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### Commission on Sustainable Development

#### Fourteenth session

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Item 3 of the provisional agenda\*

**Thematic cluster for the implementation cycle 2006-2007**

### **Report of the Asia-Pacific regional implementation meeting\*\***

#### **I. Major conclusions and recommendations of the Asia-Pacific regional implementation meeting**

1. The Asia-Pacific regional implementation meeting reviewed the implementation status of the outcomes of the World Summit on Sustainable Development and partnerships for the further application of the Plan of Implementation of the World Summit on Sustainable Development (Johannesburg Plan of Implementation) in Asia and the Pacific region.
2. The meeting expressed appreciation of the discussion by the panel composed of representatives of major stakeholders who held an interactive debate on the theme of the meeting regarding how to continue economic growth for poverty reduction without compromising environmental sustainability. The key points discussed by the panel were considered by the meeting.
3. The meeting adopted the message from Asia and the Pacific to the Commission on Sustainable Development at its fourteenth session, which is included as an annex to the present report, and requested the Secretariat to transmit the message to the Commission.
4. The meeting had before it a document entitled "Review of the implementation status of the outcomes of the World Summit on Sustainable Development: an Asia-Pacific perspective". It noted that the review could be submitted to the Commission on Sustainable Development at its fourteenth session as a note by the secretariat.

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\*\* Organized by the Economic and Social Commission for Asia and the Pacific in collaboration with the Food and Agriculture Organization of the United Nations Regional Office for Asia and the Pacific, the United Nations Development Programme Regional Centre in Bangkok, the United Nations Environment Programme Regional Office for Asia and the Pacific and the United Nations Industrial Development Organization Regional Office in Bangkok.

## **II. Organization of the session**

### **A. Opening, duration and organization**

5. The Asia-Pacific regional implementation meeting was held in Bangkok on 19 and 20 January 2006 in collaboration with the Regional Office for Asia and the Pacific of the Food and Agriculture Organization of the United Nations (FAO), the Regional Centre in Bangkok of the United Nations Development Programme (UNDP), the Regional Office for Asia and the Pacific of the United Nations Environment Programme (UNEP) and the Regional Office in Bangkok of the United Nations Industrial Development Organization (UNIDO). The objective of the meeting was to prepare inputs from an Asian and Pacific perspective for the Commission on Sustainable Development at its fourteenth session in a cluster of areas: namely, energy for sustainable development, industrial development, air pollution/atmosphere and climate change.

6. In his welcoming address, the Executive Secretary of the Economic and Social Commission for Asia and the Pacific (ESCAP) noted the achievements of Asia and the Pacific region in economic growth, dramatic poverty reduction and challenges to environmentally sustainable economic growth. He also noted the importance and significance of the meeting in assessing the implementation in the region of the outcomes of the World Summit on Sustainable Development in the previously mentioned areas. The Executive Secretary expressed confidence that the meeting, with the joint efforts of all the delegates and co-organizers, would make a great contribution to preparations for the fourteenth session of the Commission on Sustainable Development and show the commitment of Asia and the Pacific region to playing a key role in sustainable development.

7. In her opening statement, the Director of the Division for Sustainable Development, Department of Economic and Social Affairs of the United Nations Secretariat, expressed her support for regional implementation meetings as integral components that would enrich the work and discussions of the Commission on Sustainable Development by bringing regional perspectives to a global forum. She acknowledged the disparities in Asia and the Pacific region's rapid economic growth and its significant impact in helping to achieve sustainable development. She expressed the hope that the meeting would be fruitful and successful and suggested focusing questions in order to stimulate discussion.

8. As a Vice-Chair and representative of the region in the Bureau of the Commission on Sustainable Development at its fourteenth session, Javad Amin-Mansour noted with appreciation that the meeting would provide significant inputs to the forthcoming deliberations of the Commission on Sustainable Development. He highlighted the importance of energy for sustainable development and the linkages between energy, industrial development, air pollution/atmosphere and climate change. He emphasized particularly the need to assess the means of implementation among cross-cutting issues, such as technology transfer, enhancing human resources, capacity-building and building the necessary infrastructure, regional and international cooperation, mobilization of resources and financial support, exchange of information and views on best practices.

