European Union's Energy Label and Japan's Top Runner Programme. In Australia, voluntary best practice measures are underpinned by mandatory minimum performance standards. Some countries noted voluntary economic incentives, such as in Germany, where energy suppliers offer cash rebates to consumers purchasing appliances with the highest energy efficiency rating as a cost-effective alternative to building new generating capacity. Despite these successes, the purchase price of the appliance rather than the energy-efficiency label, the operational cost savings or wider sustainability issues is often the overriding factor in the appliance purchase decision. Also, implementation of market driven programmes may pose challenges to small countries with small markets where options are limited.

206. In Cuba, the government has encouraged consumers to purchase new, more efficient appliances by providing direct subsidies to consumers. It has also successfully undertaken other measures to improve energy efficiency, including an electricity tariff that increases with the

amount used, stricter standards on imported equipment, an awareness campaign, and environmental awards for best energy efficiency practices. However, lowering custom duties on imported technologies with low environmental impacts including energy-efficient equipment in Cuba has not been as successful, perhaps due to lack of information available to companies about the programme.

207. Some constraints on promoting energy-efficient products were noted, including the need for a large market such as the EU so that suppliers could recoup the investments needed to retool and produce appliances with higher standards. Some small island countries noted that they imported appliances and had difficulty purchasing appliances that met its electrical specifications (voltage and frequency), thus reducing their efficiency.

208. Recent cooperation between the United Kingdom, China and other countries to establish energy efficiency standards for digital boxes for television sets and to test such boxes was seen as a promising cooperation between exporting and importing countries to improve product performance. All countries stand to benefit from energy savings since the market for the digital boxes is expected to expand globally. Another constraint is the lack of capacity to monitor and enforce compliance with standards, in particular in developing countries. In addition, where electricity prices are subsidized, consumers have less incentive to purchase energy-efficient appliances.

209. It was also noted that while many energy efficiency programmes have been successful, the resulting energy savings have often been outweighed by increasing overall energy consumption.

### **Awareness Campaigns**

210. A number of participants cited successful awareness-raising campaigns in their countries, while others found that awareness-raising faced real limitations in their effectiveness and pointed to the need to combine them with other programmes such as appliance labeling and public procurement as part of a package of policies. Some noted that many consumers were reluctant to change their consumption patterns, even when aware of the consequences of inefficient energy use, and suggested that technological innovation was more effective. Some studies have shown that only 20 percent of a population will adopt energy conservation measures without any incentive. Some Australian states are beginning to use educational programmes and the ecological footprint concept as part of efforts to change community behavior, helping to increase understanding of the overall environmental impact of lifestyles and track progress over time. Awareness-raising programmes in schools have often been successful, and a programme in Austria that rewarded school children on the basis of reduced travel by car provides a good example.

211. In very poor countries, illiteracy poses a problem in effective awareness campaigns and hinders the bottom-up approach for increasing state response to SCP recommendations.

## **Air pollution and climate change**

212. Emissions from the transport sector were noted as a major, and in many countries, increasing cause of air pollution and greenhouse gas emissions. Growing vehicle ownership and use coupled with inadequate vehicle and fuel standards in many developing countries is a major problem. China and India, however, are successfully introducing strict vehicle standards. The need for better transport planning and the importance of the government in providing mobility choices for consumers was also noted. The low quality of service provided by mass transit systems in some developing countries was cited as a constraint. Also, transport systems should improve services for rural areas.

213. Commercially viable projects often receive priority over options that are more sustainable, including environmental services, and this poses a constraint for advancing SCP goals.

214. The transport sector was cited as epitomizing the situation in which individual preferences are given priority over the needs of society as a whole. A change in vision could better serve collective needs, and the “sustainable city” concept was noted as particularly relevant for planning and implementing collective solutions, though older cities might pose challenges in applying the concept since they are harder to retrofit. Long-term integrated land use and urban planning is needed to ensure mobility through transport systems that meet the needs of society while reducing environmental impacts. Infrastructure decisions often involve high costs and have long term impacts, so planning according to the sustainable city concept is very important.

