Inputs from the Asian and Pacific region to the Commission on Sustainable Development at its fifteenth session
Policy options related to energy for sustainable development, industrial development, air pollution/atmosphere and climate change

A. Achieving sustainable development in Asia and the Pacific

1. Unsustainable consumption and production patterns carry the risk of irreversible environmental damage to countries of the Asian and Pacific region. One of the biggest challenges for the region lies in continuing economic growth and poverty reduction without compromising environmental sustainability.

2. Over the years, there have been many global environmental conferences in which Governments have both endorsed and ratified international agreements and treaties to undertake certain actions to fulfill their commitments. The World Summit on Sustainable Development, which adopted the Johannesburg Plan of Implementation, stands out as one of the prominent international forums.

3. Countries in the region would have to strive for collective efforts to attain sustainable development through medium- and long-term forward-looking strategies.

4. At the Fifth Ministerial Conference on Environment and Development in Asia and the Pacific, held in Seoul in March 2005, "green growth", or environmentally sustainable economic growth, was endorsed as a new approach to move towards sustainable development.

5. Promoting a climate for "green" public, private and foreign investment is an opportunity for shifting towards environmentally sustainable economic growth, or "green growth", creating a level playing field for sustainable policy options. In order for significant changes to occur, this must be supported by incorporating sustainable development considerations into the decision-making process. It also means that businesses must equally rise to the challenge by boosting their corporate social responsibility to supplement the collective efforts.

6. A shift towards sustainable development requires new thinking, directing priorities and resources towards eco-efficient practices and supporting developments within the carrying capacity of the eco-systems in the region.

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

7. Achieving sustainable development goals requires energy use and industrial development, which at the same time cause air pollution, atmospheric problems and greenhouse gas emissions.

8. 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. A key factor for success in this endeavour is to find ways and means to improve the eco- efficiency of the industrial and energy sectors.

9. One option is to combine, as appropriate, more efficient use of energy, greater reliance on advanced energy technologies, including advanced and cleaner fossil fuel technologies, and the sustainable use of traditional energy resources, which could meet the growing need for energy services in the longer term to achieve sustainable development.

10. Another option is to increase eco-efficiency with financial support from all sources for capacity-building, technology transfer and exchange of technology with developing countries and countries with economies in transition, in cooperation with relevant international organizations.

C. Energy for sustainable development

11. Energy services are fundamental and essential to support economic growth and development to reduce poverty, as well as to safeguard health and well-being. While energy security is a key concern for the Asian and Pacific region, non-efficient use of energy could exert negative pressure on the carrying capacity of eco-systems.

12. To minimize these negative pressures, policies to diversify energy supply by developing advanced, cleaner, more efficient, affordable and cost-effective energy technologies, including fossil fuel technologies, are essential.

13. Sustainable development means that it will be necessary to improve the poor's access to modern energy services. One third of the population in the region has no access to electricity. The region also includes more than two-thirds of the global population that lives off traditional biomass fuels. Since over a billion people in the region do not have access to modern energy services, ways and means must be found to provide and expand equitable and universal access to these services without jeopardizing long-term environmental sustainability. Vulnerable economies, such as those in least developed countries, small island developing States, and countries with economies in transition, need special consideration in developing and implementing their energy strategies.

14. Comprehensive regional, as well as national, strategies could contribute to achieving the Millennium Development Goals, including poverty eradication and ensuring environmental sustainability.

15. In the Asian and Pacific region, fossil fuel-based energy resources continue to play a predominant role in the supply mix. However, as only a few countries in the region have a fossil energy resource endowment, effective policies and strategies are needed to accelerate diversification of clean energy resources and the use of advanced environmentally sound technologies. Diversification of energy supply is important for widening access to energy.

16. In improving energy security, energy efficiency and energy conservation have vital roles to play. With rising oil prices, and the goal of lessening dependency on imported energy resources, there is a greater opportunity to realize the benefits of energy efficiency, alternative energy resources and low-emission technologies. Furthermore, for the poor, who experience a differentiated impact of rising energy prices, addressing energy security will have to take into account their concerns at the micro-level.

17. Regional and subregional cooperation in support of an efficient energy distribution system may supplement national efforts in promoting energy development, savings and trade. The region has potential for such collaboration, as there are countries with surplus energy resources for export and countries requiring imports of energy, thus reducing the need to obtain these resources from more distant suppliers.

18. In managing energy demand in a sustainable manner, appropriate policy, institutional and legislative frameworks are essential to support infrastructure development and promote efficient practices. Participatory partnerships among relevant stakeholders, including civil society and the private sector, could also play a role in this energy strategy.

D. Industrial development

19. Export-led industrial expansion is a defining feature of this region's economic growth. The past decade witnessed an increase in the share of exported technology-intensive industrial products in many high- and medium-income countries in the Asian and Pacific region, reflecting an increasing trend towards the internationalization of production processes and the potential for further economic growth.