9. In his inaugural address, Kitti Limskul, a Vice-Minister of the Government of Thailand, welcomed the participants. He noted that poverty still prevailed in the

region and expressed the expectation that the meeting would identify obstacles and challenges to the development of the energy industry, which could contribute to poverty reduction while enhancing environmental sustainability, mitigating air pollution and tackling climate change problems. He further noted that the meeting should be perceived as a forum for sharing lessons learned and best practices to expedite application of the Johannesburg Plan of Implementation in the region. He described some of the important initiatives undertaken by the Government of Thailand in addressing sustainable development including the development and promotion of biofuel and a strategy to lower the ratio of the energy consumption growth rate to the gross domestic product growth rate from the current level of 1.4:1 to 1:1 by 2007. The Vice-Minister noted further that Thailand planned to increase the share of renewable energy from 0.5 per cent of primary energy for commercial purposes to 8 per cent by 2011. In addition to introducing clean technologies, Thailand would foster the “polluter pays” principle and ISO 14000 and encourage public participation in addressing climate change issues. He also noted that the Government of Thailand intended to host the thirteenth Conference of the Parties to the United Nations Framework Convention on Climate Change and the third meeting of the parties to the Kyoto Protocol.

## **B. Attendance**

10. The session was attended by the following members and associate members of ESCAP: Armenia, Australia, Azerbaijan, Bangladesh, Bhutan, Cambodia, China, Cook Islands, Democratic People’s Republic of Korea, Fiji, Georgia, India, Indonesia, Islamic Republic of Iran, Japan, Kazakhstan, Kyrgyzstan, Macao Special Administrative Region, Mongolia, Nepal, Pakistan, Philippines, Republic of Korea, the Russian Federation, Sri Lanka, Thailand, Tonga, Turkmenistan, United States of America and Uzbekistan.

11. Representatives of Austria and of the European Union participated as observers.

12. The following United Nations bodies and specialized agencies were represented: the Department of Economic and Social Affairs, FAO, UNDP, UNEP, UNIDO and the Office of the United Nations High Commissioner for Human Rights.

13. The following intergovernmental organizations, non-governmental organizations and other entities also attended: Asian Institute of Technology, Bengal Fine Ceramics, Centre for a Sustainable Built Environment, Centre for Energy Environment Resources Development, China Standard Certification Center, Energy Environment Consulting Company, Energy Management Association of the Philippines, Federation of Chambers of Commerce and Industry of Sri Lanka, Indonesian Peoples Forum, Institute for Global Environmental Strategies, SRG Bangladesh, International Institute for Sustainable Development, Japan Lanka Industrial Development Center, Korea Energy Economics Institute, Mongolia Erel Cement Factory, National Cleaner Production Center (India), National Institute of Agriculture Planning and Projection (Viet Nam), National Productivity Council (India), Pacific Islands Forum secretariat, People Centred Business and Economic Institute (Indonesia), PT. Semen Padang, South Asia Cooperative Environment Programme, South Pacific Applied Geoscience Commission, Stakeholder Forum for

a Sustainable Future, Steel Asia Manufacturing Corporation, Sustainable Development Policy Institute, The Energy and Resources Institute, Third World Network, Viet Nam Cleaner Production Center, Viet Tri Paper Company, Women's Major Group and Yayasan Pelangi Indonesia.

### **C. Election of officers**

14. The meeting elected the following as members of the Bureau: Chairperson: Liana Bratasida, Assistant Minister for Global Environment Affairs and International Cooperation, Ministry of Environment (Indonesia); Vice-Chairpersons: Monthip Sriratana Tabucanon, Deputy Permanent Secretary, Ministry of Natural Resources and Environment (Thailand); Jayampathi Pathmaraja Hettiarachchi, Secretary, Ministry of Industrial Development (Sri Lanka); Uilou Fatai Samani, Director of Environment (Tonga); Zamaira Tohtohodjaeva, Counsellor, Department of International Organizations, Ministry of Foreign Affairs (Kyrgyzstan); Xu Huaqing, Director, Research Professor, Energy Research Institute, National Development and Reform Commission (China); and Rapporteur: Gerald Leo Morvell, Assistant Secretary, Energy Futures Branch, Department of the Environment and Heritage (Australia).