215. Practical and more immediate solutions to transport emissions include increased investment in public transport including expansion of bus systems. A congestion-pricing scheme adopted in central London, combined with expanded bus service, was cited as particularly successful, and a similar system will be tested in Stockholm soon. Sweden has placed high taxes on diesel vehicles to reduce the fine particle emissions from diesel engines, but will reduce these taxes as diesel engine technology has improved and emissions are lower. In Denmark, the government has decided to lower taxes on fine particle filters to encourage their use. Germany is also encouraging greater use of fine particle filters. A region-wide directive by the EU mandates stricter air quality standards to control vehicle emissions in urban areas.

216. Sweden has reduced air pollution from electricity production through a tariff rebate scheme that rewards lower emissions. Regulation of point source industrial emissions has been very effective in reducing air pollution in many developed countries, including Australia, the European Union and the United States. A key new challenge is to tackle diffuse-source emissions. However, the lack of adequate air pollution monitoring capacity in some developing countries impedes the identification of adequate solutions. Constraints in Morocco also include lack of trained technicians to control emissions of vehicles in urban areas.

217. Indoor air pollution is a major health problem in many developing countries relying on traditional biomass. Different problems with air pollution from biomass exist in Sweden and Canada, where people use wood stoves for heat in winter, causing high levels of fine particles in the air. Sweden has encouraged the use of more efficient stoves with emissions control devices through subsidies.

218. A number of developing countries have implemented Clean Development Mechanism (CDM) projects that reduce greenhouse gas emissions.

### **Renewable Energy**

219. The use of renewable energy is actively encouraged in many countries. In the Dominican Republic, five percent of energy tariffs are set aside for renewable projects, including photovoltaic projects and rural electrification. In Finland, some industries have long used biomass wastes to produce heat and electricity, notably in the forestry sector, and the pulp industry provides electricity to the national grid. In Australia a tradable certificate scheme has been very effective in increasing renewable energy generation to the target level.

220. Recently, ethanol has come under favorable consideration as an alternative or additive to gasoline for environmental and financial reasons, as current high oil prices make it economically viable. Ethanol is used as an additive to gasoline in many countries including the United States and Brazil, and is under consideration in Jamaica, the Dominican Republic and Costa Rica. The Dominican Republic has taken steps to promote a domestic market by encouraging imports with a view to creating domestic demand that would eventually support the development of a domestic ethanol supply. In Denmark, industry stands ready to supply biofuels if it receives clear policy signals to ensure that a long-term market will justify the investment required.

221. Europe has been successful in promoting the use of biodiesel fuel, but it was noted that the land used had been taken from other agricultural uses. Constraints to the expansion of ethanol and biodiesel fuel production in other countries also include competing uses for land, especially for agricultural uses. One solution adopted in some developing countries, including India, has been to raise *Jatropha* plants for biodiesel fuel on marginal lands not suited for agriculture.

222. Technology improvements have made wind energy financially viable in favorable sites in many countries, including the European Union, China, Costa Rica and the United States.

223. Morocco has a strategic plan for meeting its energy needs to 2020, including a heavy reliance on renewable energy. It plans to expand renewable energy to cover 10% of its energy needs by 2011 and 19% by 2020. Costa Rica is investigating the feasibility of producing hydrogen with renewable energy, and is looking into the production of ethanol for the transport sector.

224. Although rising fossil fuel prices have recently contributed to the economic feasibility of renewable sources of energy, many countries continue to subsidize energy for consumers, limiting the competitiveness of renewable energy alternatives. Such practices pose a constraint to market expansion for renewable energy.

### **Knowledge management**

225. It was noted that while there is much information and data on new energy technologies, best practices and lessons learned, information applicable to a particular situation is often hard to

find. Better management of knowledge would help to respond to such needs. A website currently under development by the Global Forum for Sustainable Energy is designed to facilitate access to knowledge, best practices and appropriate sources of information on energy for sustainable development. The need for a web-based communication and information system which could also serve as a one-stop-shop for funding, technical support and information needs was expressed.