20. Rapid industrial growth in Asia and the Pacific has contributed significantly to the generation of wealth and robust development in many countries, which also created jobs and reduce poverty, thereby contributing to progress on achieving Millennium Development Goal 1 on eradicating extreme poverty and hunger. However, low-income economies have remained at the lower level of the industrial performance scale. The gap between low-income and middle and high-income developing countries in the Asian and Pacific region is widening, pointing to a growing industrial divergence. In addition, the rapid growth of the industrial sector in some countries of the region has led to an acceleration of depletion of natural resources and pressures on the environment.

21. As pollution-intensive industries dominate manufacturing and production in many parts of the region, there is a need to ensure that unsustainable industrial development does not pose a threat to environmental sustainability or social equity.

22. Small and medium-sized enterprises have grown in size and become an economic factor in the success of industrial growth. However, this success in some countries has not led to a corresponding reduction in the negative impact on the environment. Due to more constraints in resources and technical capability faced by small and medium-sized enterprises in developing and utilizing effective measures for reducing pollution, improving productivity and enhancing material efficiency, policies need to be initiated which provide more support and technical assistance to promote and expand environmentally sound technologies, including technologies to reduce waste as well as, the reuse and recycling of resources and products (3Rs).

23. Increasing globalization has brought both challenges and opportunities to agro-based industrialization in Asia and the Pacific. Future industrial development policies in Asia and the Pacific must embrace the social aspects of economic growth and minimize its negative impact.

24. Support for sustained advocacy campaigns to promote innovative sustainable policies and raise awareness of the advantages of compliance with environmental laws should be intensified at the public level.

E. Air pollution/atmosphere

25. With its impressive industrial growth, rapid urbanization, and growing transportation sector, the resulting air pollution continues to be a serious problem for much of the Asian and Pacific region. 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. Air pollution is a major cause of health hazards in the region, in both the urban and rural context. In order to improve the situation, national strategies and institutional mechanisms are essential for integrated air quality management.

26. Though significant improvements are reported in concentrations of sulphur dioxide and the use of major ozone-depleting chlorofluorocarbons has dramatically declined, outdoor air pollution, especially in urban areas, is increasing. Of the 15 cities in the world with the highest levels of particulate matter, 12 are in Asia.

27. In most developing countries in the region, the use of coal and biomass fuels for cooking and heating is a major source of indoor air pollution and constitutes a significant health hazard, in particular for women and children in poorer communities. Some estimates indicate that indoor air pollution is one of the largest single risk factors for mortality, at approximately six per cent. Therefore, efficient policies to curb deteriorating air quality are crucial for improvements in indoor air quality.

28. Intergovernmental networks have been established to address transboundary pollution issues in South Asia (Malé Declaration on Control and Prevention of Air Pollution and its

Likely Transboundary Effects for South Asia), East Asia (Acid Deposition Monitoring Network in East Asia) and South-East Asia (ASEAN Haze Agreement). These initiatives could be promoted to prevent air pollution. For the East Asia region, the dust and sandstorm phenomenon is recognized as an important transboundary environment issue affecting the subregion which requires further regional cooperation.

F. Climate change

29. In meeting the climate change challenge, a broad range of measures for both mitigating climate change and adapting to its adverse effects are required. These include further energy efficiency improvements, new energy and carbon capture and storage technologies, changes to unsustainable patterns of consumption and production and coastal zone management and agricultural practices. While some progress has been achieved supporting mitigation activities, providing adequate funding to support adaptation activities remains a challenge. Adaptation is important for both developed and developing countries, and multilateral support to countries that are most vulnerable to climate change is needed. Furthermore, linking the climate change agenda to the broader development agenda and promoting science based decision-making at the global and national levels are challenges.

30. Of immediate importance is the need to integrate climate change policies into national development plans to mitigate the harmful effects of rising temperatures and sea levels to habitats and cultures, in particular for small island States and in low-lying areas of other countries. Adaptation measures for agriculture, energy, forestry, human settlements, industry and marine ecosystems have to be strengthened to reduce adverse impacts on water resources and coastal zones.

31. Energy-efficiency technologies offer win-win opportunities to lower production costs, enhance energy security and reduce air pollution and greenhouse gas (GHG) emissions simultaneously. However, affordability remains a challenge for poorer developing countries and transferring technology to these countries is often problematic. Governments are critical actors in setting policies that provide appropriate incentives for more energy efficient, less polluting economic activities and increased access to modern energy services.

32. Energy efficiency is an immediate and effective way of reducing greenhouse gas emissions, as well as reducing the cost of industrial production. A wide range of low-cost policy measures have proven to be effective in improving energy efficiency, such as removal of electricity subsidies, peak hour surcharges, and energy efficiency regulations for industrial processes and urban activities. Such policy practices should be promoted and supported by programmes that assist small and medium- sized enterprises to improve energy efficiency.