### **D. Agenda**

15. The Committee adopted the provisional agenda (ESD/RIMAP/2006/L.1), which read as follows.

1. Opening of the meeting.
2. Election of officers.
3. Adoption of the agenda.
4. Review of the implementation status of the outcomes of the World Summit on Sustainable Development: an Asia-Pacific perspective.
5. Partnerships for the further implementation of the Johannesburg Plan of Implementation.
6. Message from Asia and the Pacific to the fourteenth session of the Commission on Sustainable Development.
7. Other matters.
8. Adoption of the report of the meeting.

### **E. Acknowledgements**

16. The meeting noted with appreciation the collaborative efforts made by the United Nations bodies and agencies in organizing the meeting, in particular with regard to the preparation of the information and background documents and the message. The meeting also expressed appreciation of the role of the Department of Economic and Social Affairs, ESCAP, UNEP and the Energia International Network on Gender and Sustainable Energy in mobilizing financial resources to enable

relevant stakeholders, including government officials and major groups, to participate in the meeting.

**F. Adoption of the report of the meeting**

17. The meeting adopted the present report on 20 January 2006.

## **Annex to the report of the Asia-Pacific regional implementation meeting**

### **Message dated 20 January 2006 from Asia and the Pacific to the Commission on Sustainable Development at its fourteenth session**

1. We, the participants at the Asia-Pacific regional implementation meeting, met to review the progress made as well as identify key challenges and opportunities towards further implementation of the Johannesburg Plan of Implementation of the World Summit on Sustainable Development, Agenda 21 and the Programme for the Further Implementation of Agenda 21, as well as the 2005 World Summit Outcome, in the areas of: (a) energy for sustainable development; (b) industrial development; (c) air pollution/atmosphere; and (d) climate change. In this message we draw the attention of the Commission on Sustainable Development to the following points as unique features for its consideration for Asia and the Pacific region. We pledge to avail ourselves of all the opportunities emerging in the region, with appropriate leadership and partnership, to do what has to be done to further the sustainable development agenda in Asia and the Pacific, and to bring out key messages that are unique and important for furthering our efforts.

#### **A. Achieving sustainable development in Asia and the Pacific**

2. The size and diversity of characteristics and circumstances of countries in Asia and the Pacific position the region to play a key role in global sustainable development. With different national circumstances come differences in priorities and goals for attaining sustainable development and these factors create specific challenges for cooperation.

3. Attaining sustainable development in Asia and the Pacific is a key to global sustainability. The social factors of economic development and environmental degradation currently are not adequately integrated with other dimensions of sustainable development. Sustainable production and consumption patterns, which emphasize a long-term perspective while recognizing the linkages to social development and equity, do not receive enough attention from political, business or community leaders.

4. Asia and the Pacific region has made considerable progress towards sustainable development and the achievement of the Millennium Development Goals. Strategic approaches to sustainable development are increasingly being considered at the country level, focusing on finding the right balance between economic growth for poverty reduction and environmental sustainability.

5. Despite the considerable progress achieved, macroeconomic policy in many cases does not yet integrate or attach sufficient priority to environmental sustainability concerns. Only 15 countries in the region have been assessed as “early achievers” or “on track” in developing national sustainable development strategies for enhanced integration of the principles of sustainable development into national policies and programmes.

6. Asia and the Pacific region is experiencing the fastest economic growth in the world. Strong economic growth coincides with increasing pressure on the limited carrying capacity of the region, manifested by erosion of the natural resource base, rising levels of pollution that results in threats to human health and increasing anthropogenic pressure on climate systems.

7. The current pattern of economic growth presents challenges to enhanced sustainable development, and poses major threats to environmental sustainability in Asia and the Pacific region. The region will not be able to continue its economic growth without improving the ecological efficiency and social equity of its development patterns.

8. In the region 670 million people are still living on less than US\$ 1 per day.

9. Environmentally unsustainable economic growth patterns, with the demand for ecosystem goods and services exceeding the region's ecological carrying capacity, need to be changed or reversed in order to achieve the Millennium Development Goals.