## **Conclusions**

226. The Working Group highlighted energy efficiency and renewable energies as the main priorities for further action in the field of SCP. Regional and technical cooperation, funding, environmental education, capacity building and exchange of expertise and knowledge were also mentioned by several experts.

227. The Working Group recommended national and regional measures to improve the performance of energy-using appliances. A combination of encouraging innovation and competition by the private sector could be successful in many countries.

228. It was stressed that international collaboration is important for improving the environmental performance of energy-using appliances. Participants welcomed the “Sustainable Products Task Force” as a way to facilitate action to minimize risks to economic growth and the environment by reducing pressure on energy supply infrastructures. This Task Force was invited, *inter alia*, to seek common priorities for encouraging more innovation in product eco-design, to promote practical cooperative projects between and among countries, and to monitor and report progress.

229. Sustainable consumption and production was recognized as a cross-cutting theme of the Commission on Sustainable Development (CSD), and it has particular relevance to the cluster of themes under consideration at its fourteenth session, that is, energy, climate change, air pollution/atmosphere and industrial development. Key issues identified for discussion at CSD were energy use in buildings, encouraging eco-design, a life-cycle approach to decision-making, and using public and private procurement practices to influence markets for these products. It was recognized that the Marrakech Process as well as the CSD should try to avoid duplication of efforts already being undertaken by other fora. Participants were encouraged to raise these issues at the CSD Regional Implementation Meetings.

230. WSSD Partnerships, especially those with energy and air pollution related goals, e.g. the Renewable Energy and Energy Efficiency Partnership (REEEP) and the Johannesburg Renewable Energy Coalition (JREC), were highlighted as undertaking SCP-related activities and potentially serving as a means to further SCP goals.

231. The potential for public and private procurement to stimulate markets and innovation and to produce more cost effective and sustainable options for all consumers was recognized. Also, procurement can exemplify sustainable purchasing options for domestic consumers. The Working Group welcomed the “Sustainable Procurement Task Force” and proposed that Governments seek to produce better environmental outcomes from the goods and services that

they purchase. It was also recommended that international organizations adopt sustainable procurement practices.

232. Developing countries were urged to use revenues obtained from carbon emission reductions under the CDM of the Kyoto Protocol.

233. The role of international cooperation was identified as promoting communication, matching potential project donors and recipients and enhancing networking opportunities. Within this framework, international cooperation could facilitate an exchange of technical expertise, and countries with expertise in SCP areas were called upon to make it available to developing countries for specific tasks, which could be done through a hands-on database on concrete projects and projects proposals. Regional cooperation was also encouraged by the Working Group.

234. The lack of funding, especially for least developed countries, hampers implementation of SCP goals. It was noted that many funding agencies base their decisions on national needs assessments such as Poverty Reduction Strategy Papers (PRSPs), and developing countries were strongly encouraged to include SCP-related needs in their national assessments. To overcome barriers associated with lack of capacity in preparing project proposals, the Working Group recommended training and making easy-to-use manuals on the subject readily available. In that respect, facilitation of access to financing, in particular through simplifying application procedures and through providing concise and relevant information, was considered important.

235. It was also recommended that donor countries and international organizations ensure that bureaucratic hurdles do not hamper aid-granting and project implementation, and that they consider SCP-related projects in the context of poverty alleviation. In this regard, it was further recommended that they take on the role of facilitator to direct communication and support directly to the key concerned actors and countries.

236. It was recommended that countries include a “cost of non-action” analysis in their SCP decision-making processes.

### **III. Summary of the Cooperation Dialogue Sessions**

#### **Prepared by the Session Co-chairs**

237. The Cooperation Dialogue Sessions were organized in order to engage development cooperation agencies and experts in sustainable consumption and production, from both developing and developed countries, in a dialogue intended to lead to the development, funding and implementation of sustainable consumption and production activities, and to explore how development agencies could become a mechanism of implementation for the Marrakech Process.