33. Often, low priority is accorded to climate change policy because economic development and energy issues take centre stage in the strategizing for national development plans. Methodologies to promote the integration of climate change action into socio-economic policies for sustainable development should be improved.

G. Special needs of least developed countries, landlocked developing countries and small island developing States

34. For least developed countries and landlocked developing countries, the foremost concern is to alleviate poverty and engage in sustainable economic activities, especially in rural areas. Unsustainable use of land and natural resources for productive activities, such as cooking and heating, contributes to increasing air pollution and environmental degradation, and cause harmful health effects. Because of financial constraints and lack of technological knowledge, these countries continue to experience slow economic growth and unsustainable energy production and consumption. A significant infusion of both human and capital assistance is needed to support national efforts for formulating and implementing programmes to achieve sustainable development.

35. Because of their unique geographic condition, small island developing States, in particular coral atoll countries and countries with long coastlines and low-lying areas, face specific challenges. Therefore, small island developing States require a different approach to meet their special needs, such as access to affordable and reliable energy, energy efficiency, communications, transport, waste management, human and financial resources, as well as dealing with a high level of risk from extreme weather conditions, climate variability phenomena, and sea level rise. Strong support is needed to assist the small island developing States, including the Pacific island developing States, in implementing policies which have been developed by the Pacific Island Forum Secretariat and other regional agencies in the Pacific.

H. Means of implementation

36. Even where policies that encourage environmental sustainability have been introduced, the institutional, financial and human capacity to formulate, monitor and implement them is often lacking. Enhanced capacity and financial support at both the national and regional levels are necessary for the implementation of efficient and effective policies that support environmental sustainability and expedite the implementation of the Johannesburg Plan of Implementation. Institutional arrangements need to be strengthened in order for national Governments to implement regional commitments to Agenda 21, the Programme for the Further Implementation of Agenda 21, and the Johannesburg Plan of Implementation.

1. Push for transfer of technology to developing countries

37. As called for by the Programme for the Further Implementation of Agenda 21, efforts are needed to accelerate the creation of an enabling environment, on the part of both developed and developing countries. This environment could include supportive economic and fiscal measures, as well as a practical system of environmental regulations and compliance mechanisms, to help stimulate private sector investment in developing countries. Transfer of publicly funded environmentally sound technologies, including biotechnology, should be supported and promoted. In this environment, barriers and restrictions will be limited, allowing easier access to these technologies. The private sector may be encouraged to invest in technologies targeted for local initiatives by maximizing the use of locally available resources, and other resources through South-South cooperation. These investments could eventually lead to more business opportunities for cleaner technology markets. The development of renewable and cleaner resources and technologies will improve the efficiency of production and consumption, in turn improving environmental sustainability.

2. Financing schemes to upgrade infrastructures and systems

38. As noted above, one of the main constraints associated with building sustainable development capacities in least developed countries, landlocked developing countries and small island developing States is the lack of access to financing. To alleviate this situation, as well as to attract more favourable official development assistance, these groups of countries need innovative financial packages from multilateral and bilateral financing institutions. Technology-intensive small and medium-sized enterprises could receive low-interest loans to finance their projects and enterprises and widely deploy alternative technologies. Such widespread application and acceptance of technologies could further induce sustainable infrastructural development, as well as systems to reduce environmental pressure.

39. All countries have a role to play in emission reductions. They are encouraged to use all possible measures especially flexible mechanisms of the Kyoto Protocol to the United Nations Framework Convention on Climate Change.

3. Mechanisms for regional and subregional collaboration

40. As environmental challenges to sustainable development are becoming more widespread throughout the Asian and Pacific region, collective approaches are regarded as critical for addressing the cross-border nature of these problems. Collaboration among developing countries in the form of South-South cooperation is gaining ground, but requires further impetus to speed up sharing of knowledge and best practices and to introduce pragmatic options.

41. There is also a need to improve the network schemes of national or subregional data-collection and monitoring centres to measure the progress of sustainable development. Cross-border energy development and trade through a feasible cooperation mechanism may foster increasing exchange of energy-efficient products which are affordable and quality-tested. Similarly, cooperation on sharing and disseminating environmental best practices and measures could bring mutual benefits to participating countries

4. Integration of major groups into planning and decision making

42. Effective policymaking would also necessitate the inclusion of a broader range of participants from major groups which possess valuable institutional knowledge and expertise to work in tandem with Governments. To increase ownership and accountability in the implementation of policies, participatory approaches from the major groups to engagement in the policy dialogue could continue. The role of public-private partnerships is also increasingly recognized as an effective mechanism for promoting sustainable development and bringing efficiency and new technologies to environmental management.