10. Poverty eradication, changing unsustainable patterns of production and consumption and protecting the natural resource base are essential requirements for sustainable development. The main challenge for countries individually and collectively in Asia and the Pacific region is finding ways to continue the economic growth necessary for attaining social equity and poverty reduction without compromising environmental sustainability.

11. Current planning perspectives and political systems that reward short-term economic gain lead to the neglect of short- and long-term sustainable development goals. Even where policies that encourage environmental sustainability have been introduced, the institutional, financial and human capacity to formulate, monitor and implement the policies is often lacking.

12. Strong political will and enhanced capacities within government as well as civil society and community-based groups are necessary for the implementation of effective and efficient policies that support sustainable development for the expedient implementation of the Johannesburg Plan of Implementation.

13. At the Ministerial Conference on Environment and Development in Asia and the Pacific, 2005, Asian and Pacific countries recommitted themselves to promoting sustainable development, and agreed to move towards an environmentally sustainable economic growth approach (green growth) by improving the ecological efficiency of their economic development patterns and by creating synergy between the environment and the economy. The environment must be presented as an opportunity for economic growth. A shift to a paradigm that stimulates investment in markets for environmentally sustainable goods and services would provide business opportunities and employment to synergize ecological efficiency and business profit. Such a paradigm shift would replace the prevailing perception of the environment and the economy as a "zero-sum game" with a virtuous cycle that would reward eco-efficient practices, thereby providing economic incentives and opportunities for continued environmentally sustainable economic growth in support of poverty eradication.

## **B. Issues linking energy for sustainable development, industrial development, air pollution/atmosphere and climate change**

14. While industrial growth and energy contribute immensely to social and economic development, they are also contributors to the environmental challenges facing the region, including adverse influences on climate and air quality.

15. Natural resource-, energy- and pollution-intensive industries dominate manufacturing and production in many parts of the region, and link industrial development closely to increased energy consumption, air pollution and global environmental change. The links are manifested in several ways, including in the industrial components of energy and water production, distribution and consumption; in the emissions of greenhouse gases, sulphur dioxide and nitrogen oxides from industrial activity and the combustion of fossil fuels; and in the generation and discharge of pollutants and other wastes into the natural environment.

16. Current patterns of economic growth already risk causing irreversible environmental damage. A major challenge facing the region is to find ways to ensure that industrial development and energy consumption and production do not pose a threat to environmental sustainability and social equity. This challenge could be addressed by improving the eco-efficiency of the industrial and energy sectors, which would enhance environmental sustainability.

17. There is increasing recognition of the negative impacts and risks to future prosperity stemming from climate change and air pollution and other forms of environmental degradation. Scientific evidence as well as public and political pressure have emerged to make the development direction of the industrial and energy sectors congruent with appropriate and available environmentally sound technologies.

18. There is a need to re-examine and reassess planned or ongoing structural change in energy and industry from a sustainable development perspective. Among these changes are the replacement of capital stock with environmentally sound technologies, depending on the availability of resources.

19. All stakeholders have an obligation to evaluate their contribution to these risks and to participate in the transformation to a more sustainable industrial system.

## **C. Energy for sustainable development**

20. Energy services are fundamental and essential to support economic growth for poverty eradication, particularly in vulnerable economies, such as the least developed countries, landlocked developing countries, small island developing States and countries with economies in transition.

21. One of the main challenges facing the region lies in finding ways to continue to provide and expand access to equitable energy services in support of economic growth and poverty eradication without jeopardizing long-term prosperity and environmental sustainability.

22. Energy security, energy efficiency and energy conservation have vital roles to play in long-term energy strategies. Strong policy support as well as enhanced



capacity are needed to further promote energy efficiency and to enable the private sector to capture opportunities to improve eco-efficiency. With rising oil prices and with a view to lessening dependency on imported energy resources, there is a greater opportunity to explore the benefits of energy efficiency, alternative energy resources and low-emission technologies.

23. Diversification of energy sources in terms of policy and practice has not been successful in many parts of Asia and the Pacific. Many oil-producing and oil-exporting countries still rely on oil as a major source for income and as a major energy source for consumption. In addition, many oil-importing countries still rely on oil as a major source of energy.