238. The Co-chairs of the Cooperation Dialogue Sessions were Mr James Riordan of Environment Canada and Mr Sherif Arif of the World Bank. Participating development agencies included the World Bank, the Canadian International Development Agency (CIDA), the Finnish Development Agency, the Japanese International Cooperation Agency (JICA), the Dutch Ministry of Foreign Affairs and Development Cooperation, the Spanish Agency for International Cooperation (AECA), the Swedish International Development Agency (SIDA), and the United Nations Division for Economic and Social Affairs (UN- DESA).

239. The Sessions resulted in the following main outcomes:

(a) Development agency representatives acquired a better understanding of sustainable consumption and production and how this approach can be an important part of national sustainable development plans. Some representatives agreed to expand the dialogue on sustainable consumption and production to their networks of development agencies;

(b) Experts on sustainable consumption and production from both developing and developed countries acquired a better understanding of how development agencies function and how sustainable consumption and production could fit into national development plans;

(c) Experts on sustainable consumption and production from developing countries acquired a better understanding of how to access development assistance, in particular by working through the national government and the national development plan of the recipient country.

240. Themes which emerged in the dialogues with regard to the focus of development agencies include:

(a) Poverty eradication is a priority, with a particular focus on the Millennium Development Goals;

(b) Development agencies are responsive to the objectives and priorities set by recipient governments in national development plans;

(c) Aspects of sustainable development and/or environmental sustainability are often included in national development plans, but there are generally no specific references to sustainable consumption and production;

(d) Engaging development agencies in the Marrakech Process can best be done by including sustainable consumption and production in national development plans.

241. During the dialogues, development agencies described the evolving development cooperation strategies, which include:

- (a) Ensuring that ownership of development initiatives belongs to national governments;
- (b) Focusing development assistance on a limited number of recipient countries, in particular the least developed countries;
- (c) Focusing on a few national priority sectors in order to achieve efficiencies and improvements in effectiveness;
- (d) Coordinating and harmonizing work with other development agencies to increase effectiveness and coherence of development assistance, for example by co-funding projects and sharing strategies and priorities;
- (e) Giving priority to poverty eradication, capacity building, effective governance, and community development projects, for example by supporting policy and institutional reform, institutional strengthening, and private sector development;
- (f) In some cases, such as the World Bank, there has been increasing emphasis on the involvement of other stakeholders, in addition to national governments, in the planning and implementation of development assistance activities. In addition, the World Bank has included environmental and social assessments in all of its activities.

242. Development agency representatives indicated that the Sessions were a good opportunity for dissemination of information about their priorities and objectives, how their agencies provide development assistance, and the evolution of their strategies and programmes. Some agencies were supporting projects related to sustainable consumption and production, but these generally do not have high visibility and are referred to in other terms.

243. Development agencies are already working on issues related to sustainable consumption and production, but generally through sectoral approaches; many agencies, for example, are working on energy efficiency, waste management, and water resource management and sanitation, issues which are linked to sustainable consumption and production.

244. Participants recognised the value of the Cooperation Dialogue Sessions as a good starting point for linking the Marrakech Process and development assistance programmes. In order to follow up on these Dialogues, UNEP and UN-DESA are requested to review, describe and communicate the linkages between development assistance programmes and sustainable consumption and production, including priorities, mechanisms, opportunities and existing SCP-related projects supported by development agencies.

### **Panel Discussion**

245. A panel on the Cooperation Dialogue Sessions focused on the question “How can aid agencies become a mechanism of implementation for the Marrakech Process?” The panel was chaired by Mr Allan Flores, Vice-Minister of the Ministry of Environment and Energy of Costa Rica, and included Mr James Riordan, Co-chair of the Cooperation Dialogue Sessions; Mr Sherif Arif, Co-chair and representative of the World Bank; Mr Taizo Tamada of JICA; and Ms Kathleen Abdalla of UN-DESA.

246. Mr Riordan summarised the outcomes of the Cooperation Dialogue Sessions, highlighting the importance of continuing engagement of development agencies in the Marrakech Process.

247. Mr Arif stressed the commitment of the World Bank to poverty reduction and helping people to help themselves, not only financially, but also with knowledge. For the World Bank, sustainable consumption and production is addressed through sectoral projects in such sectors as energy, agriculture, water and waste management. To work on the Marrakech Process with the World Bank, developing countries should take advantage of the funds available through the Clean Development Mechanism for projects that reduce CO<sub>2</sub> emissions. About \$600 million is available through the World Bank for purchasing carbon emission reductions from CDM projects in developing countries, and those funds could be used to leverage investments in sustainable development. He also stressed the need for a long-term view of sustainable consumption and production, in particular taking into account the impacts of trade liberalization and the “new oil boom,” which will require a review of long-term industrial strategies in both developed and developing countries.

248. Mr Yamada noted that before the expert meeting he was not aware of the Marrakech Process. In reviewing JICA projects, the agency found that it is already implementing some of the priorities of the Marrakech Process, including waste management, energy efficiency and renewable energy. He stressed the need for support for south-south cooperation and for strengthening the work of NGOs. He also noted that preparation of an inventory of existing projects relating to sustainable consumption and production would be useful in monitoring progress on implementation.

249. Ms Abdalla noted that UN-DESA is not a typical donor but implements projects funded by funding agencies, particularly in the areas of energy, transport, water and natural resources. In particular, its efforts are contributing to the implementation of Agenda 21 and the Johannesburg Plan of Implementation. The work of UN-DESA in areas such as energy efficiency is promoting sustainable consumption and production.

## **Conclusions**

250. During the Cooperation Dialogue Sessions, the experts and the representatives of the development agencies identified the following challenges:

- (a) Developing and strengthening south-south cooperation with support from bilateral and multilateral donors;
- (b) Supporting regional projects;
- (c) Improving dissemination of information on the programmes and procedures of development agencies to experts working on sustainable consumption and production;
- (d) Highlighting the benefits and opportunities of sustainable consumption and production, and convincing governments to include the issues in national development plans;
- (e) Building capacity for the preparation of project proposals for submission to development agencies;

(f) Coordinating and harmonizing work among development agencies, for example by co-funding projects and sharing strategies and priorities;

(g) Taking advantage of funding from the Global Environment Facility for projects with global environmental benefits from sustainable consumption and production;

(h) Preparing and implementing Clean Development Mechanism (CDM) projects generating revenues from verified carbon emission reductions.

251. As a result of the Cooperation Dialogue Sessions, the following activities were recommended for follow up:

(a) Undertake a review of existing SCP-related projects supported by development agencies as a basis for considering how better to integrate SCP in development plans and identify opportunities to increase access to available development funds. It is recommended that UNEP and UN-DESA lead the review and report results to the Third International Expert Meeting on the 10-Year Framework of Programmes on Sustainable Consumption and Production (Marrakech+4);

(b) Technical assistance and support should be provided to developing countries for the preparation of CDM projects in order to take advantage of the funds available for the purchase of carbon emission reductions from the World Bank and industrialised countries, with the funds used to leverage investments in sustainable development;

(c) Continue the dialogue between SCP experts and development agencies and organize similar sessions at the Third International Expert Meeting on the 10-Year Framework of Programmes on Sustainable Consumption and Production (Marrakech+4).

#### **IV. CONCLUSIONS BY THE CO-CHAIRS OF THE MEETING**

252. The Marrakech Process on sustainable consumption and production is continuing the work begun in Marrakech in 2003 on the development of a 10-year framework of programmes in support of national and regional initiatives to accelerate the shift toward sustainable consumption and production, as called for in the Johannesburg Plan of Implementation.

253. The Costa Rica meeting emphasized the importance of linking work on sustainable consumption and production to poverty reduction and the attainment of the Millennium Development Goals (MDGs). Sustainable consumption and production policies should also be developed and integrated into national sustainable development strategies and other plans and strategies, including poverty reduction strategies where applicable.