24. The region needs to promote further the use of environmentally sound and economically viable technologies as well as renewable resources, with which the region is endowed, focusing on resource-saving, generating less waste and recycling. The development and acceptance of low-emission technologies will require innovation on the part of industry and the support of Governments.

25. Inadequate access to financing and technologies remains a major constraint to rapid progress in that direction, and many policies and regulations in the region do not encourage energy conservation or energy efficiency owing largely to the energy pricing policies and subsidies provided for certain forms of energy.

26. Energy security in Asia and the Pacific region has deteriorated as rapid economic growth has increased the demand for energy, resulting in increased net imports to the region, primarily from Middle Eastern sources. Countries less well endowed with fossil fuel reserves increasingly look towards lowering their import dependency.

#### **D. Industrial development**

27. Asia and the Pacific region has a wide range of experiences in promoting growth in the industrial sector. Industrial development has progressed in areas where power facilities, trained labour, modern transport and raw materials are available. However, the gap between low-income and middle- and high-income developing countries in Asia and the Pacific region is widening, pointing to a growing industrial divergence within economies in the region. Sustainable industrial development efforts have slowed and in some cases have been interrupted by financial crises and environmental and natural disasters.

28. Industrial growth has put significant pressures on the environment, reflecting the unsustainable production and consumption patterns of the current development paradigm, thus underlining the need for urgent action to promote environmentally sustainable growth patterns in the region.

29. In enhancing eco-efficiency, markets for environmental goods and services need to be developed, a process to which the industrial sector could respond. Such markets need support in terms of policy and regulation, research and development, technological development and investment. These emerging business opportunities should be supported in order to ensure economic growth for sustainable development.

30. The promotion of small and medium-sized enterprises (SMEs) has been a key element in economic policy, as it is aimed at increasing competitiveness. Although the potential impacts of SMEs on the environment are well recognized in many instances to be deteriorating, current measures are inadequate to help to promote and disseminate environmentally sound technologies among SMEs.

31. Industrial development has certain undeniable impacts on job opportunities, social situations, communities and families.

## **E. Air pollution/atmosphere**

32. Different geographic, climatic and socio-economic features represented in the Asia and Pacific region represent different concerns, challenges and opportunities in terms of air quality and atmospheric issues. Irrespective of this diversity, most countries in the region have issues of common concern.

33. Air pollution is a manifestation of the unsustainable production and consumption patterns of the current development paradigm, which could be improved by addressing consolidated actions towards sustainable energy and industrial development.

34. Deterioration of indoor and urban air quality; transboundary pollution, including acid deposition and haze, dust and sand storms; and greenhouse gases are the major atmospheric issues in the region and cause adverse health impacts.

35. In the developing countries of the region, the use of coal and biomass fuels for cooking and heating is a major source of indoor air pollution and a significant cause of health hazards, in particular among women and children in poorer communities.

36. Outdoor air pollution, especially in urban areas, is on the increase because of rapid urbanization, increasing vehicular traffic, industrial growth and increased energy consumption. Of the 15 cities in the world with the highest levels of particulate matter, 12 are located in Asia.

37. National strategies for integrated air quality management and institutional mechanisms and infrastructure for their implementation are at the development stage and mostly too weak to effect significant progress.

38. Existing intergovernmental initiatives need to be strengthened and widened in scope in order to address issues of concern, such as indoor air pollution, acid deposition, ground-level ozone, emission of mercury, promotion of clean technologies and development, as well as trade in sustainable energy resources and technologies.

## **F. Climate change**

39. The diverse geographical, climatic and demographic characteristics of Asia and the Pacific mean that the effects of climate change and the nature of and opportunities for countermeasures vary across subregions, countries and even within countries. Climate change and drought are destroying cultures and heritages that have endured for many centuries.

40. Stresses from climate and climate-related events and phenomena that could be exacerbated by future climate change are already being felt by most countries through extreme weather and natural disasters in the region. Adaptations in agricultural, forestry and terrestrial ecosystems are considered among the high-priority measures for most countries of the region, while for some others such as small island developing States, adaptation in water resources and coastal zones, including sea level rise, are a top priority.