254. The meeting noted the large differences among countries, and also within countries, with respect to income levels and consumption patterns. Nonetheless, the broad participation in the meeting of countries from all regions and at all levels of development demonstrates a common interest in promoting sustainable consumption and production. The meeting also demonstrated not only that developing countries can learn from the experiences of developed countries, but also that many developing countries have valuable experience to share.

255. Regional processes have been set in motion in both developed and developing regions, and a high level of political commitment and practical action has been demonstrated at the regional, national and local level. The momentum generated since the Johannesburg Summit should be maintained through continuing international support for implementation at the regional and national levels.

256. The need to obtain broad commitment to sustainable consumption and production, addressing social and health impacts as well as environmental degradation, by governments, international organizations, the private sector and civil society, and the value of partnerships among various actors were highlighted. Raising awareness of the need to change consumer and producer behaviour and promote education was considered essential, as was the need to explore and promote the benefits of sustainable consumption and production and the costs of inaction.

257. There are many opportunities for achieving large benefits from investments in cleaner and more efficient technologies, but they often go unrealized due to lack of information, lack of access to finance, and lack of supportive policies.

258. There was strong recognition of the need for on-going international cooperation on SCP, including for capacity building, technical and financial assistance, and knowledge sharing.

#### **Future work**

259. The Second International Expert Meeting welcomed the suggestions of the Working Groups for future work as presented in Chapter II of this report. The five Working Groups identified a number of useful and concrete proposals, which were considered important for future

work at the national, regional and international levels. A few of the recommendations are highlighted below.

(a) The meeting called for further work on the development and application of methods to estimate the costs of inaction with respect to unsustainable patterns of consumption and production and the benefits (social, environmental and economic) of policies and measures to promote more sustainable consumption and production. It welcomed the offer by the expert from the World Bank to explore ways to share its methodology with interested international organizations and governments;

(b) Participants recognised that national strategies and action plans for sustainable consumption and production could be a cornerstone for achieving progress. Such action plans should, where relevant, be integrated into or complementary to national development plans and/or national and regional strategies for sustainable development;

(c) UNEP and UN-DESA were requested to develop non-prescriptive guidelines to support the development of national strategies for sustainable consumption and production, including suggestions for steps to be taken during the process and a menu of elements or policies that a strategy could include. Such guidelines could also help countries in sharing their experience under the Marrakech Process;

(d) Participants expressed the need for access to practical information on sustainable public procurement, including social aspects, legislation, regulations, guidelines, handbooks, etc. The importance of sharing success stories and learning from each other was recognized. The development of a web-database on product information was suggested;

(e) Large cities were encouraged to prepare integrated long-term sustainability plans that include sustainable transport, waste management, sanitation and environmental pollution control. These activities should build upon existing programmes, such as the World Urban Forum and the UN-HABITAT/UNEP Sustainable Cities Programme;

(f) Participants recognized a need for wider use of revenues from carbon emission reductions under the Clean Development Mechanism (CDM) of the Kyoto Protocol as an appropriate tool to support urban finance and other investments in sustainable consumption and production and urban planning;

(g) Participants recommended greater collaboration between transnational corporations and assistance centers, such as the National Cleaner Production Centers, in work on sustainable supply chain management and supplier training. A proposal could be prepared on ways to make the services provided by National Cleaner Production Centers more marketable to transnational corporations;

(h) Participants stressed that international collaboration is important for improving the environmental performance of energy-using appliances. There is also a need to find common priorities for encouraging more innovation in product eco-design, promoting practical cooperative projects among countries, and monitoring and reporting progress. International

cooperation is also needed for improving solid waste management and urban development and facilitating the acquisition of new and improved technologies by companies in developing countries.