41. Lack of integration of climate change issues into national development plans is a major concern, and mitigation and adaptation measures require additional policy attention.

42. There is a need for improved awareness among policymakers of the importance of integrating climate change concerns into social and economic policies and plans. In particular, awareness of promoting the environment as an emerging market and a business opportunity, and not as a burden, needs to be recognized. As oil prices rise, action to address climate changes would become compatible with economic development.

43. Developed and developing countries, including countries with economies in transition, have a role to play in emission reductions, including through the clean development mechanism of the Kyoto Protocol to the United Nations Framework Convention on Climate Change, and a range of partnership approaches.

## **G. Opportunities for furthering the sustainable development agenda in Asia and the Pacific**

44. Opportunities for enhanced transition to sustainable development emerge as valuable lessons are learned, and indicate that economic growth and environmental protection objectives are compatible in Asia and the Pacific. There are a number of successful initiatives and good practices at the national, subregional and regional levels, illustrating the progress attained and indicating the opportunities for further implementation through policy dialogues, replication of best practices, partnerships among multi-stakeholders, South-South cooperation and enhanced regional and subregional cooperation.

45. A transition towards sustainable development requires a paradigm shift, where priorities, attention and resources are directed towards supporting developments within the carrying capacity of ecosystems in the region. The region is encouraged to observe that some countries have initiated this paradigm shift as reflected in policies, including the 3R (reduce-reuse-recycle) policy of Japan, the resource recycle society of the Republic of Korea and the resource-saving society of China. Efforts to replicate and promote such a paradigm shift will contribute to the attainment of the goals of sustainable development.

## **H. Subregional issues**

### **1. Central and North-East Asia**

46. Challenging issues for Central and North-East Asia include cooperation to enable capacity-building; energy conservation; technology research and

development; technology transfer and use, including new and renewable energy sources; and diversification of the energy mix. Industrial development in the subregion has many social and environmental impacts, and incorporating research and development into industrial development to change the path of manufacturing and production in support of eco-efficiency remains a challenge. The impact on health of air pollution from industry and energy use within countries and between countries highlights the issues of health and transboundary air pollution. In addition, given the growing use of transport to the subregion, the linkages between transport and air pollution, climate change, energy use and industry are serious challenges. Capacity-building for skills related to all of these issues has been difficult.

47. Regional and subregional partnerships are important mechanisms for dealing with climate change. Subregional cooperation initiatives, such as the Regional Environmental Action Plan in Central Asia for addressing environmental issues, including common and trans-border issues, are of high importance for solving complex problems of the countries with economies in transition in their efforts towards sustainable development.

## **2. Small island developing States**

48. For the Pacific island countries and territories energy and climate change issues are of particular relevance. The Pacific small island developing States face some unique challenges owing to the large number of small islands scattered across a vast ocean. This poses major problems for rural communities to effectively access affordable and reliable energy, which is exacerbated by the countries having poor communication and transport infrastructure, weak institutions, limited data and human and financial resources. The subregion is reliant predominately on imported fossil fuels, making them particularly vulnerable to irregularities in supply due to poor infrastructure and monopoly control, as well as fluctuating international market conditions. Limited access to affordable energy sources is a major constraint to economic development and increased well-being, which must be urgently addressed if the countries are to achieve their national sustainable development goals. Pacific island countries and territories also experience a high level of risk from the effects of the changing frequency or intensity of extreme weather, or climate variability phenomena or through accelerated sea level rise. Reducing the risks associated with the impacts of extreme weather and climate variability is a fundamental development challenge faced by those countries and territories. This must be urgently addressed in order to build resilience and improve livelihoods, economic well-being and health, as well as maintain biodiversity and the unique Pacific culture.

49. Pacific Island Forum leaders, in recognizing such barriers, constraints and challenges to sustainable economic development, have developed and adopted several regional policies and frameworks, such as the Pacific Islands Energy Policy and Strategic Action Plan, the Pacific Islands Framework for Action on Climate Change, Climate Variability and Sea Level Rise and the Framework for Action on Disaster Risk Reduction and Disaster Management. The next challenge is to implement these regional policies and frameworks at the national level under the Pacific Plan for Strengthening Regional Cooperation and Integration, which was adopted by the leaders in October 2005. The simplification of development partner processes and recognizing the special needs of Pacific small island developing States under the Global Environmental Facility and other international instruments

are needed along with the adoption of key strategies highlighted in the Paris Declaration on Aid Effectiveness to assist Pacific island countries and territories to achieve their national development goals and commitments under the Millennium Development Goals. These needs must be explicitly recognized as needing special treatment and unique approaches.

### **3. South-East and South Asia**

50. Economic development and the alleviation of poverty are the foremost issues of the region and subregions; they require enormous investments in the energy sector, with emphasis on small and medium-sized projects involving private sector engagement. The high cost of energy production is adversely affecting industrial development. Currently, the development of all forms of energy, including nuclear energy, is not equal. The cost of renewable energy is high and there is great potential in developing sources of energy that emit less carbon. Technology and finance pose significant barriers, because less greenhouse gas-intensive technologies are not available in the public domain of developing countries and are not financially competitive with conventional technologies.

51. Government efforts to raise awareness are not adequately supplemented and complemented by the private sector and international agencies. Regional and subregional collaboration and technology transfer are weak, particularly between South Asia and South-East Asia. Other challenges for the subregions include inequitable growth, gender inequalities and weak governance. The subregions are particularly vulnerable to the impacts of climate change and are lacking in clean development projects under the Kyoto Protocol due to many factors such as high transaction costs, complicated procedures and underdeveloped networks for research and development. Multi-stakeholder involvement at the country, subregional and regional levels as well as between bilateral and multilateral donors and non-governmental organizations is not strong.

### **4. Major groups**

52. Greater stakeholder engagement in policy formulation, project and programme development as well as actual implementation are steps that will increase ownership and ensure sustainability and effective implementation on the ground. Intergovernmental organizations and Governments should continue to ensure adequate and predictable funding to support multi-stakeholder participation and adopt mechanisms that reflect the interests of all the parties affected.

53. Partnerships and other constructive initiatives are important in the transition to sustainable development and the major groups continue to support them where appropriate. Such partnerships promote good governance, but all stakeholders should adhere to and implement the Bali Guidelines on Type II partnerships and adopt mutually agreed criteria where they relate to the thematic clusters under consideration.

## **I. Means of implementation for Asia and the Pacific**

54. The diversity of economic development and other characteristics of the region reflect different approaches and levels of attainment towards sustainable development. However, in general among developing countries, policies and

strategies still appear to be weak in developing synergies and linkages between economic growth and environmental sustainability.

55. Coherent and coordinated policies are lacking owing to weak linkages among the policies for the four aforementioned areas, namely: energy for sustainable development, industrial development, air pollution/atmosphere and climate change.

56. A number of important factors were linked to the development of effective policies, including strong governance; finance and creating the right investment climate; skill development and capacity-building; technology research, development and transfer; sound information for policymakers; and decoupling the trade-off between economic development and environmental degradation.

57. Providing an enabling environment in the form of commitments, transparent institutional and legal frameworks, institutional collaboration, infrastructure, investment, economic instruments, technology and information-sharing and accessible funding are important factors in the wider replication of good practices within and among countries of the region.

58. Many developing countries lack the required human resources to enter on a sustainable development path. Capacities need to be strengthened, not least at the community level, to facilitate the introduction of appropriate technologies that consider local knowledge, practices and structures in support of sustainable development.

59. Changing how the long-term costs and benefits of investments are calculated would provide an opportunity for creating a level playing field for sustainable options in support of a shift towards environmentally sustainable economic growth. Efforts made by international agencies and financing institutions to implement commitments could be further enhanced through coordinated intergovernmental initiatives.

60. The region is vulnerable to natural disasters but lacks the capacity to effectively mitigate the impacts from such disasters, including potential climate change-related impacts, haze, brown clouds and the lingering aftermath of the 2004 tsunami and 2005 South Asian earthquake.

61. In strengthening energy and industrial development policies, the region is not taking full advantage of the potential effects offered by a range of partnerships. Effective partnerships require a multi-stakeholder approach and gender sensitivity.

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