260. The meeting recognized the important support that task forces on specific issues of sustainable consumption and production, with the participation of experts from developing and developed countries, could provide to the Marrakech Process. It expressed its appreciation for the substantial contribution that would be made by the five Task Forces announced in Costa Rica:

(a) The Sustainable Lifestyles Task Force will identify and disseminate international best practices in the field of sustainable consumption;

(b) The Sustainable Products Task Force will identify common priorities for encouraging innovation in product eco-design, and establish practical cooperative projects among countries;

(c) The Cooperation with Africa Task Force will assist African countries in leapfrogging to more sustainable patterns of consumption and production;

(d) The Sustainable Procurement Task Force will help governments create markets for sustainable goods and services;

(e) The Task Force on Micro, Small and Medium Enterprises will explore ways to promote sustainable production by MSMEs.

261. The meeting invited initiatives to create other task forces on issues in sustainable consumption and production. New proposals from the meeting included possible task forces on indicators, “green growth”, and construction and buildings.

262. The Task Forces were invited to report to the third international expert meeting in 2007 and to relevant sessions of the Commission on Sustainable Development.

263. Participants expressed appreciation for the participation of representatives of international and bilateral development cooperation agencies in the meeting and for the opportunity for dialogue between the experts and the agency representatives in the Cooperation Dialogue Sessions.

264. The meeting noted the linkages between sustainable consumption and production and the poverty reduction priorities of development cooperation agencies.

265. Noting the lack of familiarity of the development agency representatives with the sustainable consumption and production agenda, the need for development assistance for sustainable consumption and production activities in developing countries, and the difficulty some of the agencies had in finding projects for funding, the meeting called for further dialogue between sustainable consumption and production experts and development cooperation agencies in order to identify opportunities for obtaining funding for sustainable consumption and production activities. Cooperation Dialogue Sessions should again be organized as part of the next international expert meeting.

266. The meeting called for a focused review of existing SCP-related projects that are supported by development agencies in order to consider how sustainable consumption and production can be better integrated into development plans and strategies and to identify opportunities to increase access to available development funds. It was recommended that UNEP and UN-DESA lead the review and report the results to the third international expert meeting on the 10-year framework.

267. The meeting recognized the leading role of UN-DESA and UNEP in supporting the Marrakech Process. The establishment of the Marrakech Process website was welcomed, and UN-DESA and UNEP were requested to continue to maintain and develop the site as a principal information source and networking tool for work relating to the Marrakech Process. UN-DESA was also requested to maintain and develop, as part of the Marrakech Process website, the database on international activities on consumption and production patterns.

268. The meeting suggested that further regional meetings and other regional activities, to be organized in cooperation with regional organizations, focus on identifying practical activities for implementation, and that reports on those activities be submitted to the next international expert meeting.

269. The meeting expressed appreciation for the support that had been provided for regional activities by host countries, donor countries, and regional and international organizations, all of which were encouraged to provide support for future activities.

270. The Marrakech Process should include a third international expert meeting on the 10-year framework of programmes in two years, supported by international organizations and donor contributions. Sweden offered to host the third meeting, "Marrakech+4", in 2007.

271. Future international expert meetings and regional meetings under the Marrakech Process should continue to take into account the work programme of the Commission on Sustainable Development and provide inputs to the Commission in order to ensure the integration of sustainable consumption and production in the consideration of the thematic issues for each cycle of its work programme.

272. The meeting welcomed the participation of various UN and other international organizations. The meeting called for the report to be disseminated to all relevant UN agencies and programmes, international financial institutions, NGOs and business. Governments are invited to take into account the outcome of the meeting in the preparations for the governing bodies of all relevant UN agencies and programmes.

273. The result of the meeting was considered a substantial input to the work of the Commission on Sustainable Development and other international decision-making processes. The Meeting welcomed the intention of the Government of Costa Rica to submit this report for the consideration of the Commission on Sustainable Development at its 14th session, in May 2006.

274. The Co-chairs, Working Group Co-chairs and participants thanked the Government of Costa Rica and the Ministry of Environment and Energy for their generosity and hospitality in

hosting this meeting, for providing participants an opportunity to witness sustainable development in action, and for continuing the Marrakech Process on sustainable consumption and production. They also expressed their appreciation to the countries that provided financial support for the meeting, particularly for supporting the participation of experts from developing countries.